



VERIFICATION OF THE SEECOF 7 SUMMER 2012 OUTLOOK FOR THE TERRITORY OF THE REPUBLIKA SRPSKA, BOSNIA AND HERZEGOVINA



Summer season of the 2012 was the driest and the warmest in Srpska, since the 1960 to present, and among the five driest in the past 130 years (less amount of rainfall is recorded during the 1950, 1946, 1933, 1952 years).

Mean air temperature were significantly above normal (around +4°C in average, relating to 1961-1990, +3°C relating to 1981-2010*). It is predicted, with 60% probability, above normal summer temperature, according to the probabilistic consensus forecast for tercile categories of anomalies relative to the period 1961-1990 (figure 1).

| The summer air temperature of the 66.67th percentile compared to summer 2012 (°C/JJA) | | | | | | |
|---|-------------------------|-----------------------|------------------|----------------|---------------------|--------------------|
| ref. Period / Station | Бања Лука Banja Luka | Бијељина Bijeljina | Билећа Bileća | Добој Doboj | Приједор Priedor | Соколац Sokolac |
| 1961-1990 | 20.0 | 20.2 | 20.7 | 19.7 | 20.2 | 15.5 |
| 1971-2000 | 20.6 | 20.9 | 20.9 | 20.3 | 21.1 | 16.0 |
| 1981-2010 | 21.5 | 21.8 | 21.6 | 21.0 | 21.8 | 16.9 |
| 1960-2011 | 20.8 | 21.2 | 21.4 | 20.5 | 21.1 | 16.3 |
| summer 2012 | 24.2 | 24.9 | 24.0 | 23.7 | 23.9 | 19.6 |

Figure 1: Verification of Mean Temperature (°C) outlook for the summer season 2012 in The Republika Srpska, Bosnia and Herzegovina

*(For the referent period 1981-2010 there are more stations with T_{mean} data than it is shown in this table)

The heat waves are registered in most of the places from 15th to 25th June, 28 June - 15 July, 25 July - 10 August, 14 - 26 and 26-31 August. July 2012 was the warmest July in the past 50 years, especially in Bijeljina, where the mean temperature was for 3.9°C higher than the normal value related to 1981-2012. The hottest days in August were 6th, 22th and 24th, when it were exceeded the absolute thirty-year daily maximum of air temperatures in the most places

The summer amount of rainfall in Srpska were significantly below long term means (prognostic probabilities were 40% for „below normal“, 35% for „normal“), figure 2.

In June 2012, in average had occurred a rainfall deficit of -66%, July -26%, August -94%.

Since June is the wettest month over the year, in the greater part of the territory (except for the southern regions where is November the wettest), climate variations resulting in September as the primary maximum during the last decade in the most places.

The summer precipitation of the 33.333th percentile compared to summer of the 2012 (mm/JJA)

| ref. Period/ Station | Банџа Лука Banja Luka | Бијељина Bijeljina | Билећа Bileća | Грачко Gracko | Добој Doboј | Нови Град Novi Grad | Приједор Priјedor | Соколац Sokolac | Требиње Trebinje | Чемerno Čemerno |
|-------------------------|--------------------------|-----------------------|------------------|------------------|----------------|------------------------|----------------------|--------------------|---------------------|--------------------|
| 1961-1990 | 79 | 191 | 184 | 192 | 215 | 215 | 228 | 188 | 177 | 226 |
| 1971-2000 | 78 | 220 | 145 | 172 | 233 | 210 | 208 | 192 | 138 | 188 |
| 1981-2010 | 74 | 216 | 144 | 158 | 215 | 201 | 198 | 198 | 133 | 172 |
| 1960-2011 | 74 | 192 | 151 | 164 | 215 | 215 | 212 | 192 | 139 | 194 |
| summer 2012 | 42 | 80 | 43 | 44 | 104 | 155 | 100 | 90 | 79 | 91 |

Figure 2: Verification of Precipitation (mm/JJA) outlook for the summer season 2012 in The Republika Srpska, Bosnia and Herzegovina

Bearing in mind the extremely warm and dry summer 2012 (the average precipitation deficit of 60 %), significantly increased evaporation, these weather conditions caused by anticyclone activity, adversely badly affected the agricultural conditions and water resources, as well as the frequent fires a larger scale. This drought is a serious problem, especially in Bijeljina, (the eastern part of RS) because in the 2011 has occurred absolute annual minimum of precipitation in Srpska.

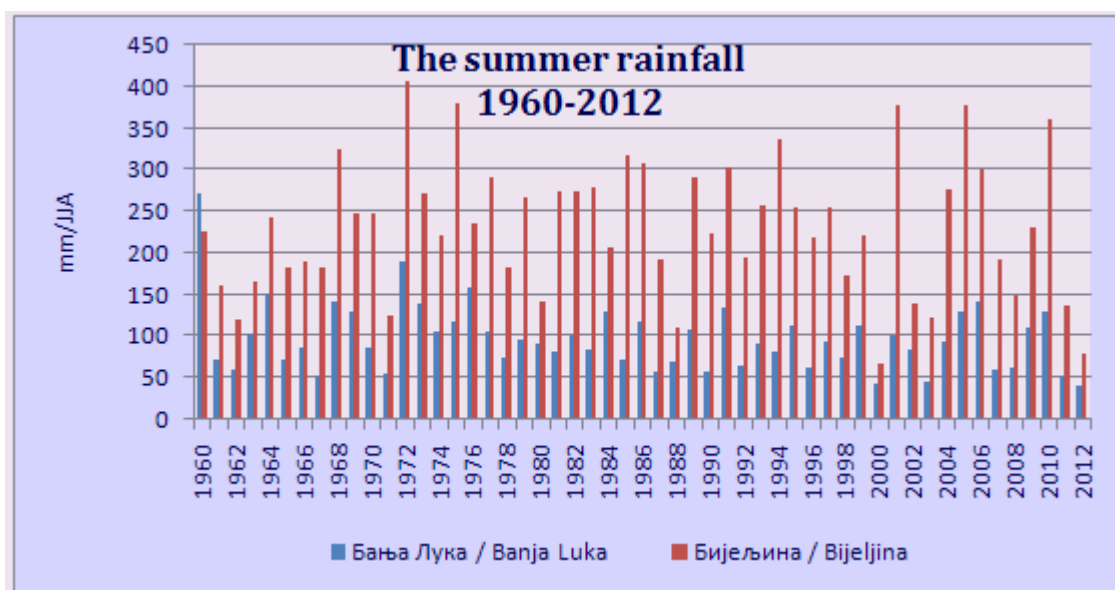


Figure 3: The historical data set of the amount of rainfall during summer season in Banja Luka and Bijeljina

