

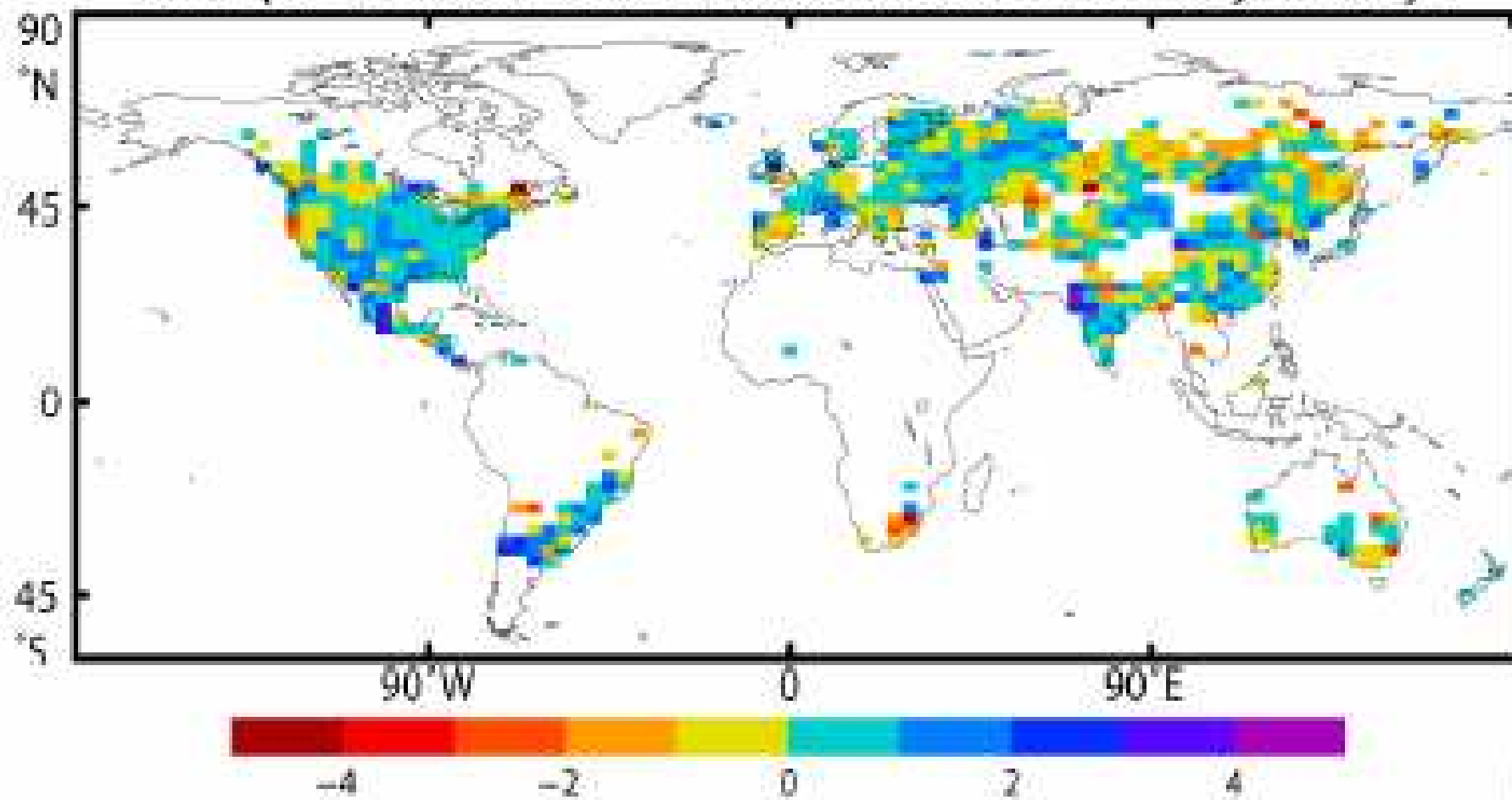
# A felszíni vízmérleg elemeinek éghajlati tendenciái

Szalai Sándor

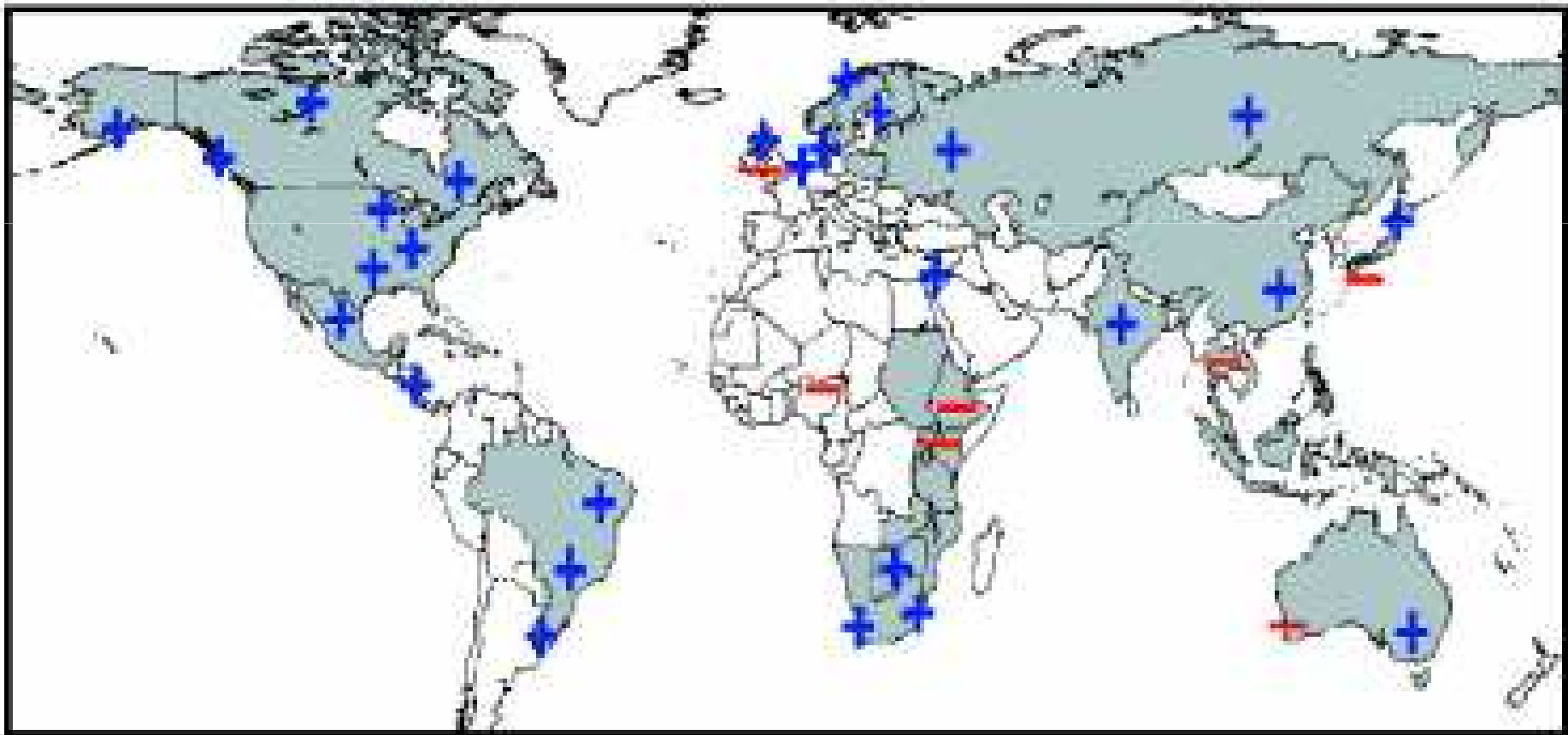
Országos Meteorológiai Szolgálat

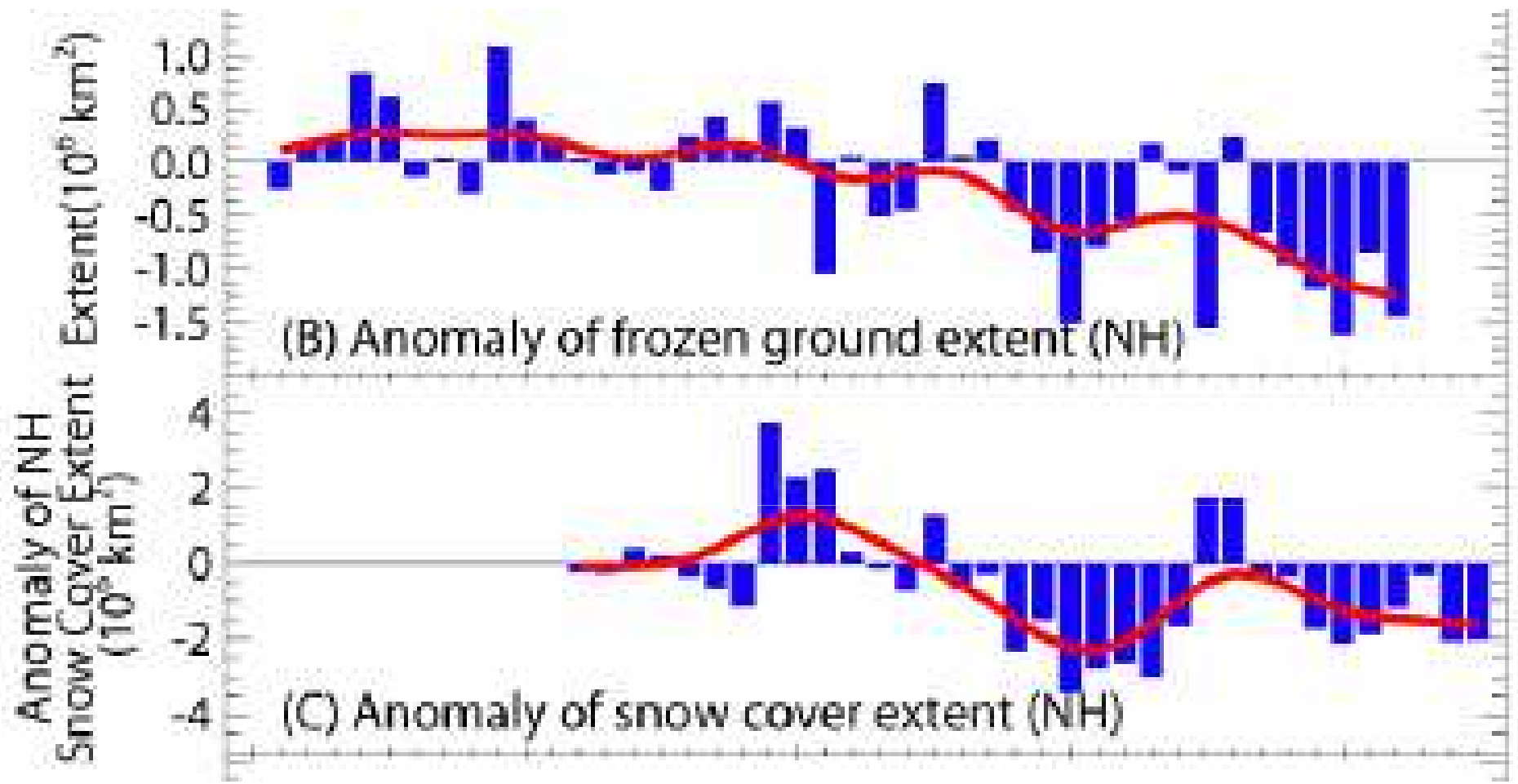
# Globális tendenciák

Trend per % decade 1951–2003 contribution from very wet days



# Regions with disproportional changes in heavy precipitation

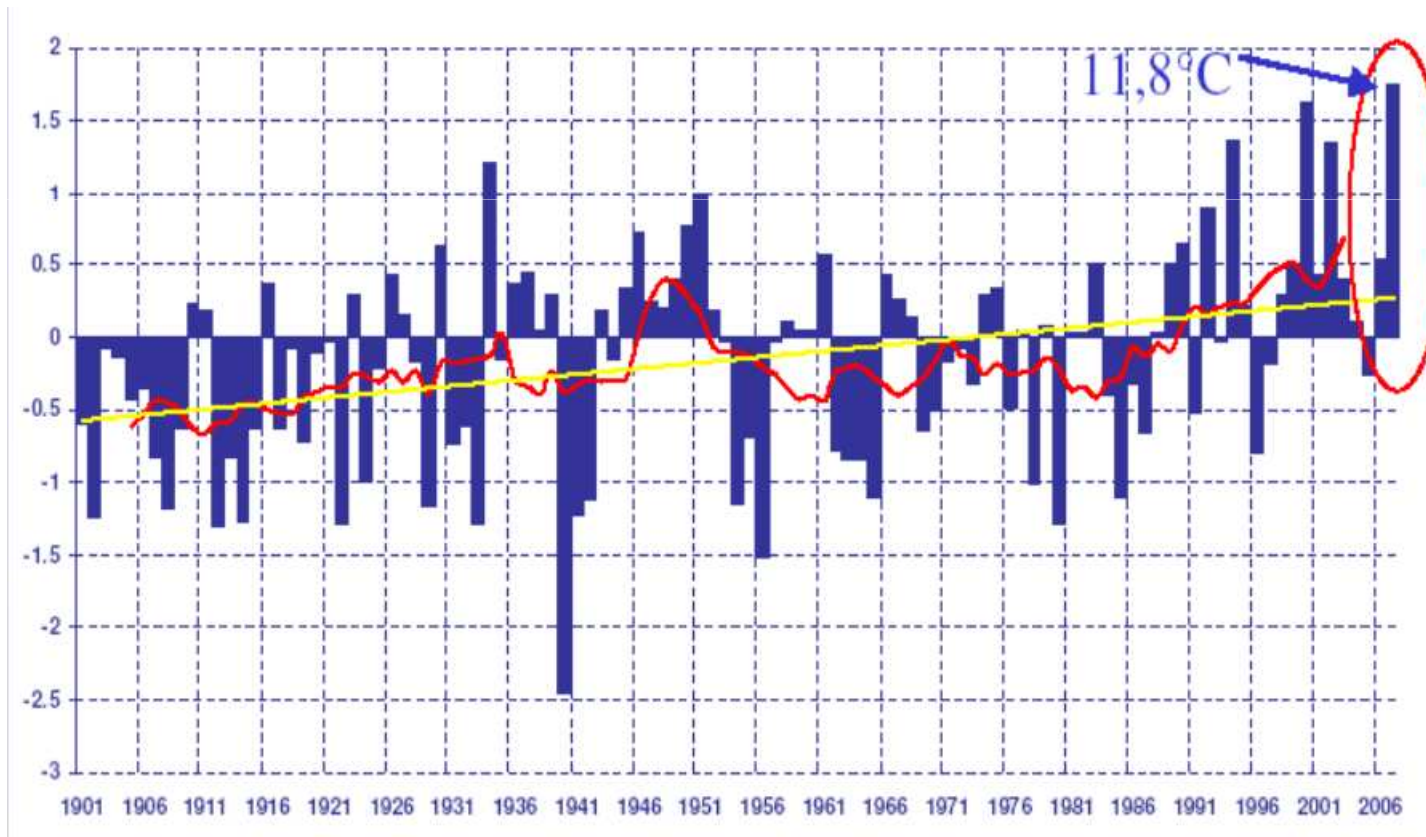




| Phenomenon <sup>a</sup><br>and direction<br>of trend                           | Likelihood of<br>future trends<br>based on<br>projections for<br>21st century<br>using SRES<br>scenarios | Examples of major projected impacts by sector   |  |   |  |
|--|--|---|--|---|--|
|  |  | Agriculture,<br>forestry and<br>ecosystems<br>[4.4, 5.4]  | Water resources<br>[3.4]   | Human health<br>[8.2]   | Industry,<br>settlements and<br>society [7.4]  |
| Heavy<br>precipitation<br>events:<br>frequency<br>increases over<br>most areas | Very likely  | Damage to<br>crops; soil<br>erosion, inability<br>to cultivate land<br>due to<br>waterlogging of<br>soils                           | Adverse effects on<br>quality of surface<br>and groundwater;<br>contamination of<br>water supply;<br>water scarcity may<br>be relieved | Increased risk of<br>deaths, injuries<br>and infectious,<br>respiratory and<br>skin diseases  | Disruption of<br>settlements,<br>commerce,<br>transport and<br>societies due to<br>flooding; pressures<br>on urban and rural<br>infrastructures; loss<br>of property |
| Area affected by<br>drought<br>increases                                       | Likely   | Land<br>degradation,<br>lower yields/crop<br>damage and<br>failure; increased<br>livestock deaths;<br>increased risk of<br>wildfire | More widespread<br>water stress  | Increased risk of<br>food and water<br>shortage;<br>increased risk of<br>malnutrition;<br>increased risk of<br>water- and food-<br>borne diseases | Water shortages for<br>settlements,<br>industry and<br>societies; reduced<br>hydropower<br>generation<br>potentials; potential<br>for population<br>migration        |

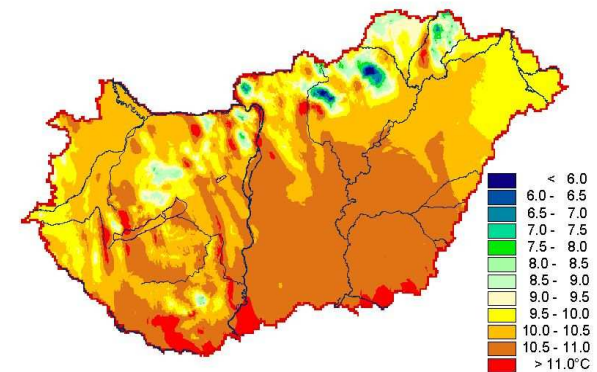
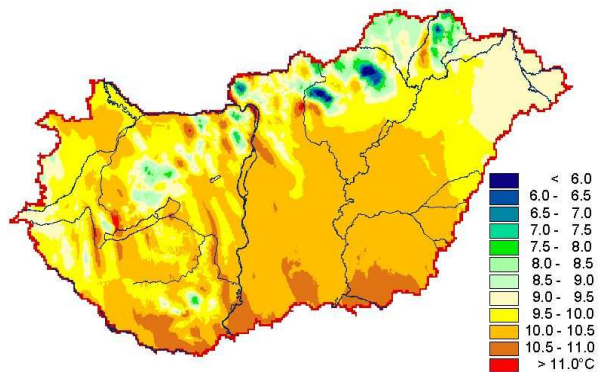
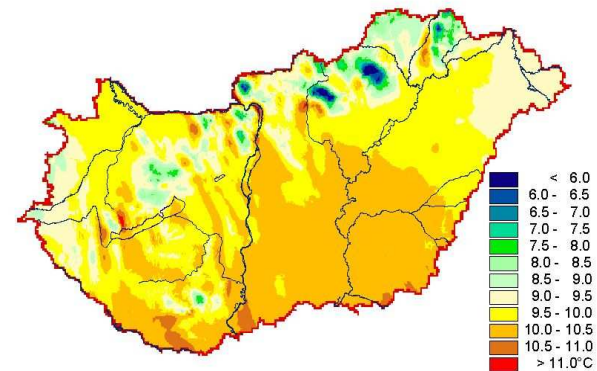
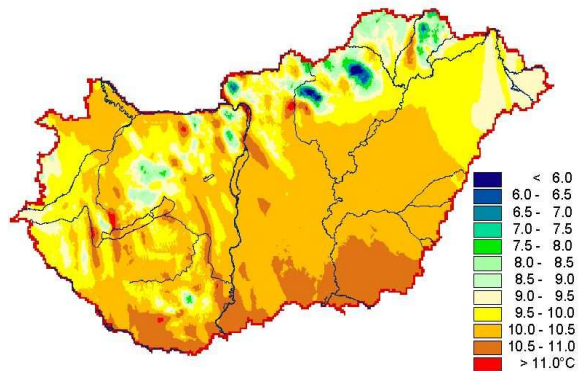
Hőmérséklet

# Évi átlaghőmérséklet

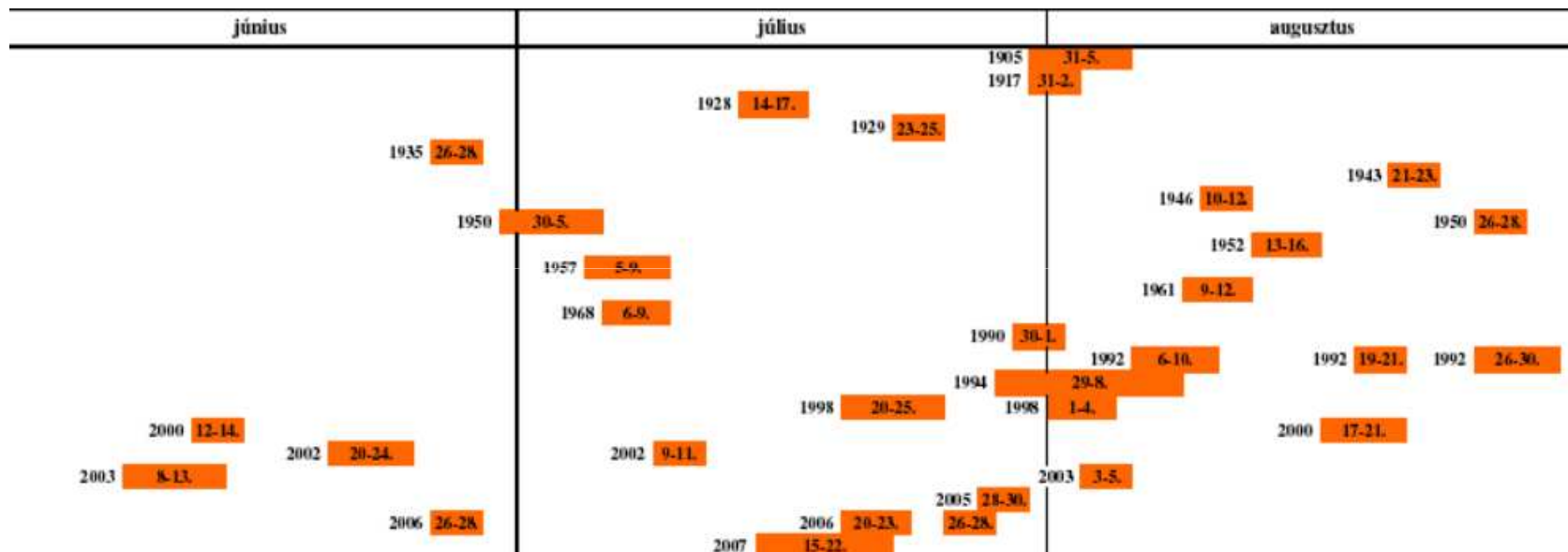




# Évi átlaghőmérsékletek sokévi átlaga: 1971-2000, 1971-80, 1981-1990, 1991-2000

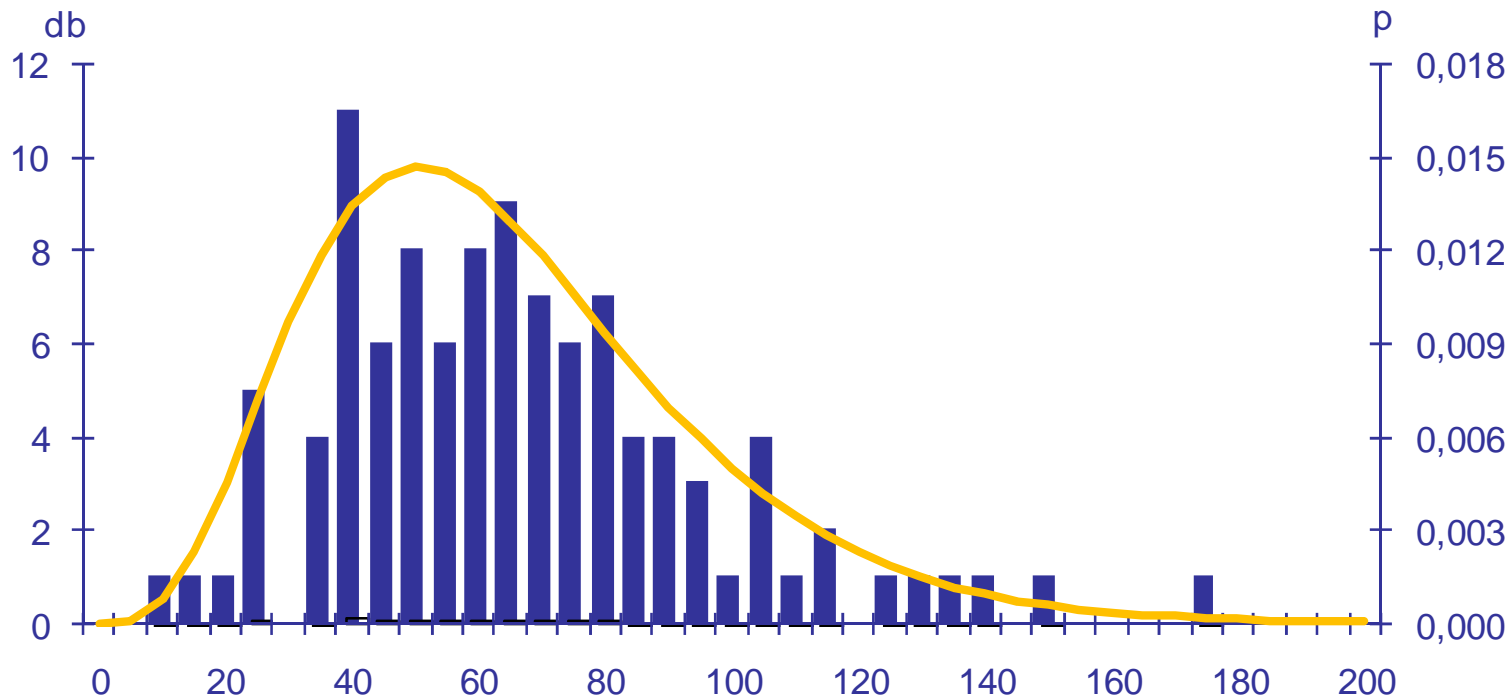


# Hőhullámok

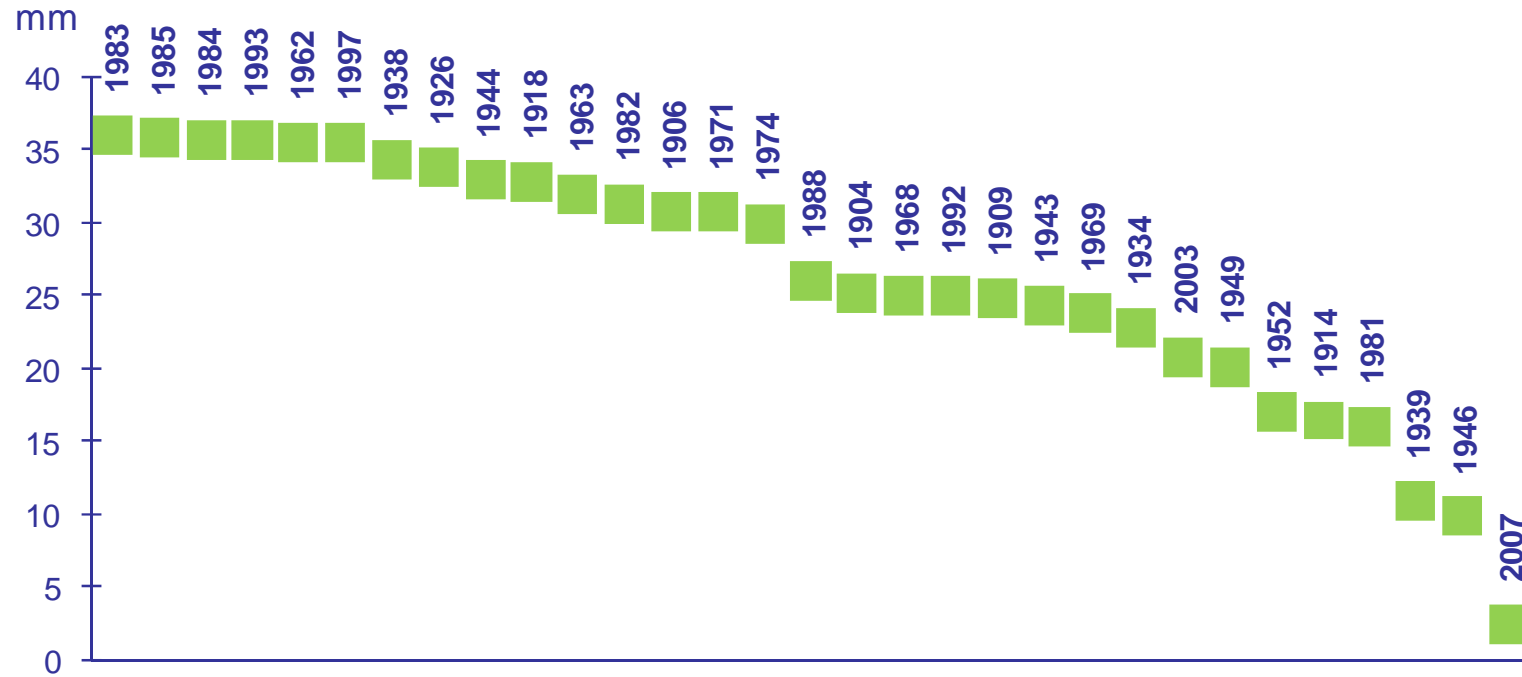


Csapadékmennyiség

# Az augusztus havi csapadékösszeg gyakorisági eloszlása



# 1901 óta a 30 legszárazabb április



# Éghajlati vízhiány

| Város           | Trend együttható |
|-----------------|------------------|
| Budapest-Lőrinc | 0,027            |
| Miskolc         | 0,046            |
| Debrecen        | 0,034            |
| Nagykanizsa     | 0,032            |

# Effektív csapadék (mm)

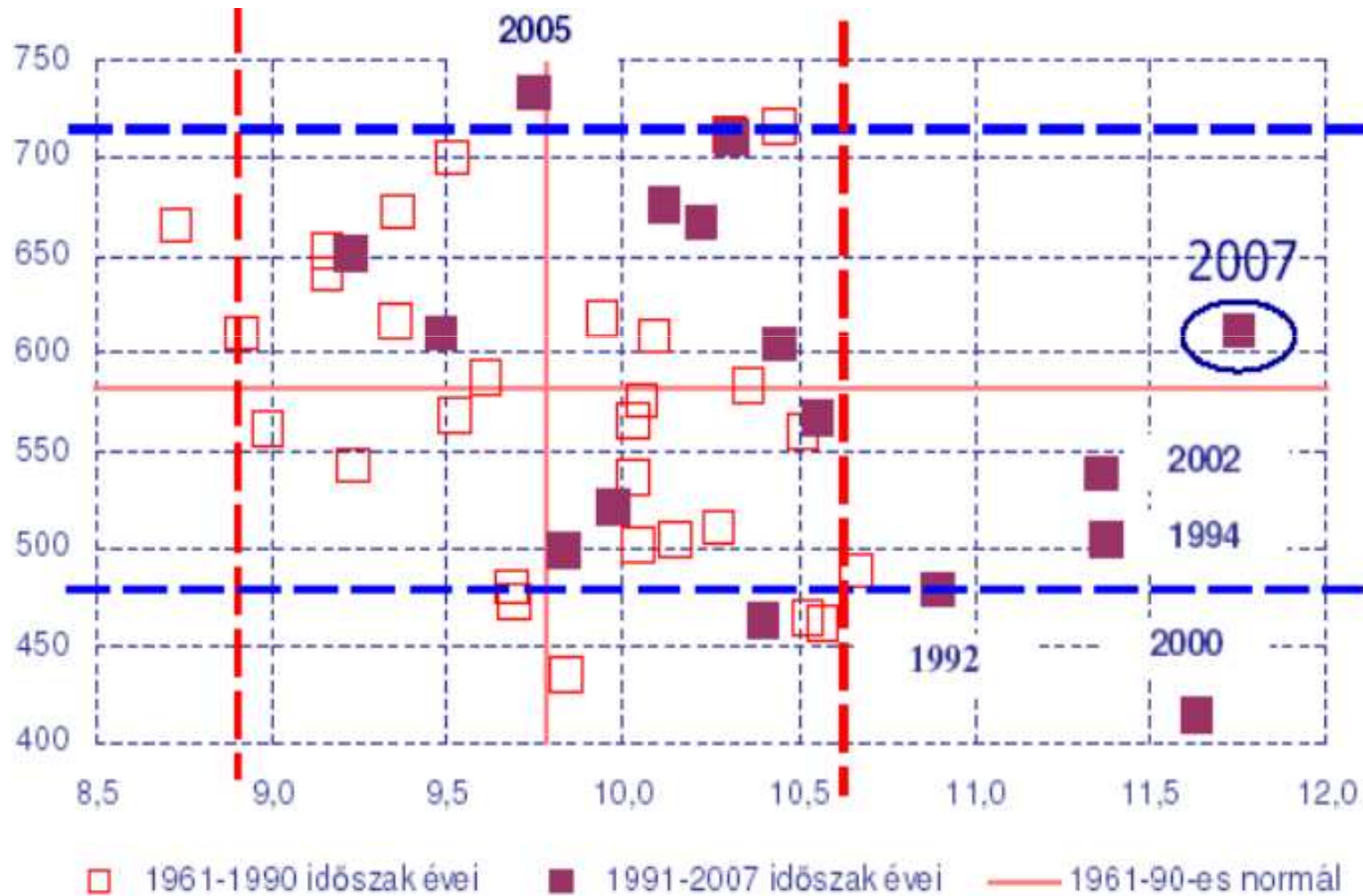
## Budapest Lőrinc, 2007

|                                 | Május | Június | Július | Augusztus |
|---------------------------------|-------|--------|--------|-----------|
| Csapadékos napok száma          | 15    | 14     | 10     | 16        |
| Effektív csapadékos napok száma | 3     | 3      | 2      | 5         |
| Csapadékösszeg                  | 42,2  | 46,3   | 37,9   | 133,0     |
| Effektív csapadékösszeg         | 36,3  | 40,1   | 26,8   | 122,2     |

# Hőmérséklet és csapadékösszeg



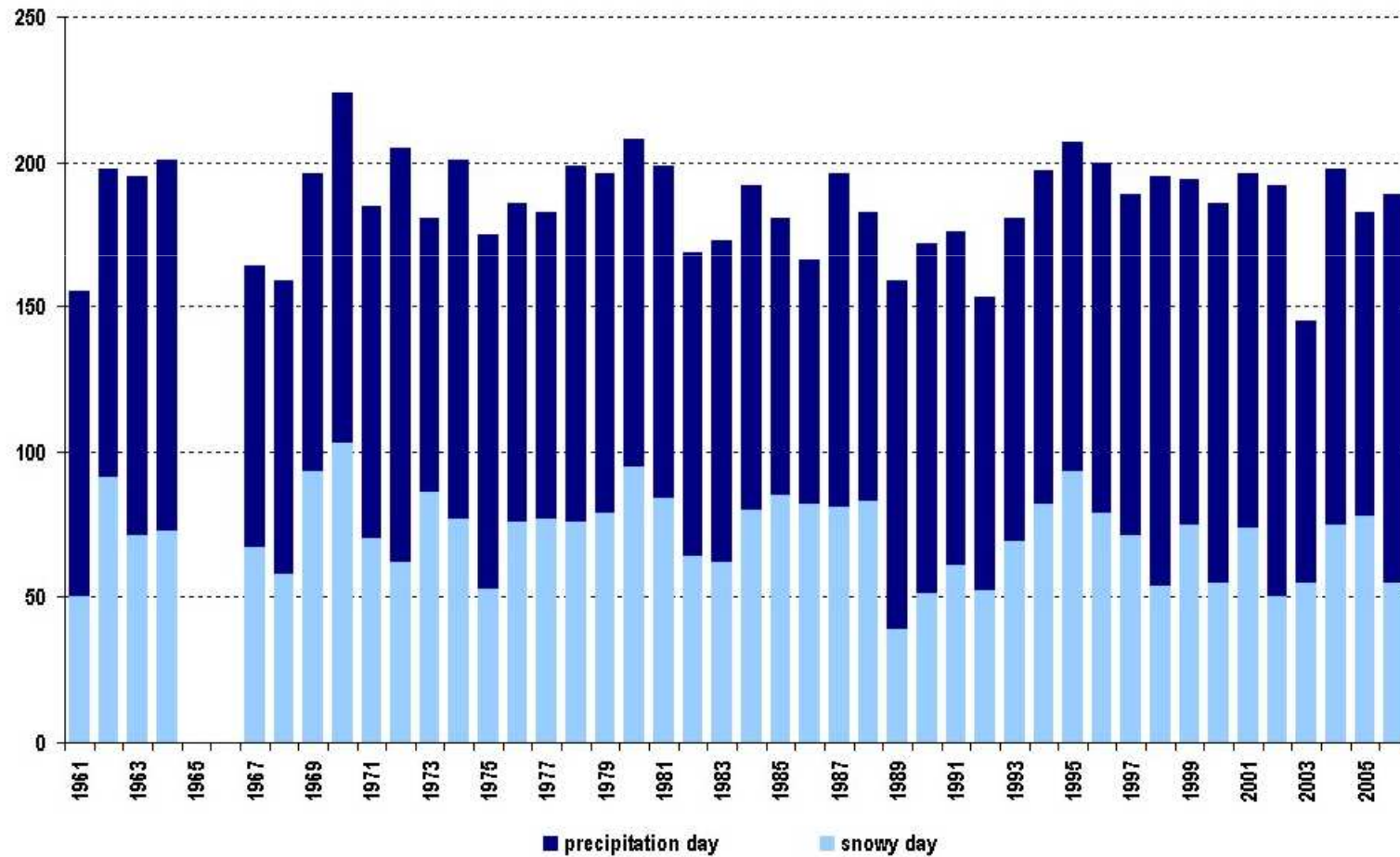
# Évi hőmérsékletátlag és csapadékösszeg



Hótakaró

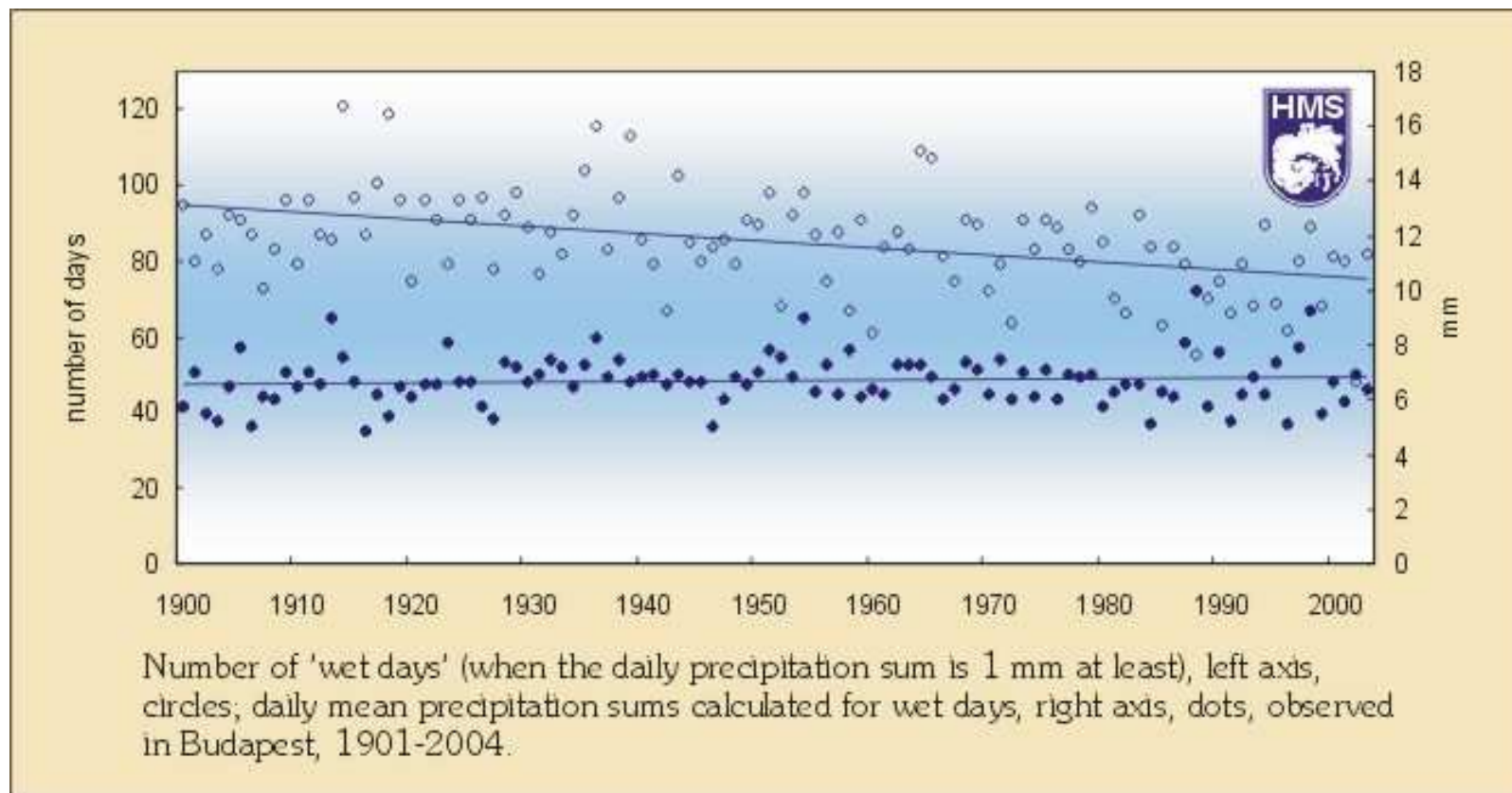


# A csapadékos és a havas napok Kékestetőn

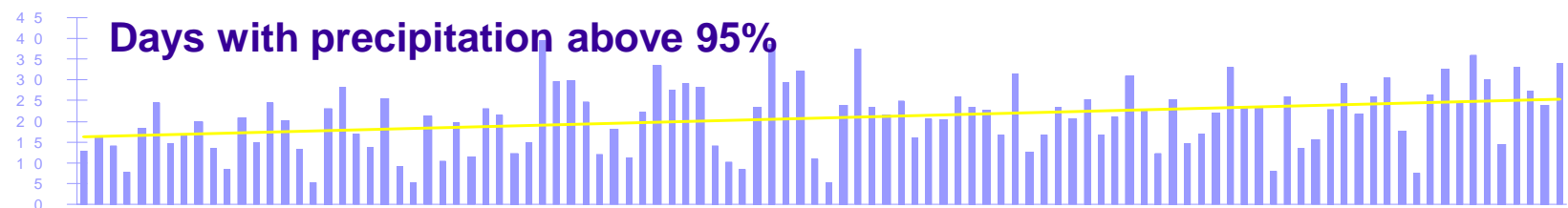
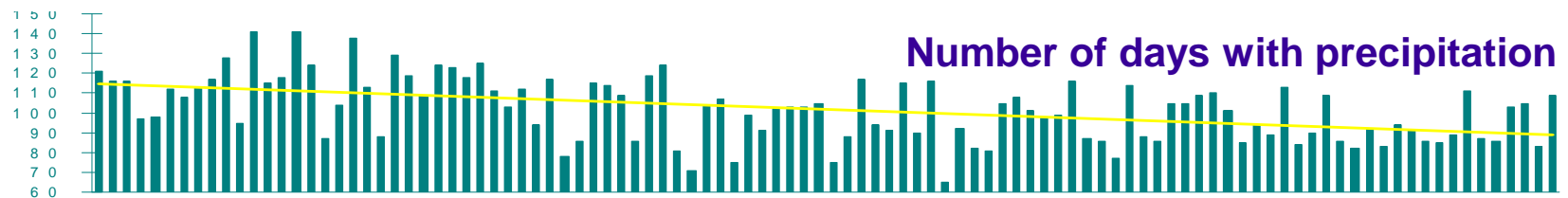
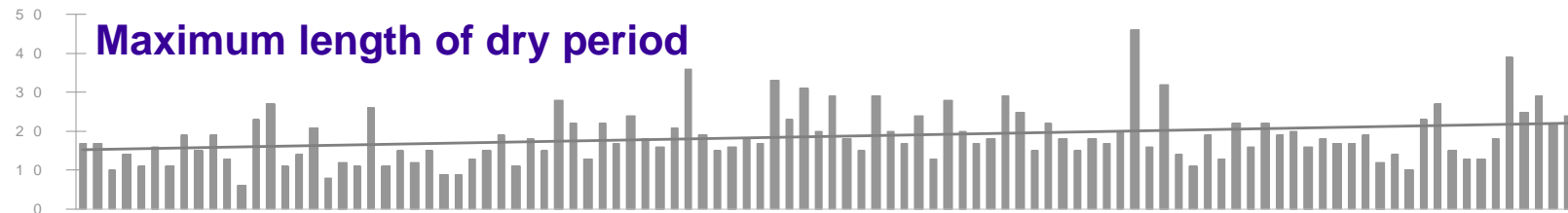
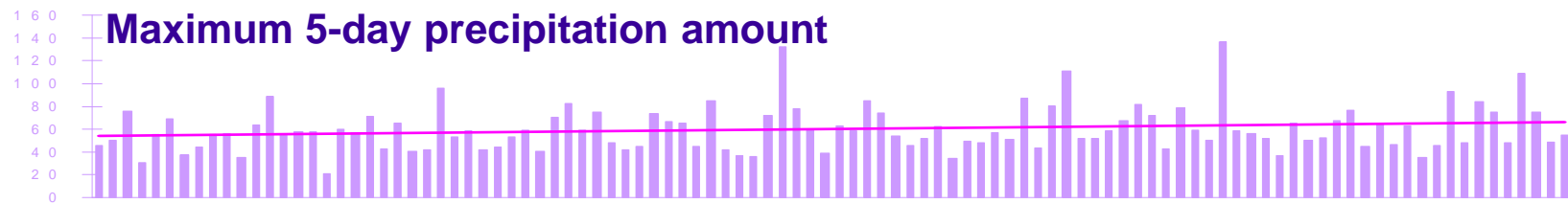
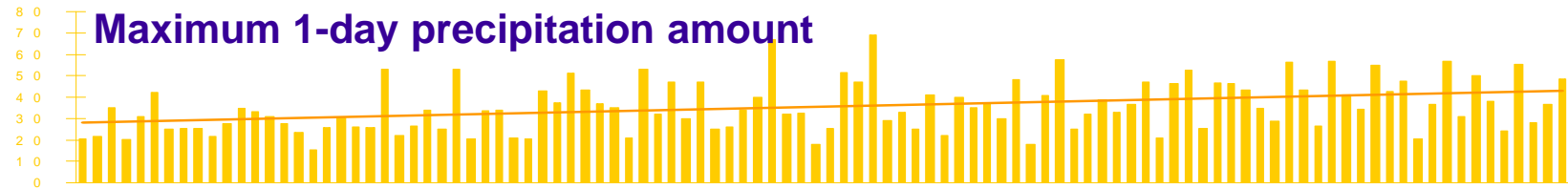


# Csapadékintenzitás

# A legalább 1 mm csapadékösszegű napok száma és átlagos csapadéka



# Néhány csapadékstatisztika idősora Vásárosnamény, 1901-től



Köszönjük a figyelmüket!