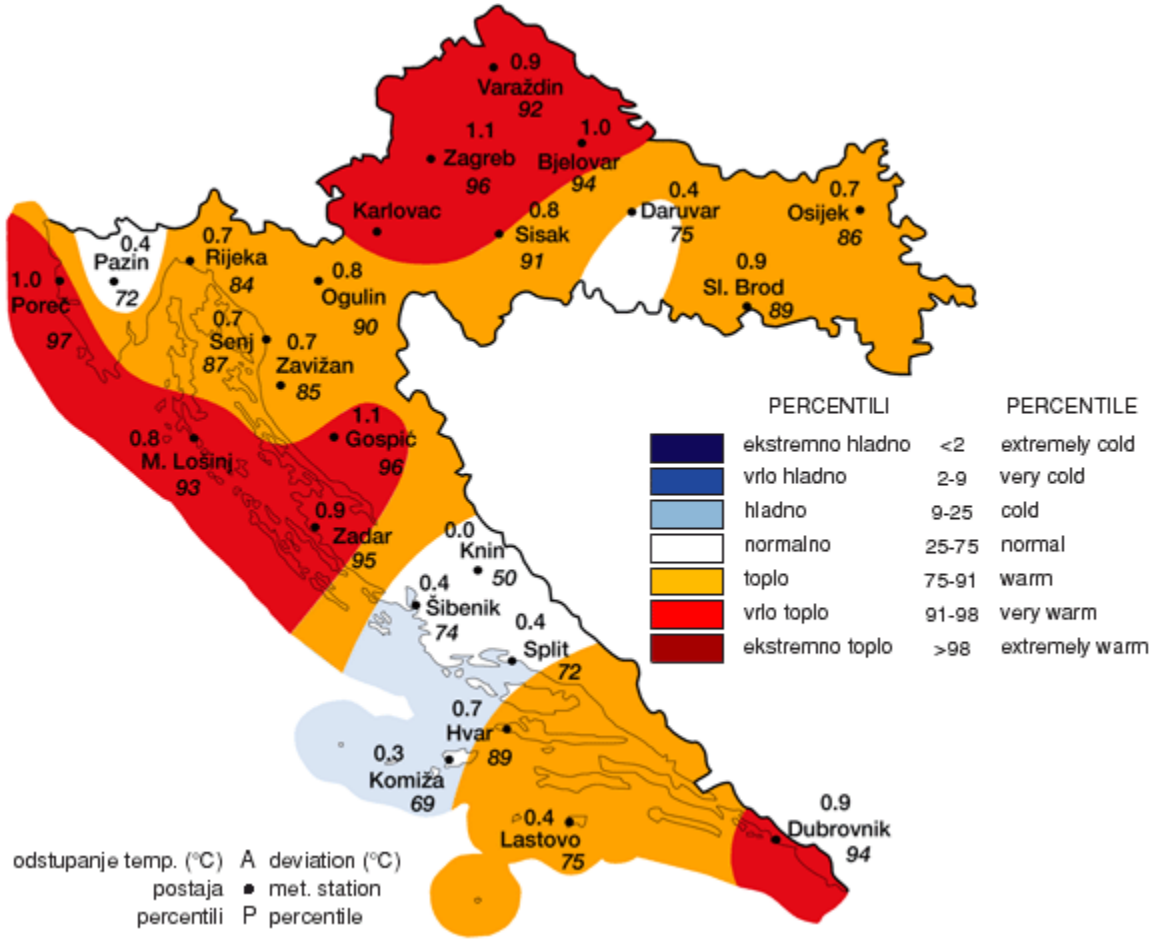
Climate Report for Croatia for Summer 2014

Air temperature anomalies for Croatia in Summer 2014

Average summer (June, July, August) air temperature in Croatia were mainly above the multi-annual average (1961-1990). Corresponding air temperature anomalies for summer 2014 were within the range from 0.3°C to 1.1°C.

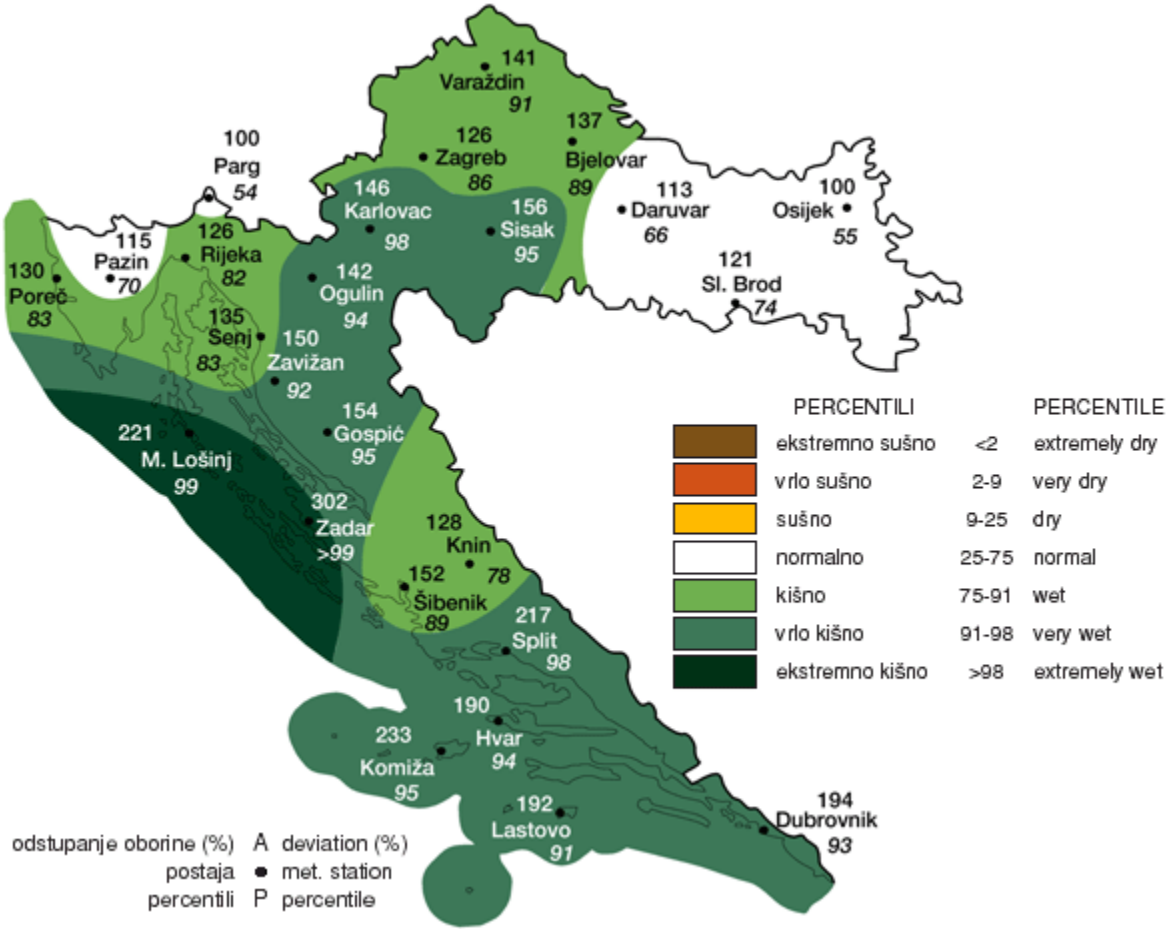
According to percentile ranks and classification ratings, thermal conditions in Croatia for summer 2014 have been described by the following categories: **normal** (an area in the hinterland of the Northern Adriatic, part of Northeastern Croatia as well as part of the Middle and Southern Adriatic), **very warm** (part of Northern and Central Croatia as well as part of the Northern, Middle and Southern Adriatic) and **warm** (the remaining part of Croatia).



Precipitation amounts for Croatia in summer 2014

An analysis of precipitation amounts for summer 2014 given in percentages (%) of 1961-1990 average, shows that these precipitation amounts in Croatia were mainly above the average with the exception of Osijek and Parg where precipitation amounts were on par with the mentioned average. Corresponding precipitation amounts for summer 2014 were within the range from 100% to 302% of multi-annual average for this season.

According to percentile ranks and classification ratings, precipitation amounts for summer 2014 have been described by the following categories: **normal** (an area in the hinterland of the Northern Adriatic as well as part of Eastern Croatia), **wet** (part of Northern and Central Croatia as well as part of the Northern and Middle Adriatic), **extremely wet** (part of the Northern and Middle Adriatic) and **very wet** (the remaining part of Croatia).



SEECOF-11 CLIMATE OUTLOOK VALIDATION

Air temperature anomalies for Croatia in Summer 2014

According to the SEECOF-11 climate outlook, for all Croatian teritory, there were chance for warmer than normal summer season, with higher probability for above average conditions along the coast with belonging inland. Probability for exceeding the average summer season temperature was 40%.

The summer season in Croatia according to multi-annual average 1961-1990 was mainly around and above normal. In relation to the multi-annual average 1981-2010, the warmer anomaly is a bit less. We can conclude that the outlook was relatively satisfying.

Precipitation amounts for Croatia in Summer 2014

According to the SEECOF-11 climate outlook, the precipitation had no preference for any climate defined categories for all of Croatian teritory, with an equal probability of all three terciles.

The actual precipitation amounts were mainly above thirty-year average 1961-1990, especially along the Adriatic coast and in the mountainous part of Croatia. Taking into account that the newer climatology 1981-2010 is generally similar or drier than the older one, we can say that the positive anomaly along the Adriatic coast is even more pronounced. We must emphasize that the signal for wet conditions in the bigger part of Croatia was missed. Apart from that, for the eastern part, where outlook expected climatology, the forecast was satisfying.

Country	Seasonal temperature (JJA)		Seasonal precipitation JJA		High Impact Events
	Observed	SEECOF-11 climate outlook for temperature	Observed	SEECOF-11 climate outlook for precipitation	
Croatia	Normal to Above normal	Above normal	Above normal Normal (in eastern part and in the hinterland of Istra, North Adriatic)	Normal (No predictive signal)	In all three months convective related severe weather phenomena (thunderstorm, hail, heavy rainfall, flash flood, water spout) were observed mostly all over Croatia. Some apsolute daily and monthly maxima were recorded. **In June**, apsolute **monthly maximum** of rain was recorded in Dubrovnik (South Adriatic) - 191,0 mm (since the beginning of measurements in 1961). Similar was in Komiža (island Vis, Dalmatia) – 178,0 mm, the biggest amount since the beginning of measurements in 1981. Even more maxima were recorded **in July**. Very extreme was thunderstorm which caused heavy rainfall in Zadar (Central Adriatic) on 10 July – during 1 hour 44,7 mm of rain was observed, 109,5 mm/24 h. Apsolute **monthly maximum** was recorded too (since 1961), with 341,3 mm of rain which was approximately 10 times more than average for July, and over previous record (2002.) for all summer season (305,2 mm). Apsolute **daily maximum** of rain was recorded: - on 14 July in Pula (Istra, North Adriatic) (since 1963) – 96,6 mm/24 h - on 28 July in Komiža (island Vis, Dalmatia) (since 1981) – 47,5 mm/24 h - on 30 July in Rab (island, North Adriatic)(since 1978) – 92,3 mm/24 h; Ist (island, Central Adriatic)(since

					2006) – 294 mm/24 h and Silba (island, Central Adriatic) (since 1989) – 217,5 mm/24 h Apsolute **monthly maximum** of rain was recorded: - in Gospić (Lika, highland)(measurement since 1872) – 264,1 mm - Zavižan (highland)(since 1953) – 275,3 mm - Rab (island, North Adriatic)(since 1978) – 198,2 mm - Ist (island, Central Adriatic)(since 2006) – 294,0 mm - Silba (island, Central Adriatic) (since 1989) – 412,5 mm – this amount is approximately half of annual average (annual average is 872,4 mm, measurements since 1989) In August, both **daily** (109 mm/24 h on 14 August) and **monthly** (248 mm) **maxima** of rain was recorded in Krapina (measurement since 1993) in north-west part of Croatia.