



"Climate change on Friuli Venezia Giulia (Italy): rapid temperature rise, new records of heavy precipitation and orographic effects on temperature extremes across Alps and Adriatic. Analysis of the data of the period 1991-2015 in comparison to the historical series previous."

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Friuli Venezia Giulia is well-known as the wettest land of Italy with important yearly average from 1000 m over coastal zone to 3300 m over prealpine sector., and from 1991, OSMER has implemented a observative meteorological system and investigated over a pattern of meteorological phenomena, some of this, typical of this zone, as strong rainfall precipitation, frequent thunderstorms with hail, strong wind Bora over the sea.

During the last 25 years we have seen significant change in weather conditions, with a rapid rise of temperature and distribution, frequency and intensity of precipitation.

The most frequent extension to high latitude of tropical high pressure and a irregularity of westerly circulation over Mediterranean zone cause a change of the distribution of precipitation, an increasing a strong and quickly rainfall, and a rapid increase in average temperatures, with many new heat and cold records.

During the 1961-1990 time, but too in the past since the beginning of observation, the average precipitation is quiet stable, but in the last 25 years it's possible observe more variability with more frequency of period of abundance and scarcity. This extremes of variability of precipitations is even more significant over the last 15 years, with an exceptional peak in 2014.

The temperature analysis shows a clear upward trend, more pronounced than the other Italian regions, with new records, due to the location and geography of the region, the bridge between the Alps, the Adriatic and the Balkans.