

Assessment of Probability Forecast for The DJF season in The Republika Srpska, Bosnia and Herzegovina

1. SEECOF-14, MedCOF-5 Climate outlook for the 2015-16 winter season:

Temperature

The heat condition over RSrpska and BH is expected to be above median, with 15, 30, 55% probabilities for the central and southern area or 20, 35, 45 over the northern one.

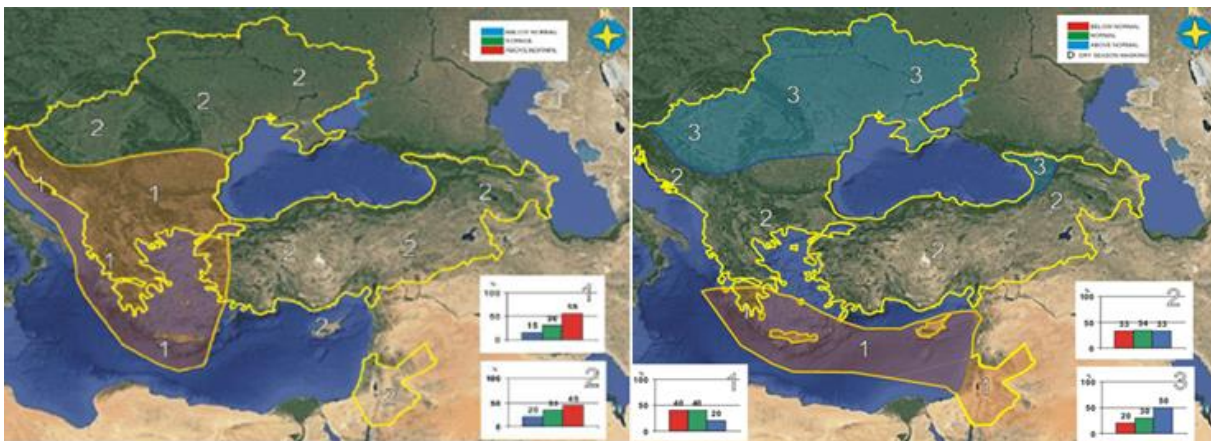


Figure1 Temp and PRC tot DJF16 Outlook

Precipitation

Suggested probability forecast of 20, 30, 50 percentage for the *northwest and northern area* for **wetter** than normal conditions but for the rest of the area was not given the clear signal (33, 34, 33).

1. Analysis of the 2015-16 Winter season (December to February):

The last season was the 3rd warmest 'climatological' winters on record and dry one. The DJF 2006/07 was the warmest winter in RS. Tmean ranged from 0,27⁰C in Sokolac to 7,93⁰C in Trebinje, precip total from 0mm in December (Nevesinje, Bileća, Trebinje, Gacko, Čemerno) to 309mm in February (Gacko)

Air temperature

Tmean for the 2016 winter season are presented graphically, regarding to mean temperature averaged over the RS stations in figures 1 to 4, so there is a possibility to compare DJF16 to DJFs of the recent past.

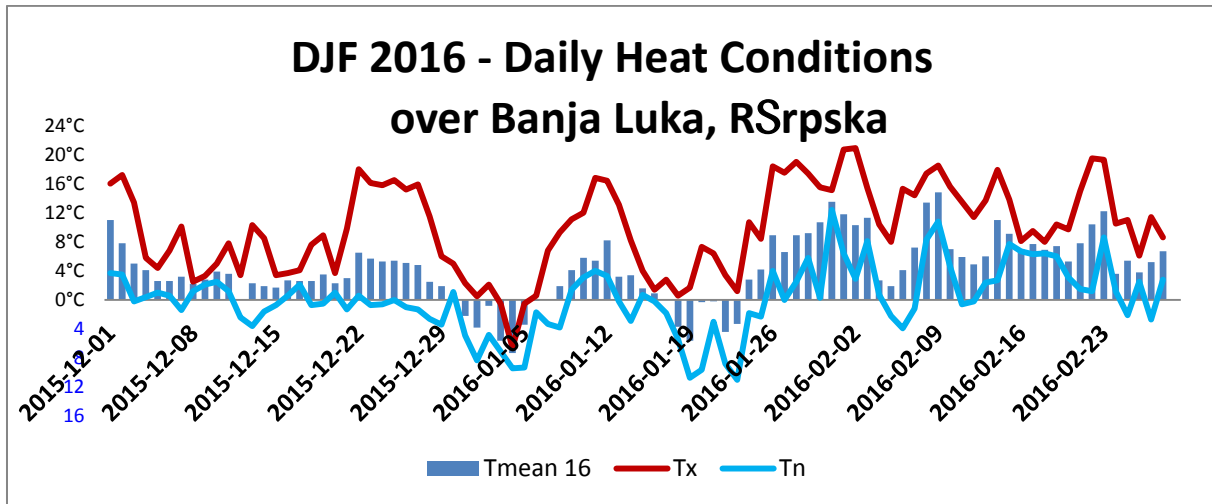


Figure 2: Temp, daily mean dec-feb 2016 in Banja Luka, RSrpska

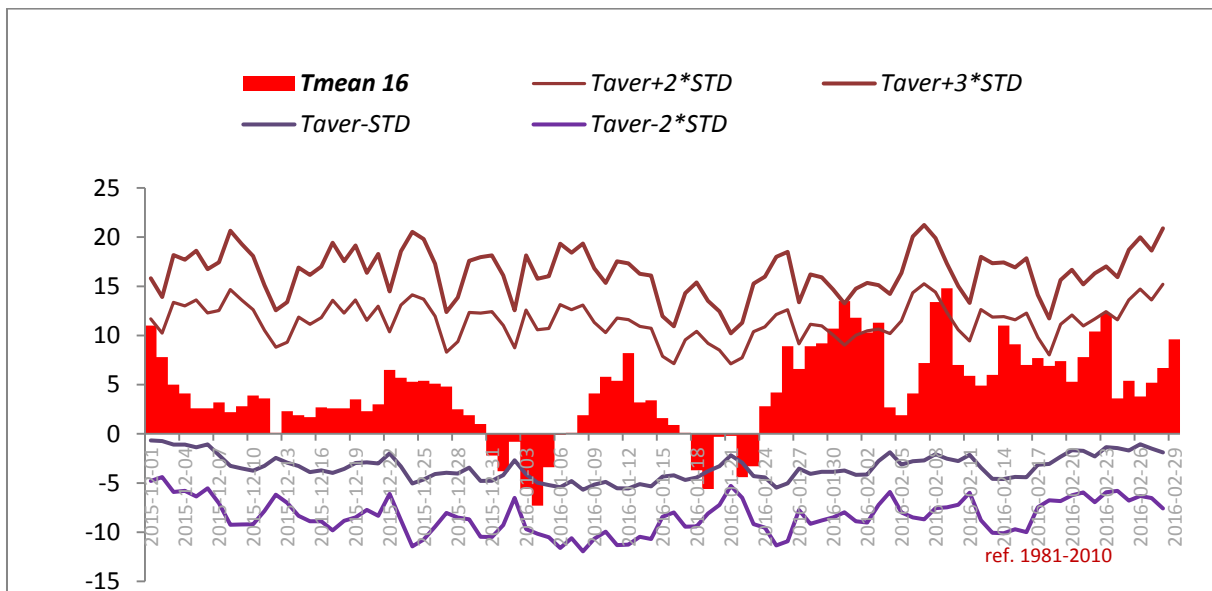


Figure 3: The DJF 2016 Temp, daily mean ($^{\circ}\text{C}$) compared to $T_{\text{mean}81-10} \pm \text{STDs}$ for Banja L., The RSrpska

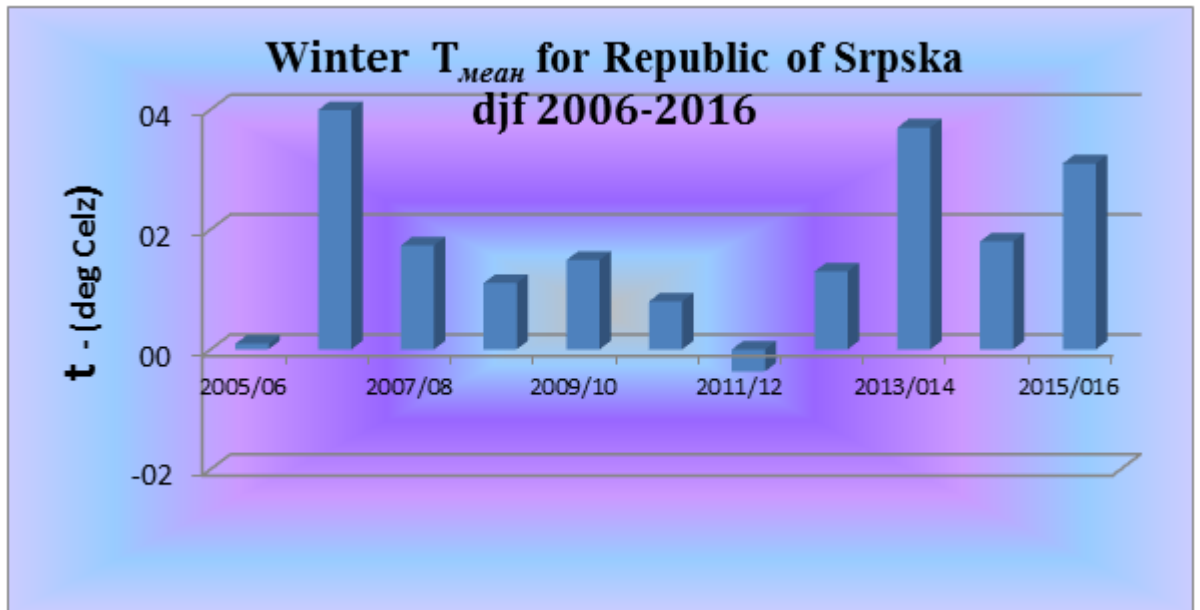


Figure 4: The DJF Tmean averaged over 25 stations in the RS from 2005/06 to 2015/16

Precipitation

During the winter season 2016 in RS is countered below average prec total (fig 6) due to extremely dry December.

Trend of DJF precipitation regarding to 1981-2010 climatology, ranged from -69% in Višegrad to +38% in Ist. Drvar Potoci. During January and February particularly, there were recorded a positive mean trend of precipitation up to 90% in the South but negative in the rest of Srpska, up to minus 40%.

<i>The Republika Srpska, Bosnia and Herzegovina</i>						
	lower tercile	upper tercile	median	2015/16	rank	trend
<i>December</i>	91	126	102	5	b	-0.951
<i>January</i>	66	90	74	93	a	0.257
<i>February</i>	59	80	71	126	a	0.775
DJF	217	295	248	218	b	-0.121

b-below lower tercile, a-above upper tercile, n-around midst

Figure 6: The mean precip in mm/djf1616 averaged over RS stations, compared to tercile categories (1981-210)

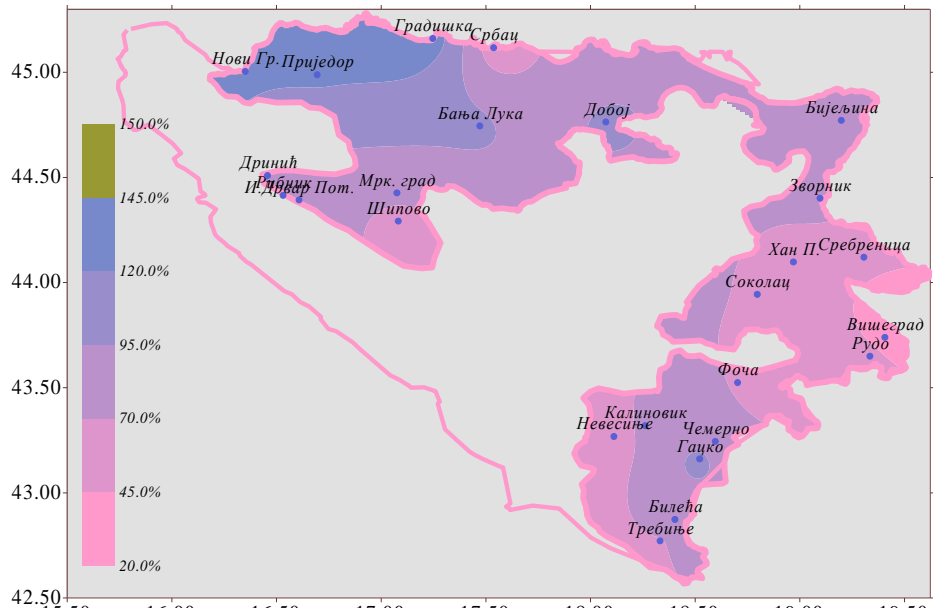


Figure 7: Spatial distribution of DJF16 Precip in percentage compared to 1981-2010

1. High impact events:

- The month of December 2016 was extremely dry with no precipitation in many places
- The month of February 2016 was extremely warm
- On Feb 10th storm windy (Banja L. 31,8 m/s)
- There was a cold period in January with very low temperatures from ranged from -10°C to -16.3°C (mountains regins to -22.3°C) and snow cover in the bigger part of the entity.

2. Verification of the SEECOF-14&MedCOF-5 climate outlook for the 2016 winter

Country	Seasonal temperature (DJF)		Seasonal precipitation (DJF)	
	Observed	SEECOF14, MedCOF-5 climate outlook	Observed	SEECOF, MedCOF-5 climate outlook
Bosnia and Herzegovina, Republica Srpska (5)	Above normal	Above normal	Above or near normal on the North; Below normal In the southern part of the country	Above or near normal in the northern part of the country No predictive signal

				In the most part of the country
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The assessment of seasonal prediction is that the forecast were correct for precipitation and fully correct for men temperature.

*It is interesting to mention that this winter, taking into account **Daily temp values**, from 22Dec (9.Деу) to 20March (7.Марм), was showing significal change, not because of global warmth – but just treating it by different dates.*

*An example of Banja Luka: **4,54° C Julian date; 5,13° C Gregorian date; 4,38 Celsius degree for DJF monthly triplet.***