



Review of the meteorological extremes in 2014 and 2015 in Croatia

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Extreme and dangerous weather was quite frequent in Croatia in past two years. Different kind of storms caused great damage but certainly the biggest disaster occurred in May 2014, the most devastating flood in the region in the last 120 years. A large area which included eastern Croatia, northern Bosnia and Herzegovina and central Serbia was affected. More than 60 people died, over 100 000 homes and buildings were destroyed and thousands of livestock were killed.

After this event there was a short break concerning high impact weather but very active summer and autumn brought numerous thunderstorms and flash floods. The number of red alerts till the end of September reached 7 and orange 40. On several occasions the daily maximum amount of rain was exceeded at some synoptic stations. For example on 30th July on the island Ist 294 mm of rain fell within 24 hours. One of the rare events was also an MCC on 20th of September. In connection with this event a red alert was issued for thunderstorms over Dalmatia but the most severe weather occurred over northern Italy and the Adriatic Sea.

Last winter, although mild, showed its strength on several occasions. A remarkable event took place on 30th January with deep cyclone over northern Italy and the Adriatic. Stormy southerly wind (from southeast to southwest) in Dalmatia was blowing with the speeds greater than 25 m/s for whole day, producing high waves whose strength literally smashed some waterfronts and the waves even poured over 40 meters high city walls in Dubrovnik.

Another winter storm completely blocked transport from northern part of Croatia to the south in the period from 6th to 8th February. In the littoral mountain range of Gorski Kotar more than 70 cm of snow fell in two days and was accompanied by wind gusts of 17 to 25 m/s which caused snowdrifts 3 m high. In the Velebit channel in northern Adriatic the bora wind was blowing with the speeds up to 60 m / s.

Storms range in scale from tornadoes and thunderstorms, through tropical cyclones, to widespread extratropical cyclones, but most often they all bring destructive weather conditions. In this lecture a review of several high impact weather events, i.e. severe storms that have hit the Croatian territory in the past two years will be presented. Also, the statistics of warnings issued by NMHS will be given, indicating the increase of red alerts in the past two years. The question arises, are the extreme weather events more frequent or are we overcautious because of the public criticism?