

Associazione Italiana di Meteorologia I'm only a point on the map, but I suspect climate change...



Meteorological station of Legnaro (Italy) - Climatology overview: 1993-2013 (21 years)

Legnaro station (PD) Italy, is one of the ARPA Veneto DRST - Servizio Meteorologico meteorological station in Veneto region. I show here the climatological analysis of meteorological parameters collected in the last 20 years. This station is representative of its regional area and its behaviour is similar to other close stations.

Data analysis

century (2010).

• The graphs show the trend of temperature, radiation, wind intensity, and total rain accumulation in the last 2 decades in Legnaro station.

· Also derived indexes such as annual number of heat waves and strong precipitation events was compared year by year . Comparing the first decade with the last one is possible to observe that: Summer temperature max and min are increased, averaged wind intensity is also increased; heavy precipitation and heat waves events became more frequent.

Conclusions . The evidence that "something is changed" in the last 10 years inside of climatic series of Legnaro station support the climate change thesis

• The local observations are not able to resolve some exceptional world events, such as the warmest year in the last

· Data analysis of one meteorological station is enough to capture the meaningful signals of climate change

Legnaro (PD) is at 8 m asl - Ion 11° 57' E 45° 20' ARPAV

days



Thanks for the data to:

ARPAV, the Regional Agency for Environ ental protection in Veneto Region

DRST, the Department that manages meteo, hydro and land network.

Centro Meteorologico di Teolo the public meteorological centre in Veneto with institutional assig

for more than 3 day



Almost one week with Tmin >34 °C in the last 5 years, except 2014!





Mild winter becomes common in the last 10 years

average 1993-2002 vs 2003-2012





Total precipitation over 1000 mm becomes common in the last 15 year.



Tmin >20 °C in summer becomes common in the last 7 years.

2005

2007 2009 2011 2013

Tmin summer

the phenomena was

1995 1997 1999 2001 2003



than 30. (*) visibilimeter data bed ame available only from 2010

Extreme values

windy day: 8.7 m/s 9th March 2010 wind gust: 10.5 m/s 10th March 2010 T max (max): + 37.5 22nd August 2011 T max (min): - 2.7 28th December 1996 Precipitation day (max): 168.8 16th September 2009 T min (max): + 23.8 2nd July 2012 T min (min): - 10.5 20th December 2009 Day continuous without rain in summer: 56 in 2012





The trend of "No rain days" is positive.

average 2004-2008 vs 2009-2013

2007

2009

2011

2013



Heavy precipitaion



Heavy precipitation is a consequence of the last two graphs.



2005

1997 1999 2001 2003 2005 2007

Heat wave