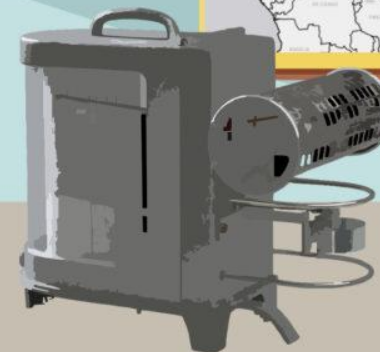
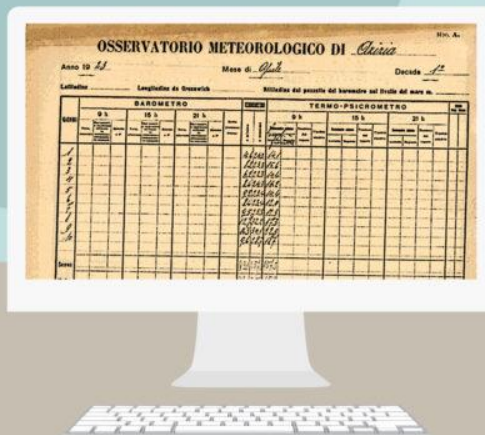




# Dieci e Lode

Dati climatici delle Ex Colonie Italiane  
E LOro Digitalizzazione





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Consiglio per la ricerca in agricoltura  
e l'analisi dell'economia agraria

**Amministrazione Centrale**

**UDG4**

# **The Meteorological Service of Italian Colonial Africa through the historical climate data of the Agriculture and Environment CREA**

***Luigi Iafrate \****

**\* CREA UDG4, Coordinatore Area Biblioteche e  
Collezioni storiche**



*Amilcare Fantoli at the headquarter of the Libyan meteorological Network*

**The meteorological services of the former Italian colonies were systematically founded by a geographer and climatologist named Amilcare Fantoli (1891-1980).**

**It all began in 1919 with the foundation of the Tripoli Central Observatory, whose headquarters had been in the castle since 1921.**

**Twenty years after the Libyan meteorological network was thus expanded that it included 72 first- and second-class meteorological stations and over 200 rain ones. They were distributed throughout Libya.**

**The political-military events of the period 1940-1945 interrupted the publication of the meteorological bulletins of the former Italian colonies in Africa.**

**In the years 1920-1939 Fantoli also worked on the establishment of similar weather services in all the other regions of the former Italian Africa.**

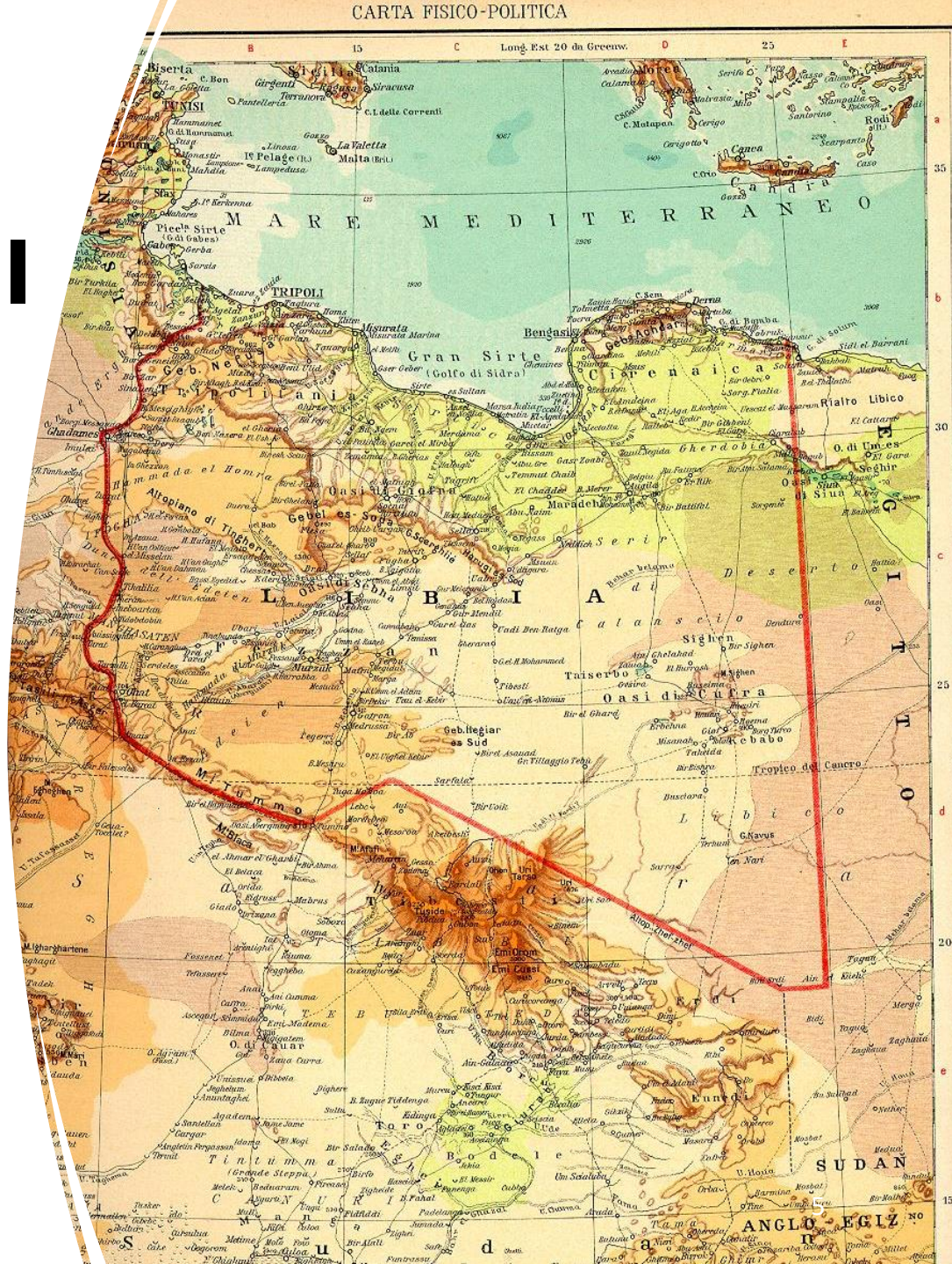
**The staff in charge of observations was mostly military.**

**Rainfall data and processing of other atmospheric observations and measurements relating to Lybia are mainly published in three works by Fantoli himself:**



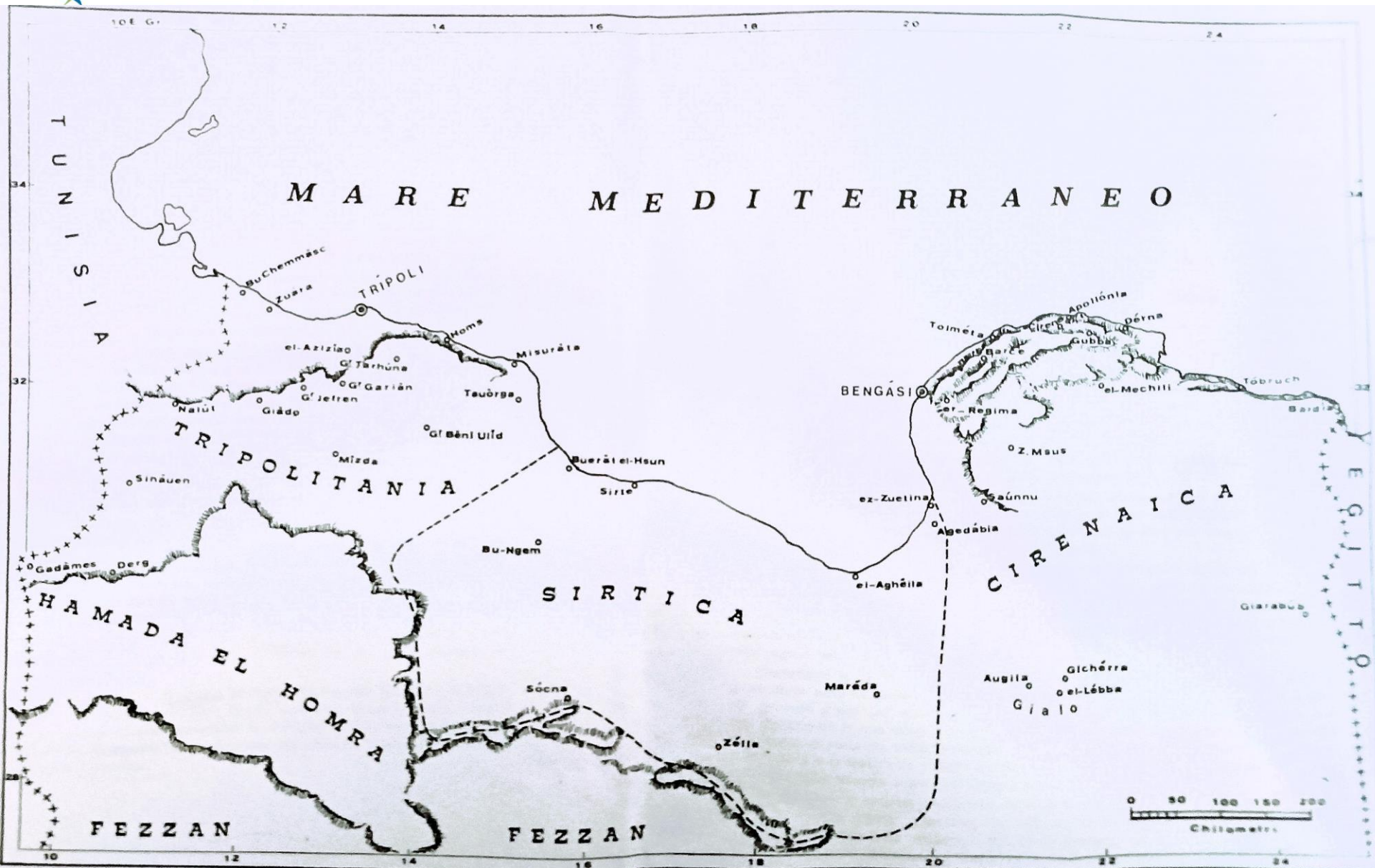
# Lybia's Meteorological Service

- «Contributo alla climatologia della Tripolitania», Roma 1967;
- «Contributo alla climatologia della Cirenaica», 1968;
- «Contributo alla climatologia delle regioni interne della Libia», 1969.





# Map of the natural regions of Libya, where main stations of the network are shown



**Ethiopia's Meteorologica Service was established by Amilcare Fantoli on the example of the weather services of Eritrea and Somalia. Its network was organized in 1937 and consisted of 35 meteorological stations and 140 rainfall ones. Its central office was in Addis Abeba.**

**The Eritrean meteorological network consists of 11 weather stations and 59 rainfall ones.**

**The original nucleus of the Somalia Meteorological Service was established by the Italian Royal Central Office of Meteorology and Geodynamics (now Agriculture and Environment CREA) in 1909 and was entrusted to the staff of the Royal Navy's radiotelegraph stations. Mogadiscio, Brava and Giumbo were its first stations.**

**However, its functioning turned out to be precarious, so much so that Prince Luigi Amedeo of Savoy, Duke of Abruzzi, took steps to reorganize and make it operational for five years (1920-1925).**

**In 1934 Fantoli was entrusted with the reconstitution of the Meteorological Service of Somalia.**

**At the same time, he also took care of the reorganization of the Eritrean one.**

**Strengthened by his project of unification of the colonial meteorological services, which he presented at the X Geographical Congress of Milan (1927), Fantoli managed to group them into a single organism: the Italian Eastern Africa ["Africa Orientale Italiana"] Meteorological Service.**

**Rainfall data and processing of other meteorological observations and measurements relating to Ethiopia, Eritrea and Somalia are chiefly published in three other works by Fantoli himself:**

- **«Contributo alla climatologia dell'Etioopia», 1965;**
- **«Contributo alla climatologia dell'altopiano etiopico», 1966;**
- **«Contributo alla climatologia della Somalia», 1965.**



**In 1939 Fantoli was forced to return to Italy, due to serious disagreements with Italo Balbo, then governor of Libya.**



***These volumes are kept in the CREA Central Library of Italian Meteorology.***

# The CREA Central Library of Italian Meteorology

**CREA's Meteorological Library at Collegio Romano. It is in the wing that has been the headquarters of Italy's first Central Meteorology Office and its heirs until 2016 (for almost 140 years), incorporated into Agriculture and Environment CREA in 2017.**





Known as the "**Central Library of Italian Meteorology**", it appears as **the largest one among the Italian collections specialized in Atmospheric Sciences** and is the main memory of the historical tradition of Italian modern Meteorology and Geophysics. **Erected by Abbot Joseph Calandrelli in the last eighteenth century, this Library has been enriched with numerous, valuable and interesting collections of books and periodicals on Earth Sciences, specially on Meteorology, Geophysics, Geology, as well as Astronomy and Phenology. It has now more than 50,000 volumes, including monographs and periodicals. Periodicals published by the Italian and foreign weather offices, as well as the old overview maps (the second half of 1800), kept in this Library, have a particular historic and scientific interest. The large amount of daily weather data collected in such publications, along with other specialized sources stored in the Library, enable to make studies and researches on climate dynamics in a historical and comparative perspective as far as Mediterranean Europe is concerned.**





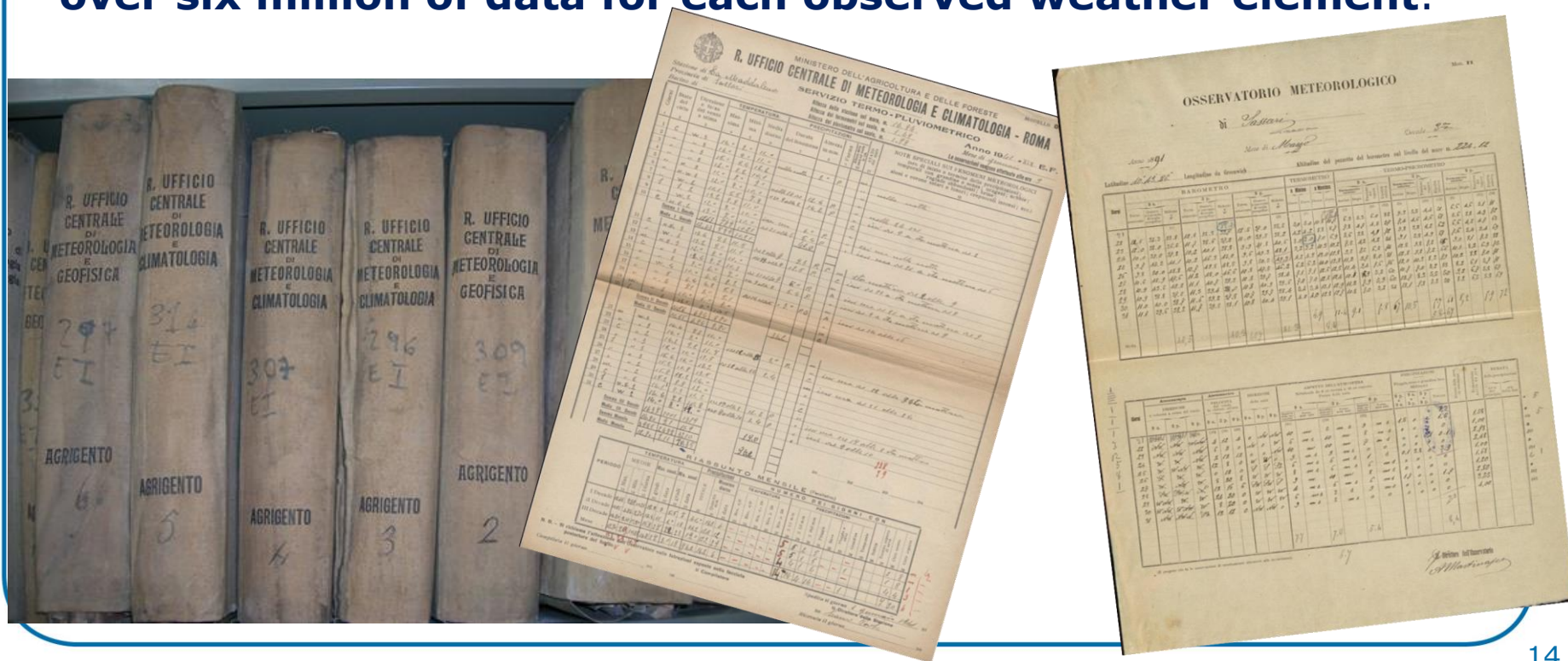
# **The CREA Historical Weather Archive**



# The CREA Historical Weather Archive



The Weather Data Archive consists of paper cards concerning the historical Italian meteorological stations, where observers transcribed daily observations and measures. This Archive is a wealth of information, unique in Italy: it is composed of about **900 meteorological data series**, whose **260 are more than thirty years old** and **20 more than one hundred-year-old**, for a total of over six million of data for each observed weather element.





Just over ten years ago, **in the basement of the Collegio Romano,, we found numerous paper forms containing meteorological data of some African weather stations, led by Dr. Maria Carmen Beltrano. Such stations were installed by the Italian Central Office of Meteorology during the period of Italian Colonialism**, phenomenon which saw the expansion of the Italian Kingdom over four African states: Libya, Somalia, Ethiopia and Eritrea.

**We have catalogued the retrieved series** according to criteria already used for other climate series in the archive: **the consistency information are shown in the synthetic tables on the right.**

**Data and information contained therein and in some publications kept in the CREA Meteorological Library could fill data gaps and be useful to studies on the climate and extreme events of those regions.**

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***Meteorological data  
of the Italian  
colonies in Africa  
and other foreign  
cities***





***Meteorological data of the Italian colonies in Africa and other foreign cities***



# OSSERVATORIO METEOROLOGICO DI *Agadabia*

Anno 19 *25*

Mese di *Luglio*

Decade *22*

Latitudine

Longitudine da Greenwich

Altitudine dal pozzetto del barometro sul livello del mare m.

GIORNI	BAROMETRO									TERMOMETRO		TERMO-PSICROMETRO									MEDIA temp. aerea				
	9 h			15 h			21 h			Media pressione barica	a minimo	a massimo	9 h			15 h			21 h						
	Term. attaccato	Bar. osserv. o applicata soltanto la correzione strumentale costante	Ridotto a 0°	Term. attaccato	Bar. osserv. o applicata soltanto la correzione strumentale costante	Ridotto a 0°	Term. attaccato	Bar. osserv. o applicata soltanto la correzione strumentale costante	Ridotto a 0°				Termometro esterno		Tensione del vapore	Umidità relativa	Termometro esterno		Tensione del vapore	Umidità relativa		Termometro esterno		Tensione del vapore	Umidità relativa
													Asciutto	Bagnato			Asciutto	Bagnato				Asciutto	Bagnato		
11										17.8	40.4	32.5			35.1			24.5					29.1		
12										16.4	28.3	25.0			26.3			22.4					29.0		
13										12.4	29.3	24.9			26.5			21.8					29.8		
14										10.2	29.4	20.9			24.0			21.1					19.8		
15										12.6	29.6	26.9			26.8			20.1					23.1		
16										9.8	30.8	24.5			28.1			22.0					20.2		
17										11.2	34.9	29.1			31.8			22.5					29.0		
18										16.4	40.9	31.9			34.3			30.4					29.8		
19										14.5	43.6	32.5			42.4			29.8					31.5		
20										19.1	42.5	35.5			34.5			27.0					29.8		
Somma										169.4	314.6	290.6			918.2			211.6					279.5		
Media										15.0	34.9	29.0			31.8			26.2					26.9		

Medie qu. 18h e 21h	Acqua caduta in mm.	Numero dei giorni	Stato del cielo	Provenienza del vento								CALMA		
				N	N-E	E	S-E	S	S-W	W	N-W			

Thanks for your kind attention!