

## Assessment of the seasonal forecast of mean temperature and precipitation for the winter of 2010/2011 in the Republika Srpska

Normal winter temperatures have been recorded all over the Republika Srpska (RS), regarding to the period of 1961-2009 (figure 1). Mean temperature ranged from  $-2.4^{\circ}\text{C}$  (Han Pijesak) to  $6.6^{\circ}\text{C}$  (Trebinje). Temperature deviations were positive almost in all RS and ranged between  $0.1^{\circ}\text{C}$  (Bileća) to  $1.7^{\circ}\text{C}$  (Sokolac), except in the eastern part of RS where is occurred negative temperature anomaly of  $0.3^{\circ}\text{C}$  (Bijeljina).

In the Republika Srpska it was the coldest winter in the period of 2007-2010.

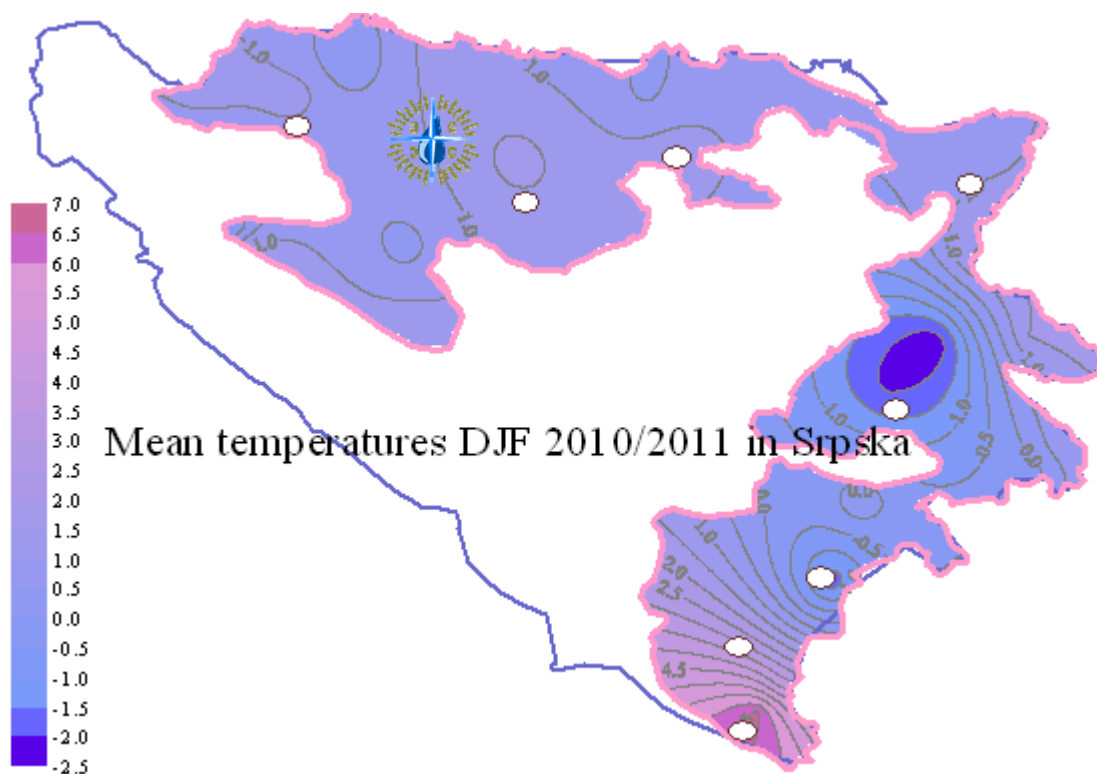


Figure 1: Spatial distribution of mean temperature for the winter 2010/2011 in the Republika Srpska. White rounded rectangle illustrate normal temperatures (25%-75% of normal, ref 1961-2009)

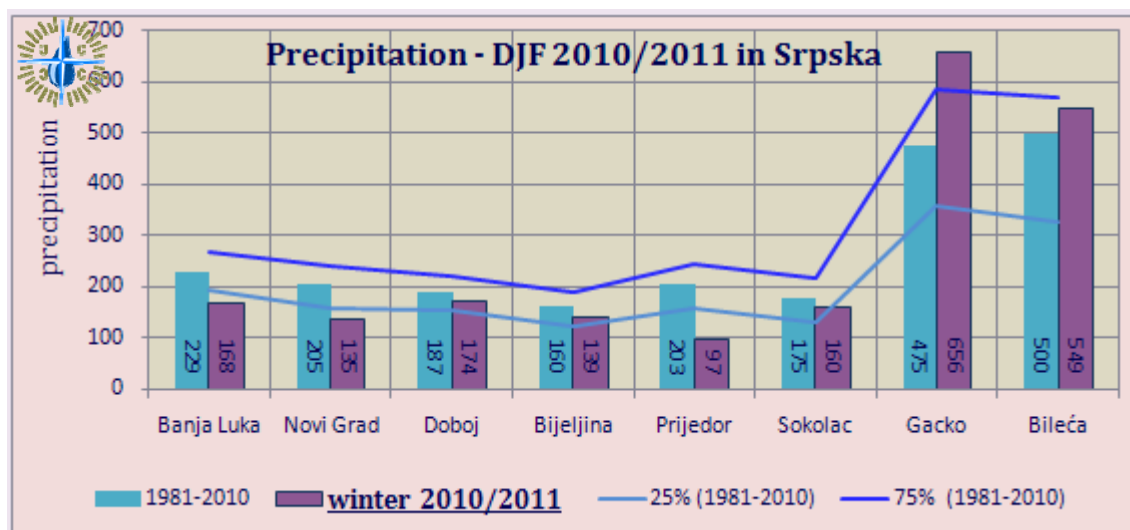


Figure 2: Precipitation during winter season of 2010/2011 in RS compared to normal value 1981-2010

Regarding to the normal value of 1981-2010, winter precipitation of 2010/2011 were below normal range in the north-western part of RS (Banja Luka, Novi Grad, Prijedor). In some part of Eastern Herzegovina were occurred precipitation above normal (Gacko), whilst over the other parts of RS measured precipitation were in the normal range (Bijeljina, Doboj, Sokolac, Čemerno, Bileća), what is shown in figure 2.

Compared to long term mean **1961-2009** precipitation for DJF were below normal in the northern part of RS, normal in the middle of, whilst in the southern part precipitation were above 75% of normal value. That caused floods in December in the eastern Herzegovina which has the most precipitation in RS and B&H (annual average around 1770mm). In the other parts of RS (north-eastern) occurred floods in that time were caused by extremely rainfall in Montenegro over the Drina basin.

The most of climate models predicted winter precipitation and mean temperature **below normal** over all Bosnia and Herzegovina.

### Remark:

The normal value is rather over the period 1961-2009 because of lack of data in the selected stations over the different period of time.