Un’estate italiana

Meteorological report about the summer quarter based on the MeteoNetwork database
“Un’estate italiana” (An italian summer) is a data visualization project by Gli Additivi based on the MeteoNetwork database. The introduction is drenched of football — related jokes and metaphors, the title itself (Un’estate italiana) comes from the title of the Italian version of the famous song “To Be Number One”, produced by Giorgio Moroder and sung by Edoardo Bennato and Gianna Nannini at the opening of the Italian edition of the Fifa World Cup in 1990.
Summer 2015 has almost won the championship of the hottest summers, after a long dispute with the other champions of the hottest summer ever: summer 2003 and summer 2012; 2015 ended up in third place by a whisker, despite an incredibly hot July, especially in northern Italy. July, in many places, was recorded as the warmest month of the year. Many cities have had temperatures constantly above 38° C for 15 days or more, like Mantua (Lombardy).

Our old last bastion, the Azores High, an icon of the nineties summers, with its temperatures that remain unsurpassed for over a decade, this year has warmed up much on the sideline of the pitch, but finally sat on the bench, on the Atlantic Ocean, giving way to the north African anticyclone to run with a hard pressing, just like a Francesco Totti’s lob, Southern Italy has been bypassed to score in the Northern Europe.

Indeed, in the first two weeks of June the northern part of our country has been hit by a humid and stagnant warm. That has made the air even difficult to breathe. In the following month the effects of the zonal marking by the Northern African High did not take long to be felt further south, recording exceptional values. And then our striker went through the entire area, and together with Spain and France, has full-invested the entire peninsula. That’s to say a field on fire!
Number of all MeteoNetwork’s weather stations in Italy, sources of the dataviz.

Italian cities located between 0 and 300 mt. above sea level which recorded at least once temperatures over 35°C.

Italian cities located between 0 and 300 mt. above sea level which recorded temperatures over 35°C for 7 days in a row.

Italian cities located between 0 and 300 mt. above sea selected as sample unit.
2015: An italian summer — Temporal continuity
Maximum over 35°C
/Italy
2015: An Italian summer — Temporal continuity
Maximum over 35°C /Northern Italy

8 days › Venezia
14 days › Milano
16 days › La Spezia
17 days › Bologna
19 days › Verona
20 days › Novara
21 days › Parma
23 days › Monza
23 days › Modena (Carpi)
31 days › Mantova
32 days › Rimini (Verucchio)
33 days › Modena
39 days › Modena (Carpi)
2015: An Italian summer — Temporal continuity
Maximum over 35°C
/Middle Italy
2015: An italian summer —
Temporal continuity
Maximum over 35°C
/Southern Italy

[Diagram showing travel times and destinations]
2015: An Italian summer — Warmest Cities: temporal continuity over 38°C

- Mantova: 16 days
- Firenze: 13 days
- Rimini (Verucchio): 12 days
- Modena (Carpi): 10 days
- Caserta (Alife): 9 days
- Lecce (Tuglie): 8 days
Going to bed with a temperature higher than 26°C is not exactly a way to enjoy our lives. If this happens for more than one week, then the inconvenience becomes remarkable. The “best” score is for Palermo, with 24 days above 26°C., second place for Livorno, which has exceeded the threshold of 28°C for 11 days out of 13.

The top five of highest minimum temperatures sees the South of Italy stand out, with three cities in Puglia: first place go to Fasano (Brindisi) with 30.1°C.; followed by Bassano del Grappa (Vicenza) with 29.4°C. and 29.1°C. for Genoa. The last place for Vieste (Foggia) and Taranto equally placed with 29°C.

The interesting, extraordinary and unnatural fact is that the increase of minimum temperatures in the urban centres. The approaching overbuilding retains the heat generating a real island of heat, which increases the discomfort of the inhabitants, especially in some poorly ventilated countries.

We all should think of something to stop the phenomenon.
2015: An Italian summer — Temporal Continuity
Minimum over 26°C
/ Italy

- Palermo
- Messina
- Napoli
- Livorno
- Vicenza (Bassano del Grappa)
- Torino (Trieste)
- Milano (Buccinasco)
- Latina (Ventotene)

Days over 26°C in the summer quarter 2015
2015: An Italian summer — top 5 highest minimum temperatures

- **30.1°**: Brindisi (Fasano)
- **29.4°**: Vicenza (Bassano del Grappa)
- **29.1°**: Genova
- **29°**: Foggia (Vieste)
- **29°**: Taranto
The Heat Index is the index which measures the level of discomfort caused by high temperatures combined with a very high level of humidity. The index considers temperatures of 27°C or higher, and humidity over 40%; it is made up of 4 ascending levels, each corresponding to a certain degree of discomfort: the higher the level, the more intense the discomfort.

Monitoring these data is crucial for preventative healthcare. For this reason Meteonetwork association carried out a research project called “Weatherness” together with The Centre for Research in Medical Bioclimatology, Biotechnologies, and Natural Medicines of Milan University (Centro di ricerche in Bioclimatologia Medica, Biotecnologie e Medicine Naturali).

The graphic focuses on level 3 and evaluates temperatures from 40° to 54°. This value corresponds to a strong physiological discomfort commonly known as heat stroke, and related symptoms such as dizziness, weakness, lethargy and shortness of breath. Towns between 0 and 300 meters above sea level which recorded a heat index of 40° of higher for more than six days in a row have been analysed. Mantua leads the field.

In 2015, the highest value of heat index for the whole summer were recorded in July, whereby Italians responded by mostly staying inside, either at home or in the office and turning to any source of refreshment available.

Indeed, if we compare the heat index values with those of power consumption, we notice that the consumption of the towns at the top of the heat index rank coincide with those regions which have the highest consumption: Lombardy with Mantua, Cremona and Lodi; Emilia Romagna with Modena, Rimini and Forlì; Tuscany with Grosseto; Friuli-Venezia Giulia with Pordenone; Veneto with Rovigo, Padua and Verona; Trentino-Alto Adige with Trent.
July 2015:
An italian summer —
Heat index and power consumption by region

- 12830 MW/h
  Lombardia

- 5538 MW/h
  Liguria
  Piemonte
  Valle D’Aosta

- 9804 MW/h
  Emilia Romagna
  Toscana

- 9530 MW/h
  Abruzzo
  Lazio
  Marche
  Molise
  Umbria

- 1263 MW/h
  Grosseto (Castiglione d. P.)
  10 consecutive days
  Heat Index 40° / 54°

- 3342 MW/h
  Sicilia

- 9530 MW/h
  Friuli Venezia Giulia
  Trentino Alto Adige
  Veneto

- 9804 MW/h
  Pordenone (Sacile)
  8 consecutive days
  Heat Index 40° / 54°

- 8452 MW/h
  Basilicata
  Calabria
  Campania
  Puglia

- 5538 MW/h
  Verona (Pescantina)
  8 consecutive days
  Heat Index 40° / 54°

- 1463 MW/h
  Sardegna