Climate Report for Croatia for winter 2016/2017

► Air temperature anomalies for Croatia in winter 2016/2017

The average winter air temperature (December 2016, January 2017, February 2017) in Croatia was mainly below the multi-annual average (1961 - 1990) while on some meteorological stations (Poreč, Rijeka, Split-Marjan and Dubrovnik) was on par with the mentoned average. Corresponding air temperature anomalies for winter 2016/2017 were within the range from - 1.4° C to 0.9° C.

According to percentile ranks and classification ratings, thermal conditions in Croatia for winter 2016/2017 dominantly fall under the category **normal** with the exception of the wider area of the town of Daruvar which falls under the category **cold**.



▶ Precipitation amounts for Croatia in winter 2016/2017

An analysis of the precipitation amounts for winter 2016/2017 expressed as percentages (%) of 1961 - 1990 average, shows that these precipitation amounts were mainly below the average. Corresponding precipitation amounts for winter 2016/2017 were within the range from 44% to 109% of multi-annual average for this season.

According to percentile ranks and classification ratings, the precipitation amounts for winter 2016/2017 have been described by the following categories: **normal** (part of the Northern Adriatic, the wider area of the town of Knin, part of the Southern Adriatic as well as Eastern Croatia), **very dry** (the wider areas of the towns of Bjelovar, Zagreb, Gospić and Split) and **dry** (the remaining part of Croatia).



SEECOF-16 CLIMATE OUTLOOK VALIDATION

• Air temperature anomalies for Croatia in winter 2016/2017

According to the SEECOF-16 climate outlook, for Adriatic coast, interior of Dalmatia and mountain region (Gorski kotar and Lika) there were chance for warmer than normal winter season. Probability for exceeding the average winter season temperature was 50% (for below normal 20 % and for above normal 30 %). For the rest of Croatia (the Panonian Plain and NW Croatia) near-normal temperature was favoured with 40 % probability.

The winter season in Croatia according to multi-annual average 1961-1990 was normal almost in the whole country. In relation to the multi-annual average 1981-2010, anomalies range is from -1,2 to 1,1 °C for the 5 biggest stations in Croatia (Zagreb, Osijek, Gospić, Rijeka and Split).

We can conclude that the outlook for the part of Panonian Plain and North-west Croatia was correct, but for the rest of the country was not correct.

• Precipitation amounts for Croatia in winter 2016/2017

According to the SEECOF-16 climate outlook, the precipitation in the North and East part of Croatia had no preference for any climate defined categories, with an equal probability of all three terciles. In the remaining part of Croatia precipitation was forecasted to be above average (probability for above normal was 40%, near normal 35% and below normal 25%).

The actual precipitation amounts were below thirty-year average 1961-1990 in the whole country. Taking into account that the newer climatology 1981-2010 is generally similar or little bit drier than the older one, we noticed that the deficit of precipitation is slightly less present.

We can conclude that outlook for precipitation above average along the Adriatic coast and its hinterland was not correct.

	Seasonal temperature		Seasonal precipitation		
Country	Observed	SEECOF-16 climate outlook for temperature	Observed	SEECOF-16 climate outlook for precipitation	High Impact Events
Croatia	Normal	Above normal at the Adriatic coast, interior of Dalmatia and mountain region (Gorski kotar and Lika) Normal (remaining part of Croatia)	Normal (part of the Northern Adriatic, the wider area of the town of Knin, part of the Southern Adriatic as well as Eastern Croatia) Below normal (in the remaining part of Croatia)	Normal or above normal (the Adriatic coast and its hiterland and mountainous part of Croatia) No predictive signal (North and East part of Croatia)	 December 2016 was extremely dry. In some parts of Croatia there were not precipitation at all (for example Dubrovnik). Extreme weather conditions in January 2017 were low temperature and strong wind. According to percentile ranks and classification ratings, thermal conditions in Croatia for January 2017 fall under the category cold, very cold and extremily cold. Some apsolute minimum temperature was measured in Dalmatia (in Komiža, Makarska, Split airport and Dubrovnik airport). Two cold spels was recorded – from 3rd to 8th and from 15th to 19th. The coldest days were 7th and 8th. Together with gale force bora (NE wind) low temperature coused a lot of demages in the water supply system in Dalmatia and a lot of traffic interuptions. At some parts along the coast the sea was frozen. February 2017 was warmer than normal and especially at the North Adriatic wetter than

		normal (wider area of Rijeka was extremely wet). There was not high impact weather recorded.