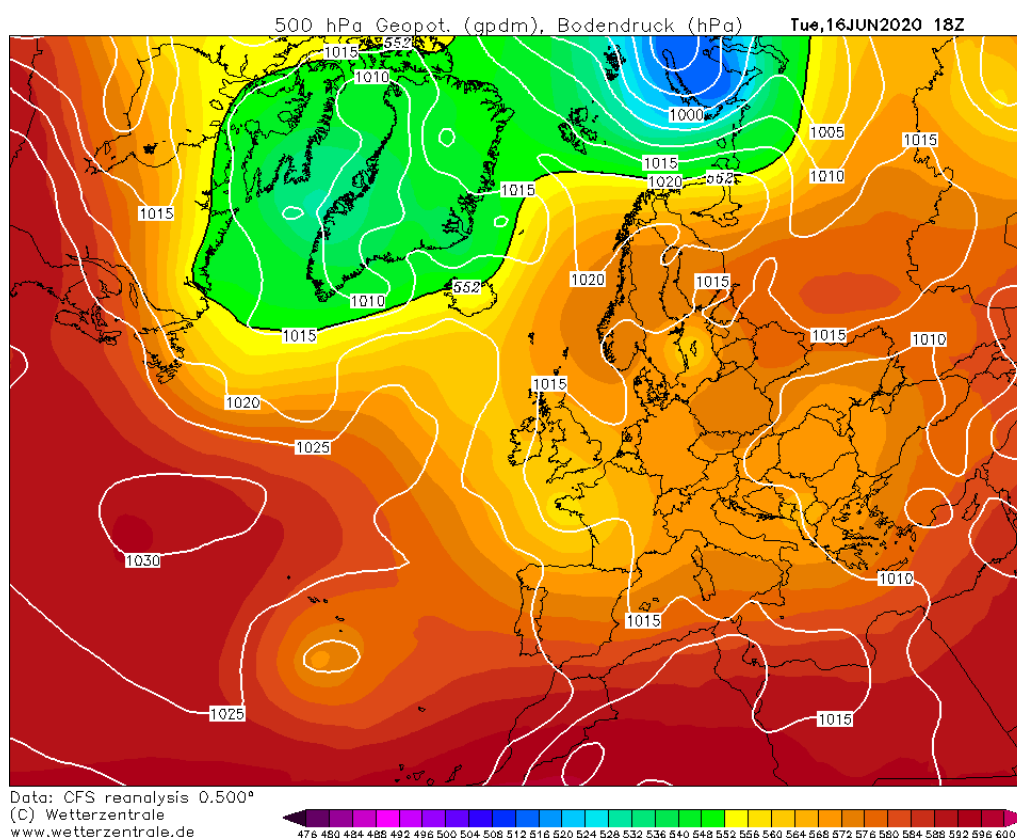


# METEOCLIMATIC REPORT

June 2020

The FIRST MONTH OF THE WEATHER SUMMER 2020 was characterized by a prevalence of uncertain weather, often disturbed in the first two decades and by typically summer weather conditions in its last part.

The synoptic situation was characterized, especially in the second decade, by some disturbed cyclonic passages, with westerly very accentuated but with overall modest rainfall. The general thermal framework was affected by these advances of oceanic air masses, showing slightly lower than the thirty-year climatic averages and especially the recent ones. The rhythmic expansion towards the north of the anticyclone of the Azores, the absolute lack of inputs of the African anticyclone and a certain strengthening of an anticyclone positioned between the Balkans and European Russia have determined a frequent "reverse omega" type of 500hPa geopotential, due to the moderately perturbed weather previously highlighted (fig. 1)

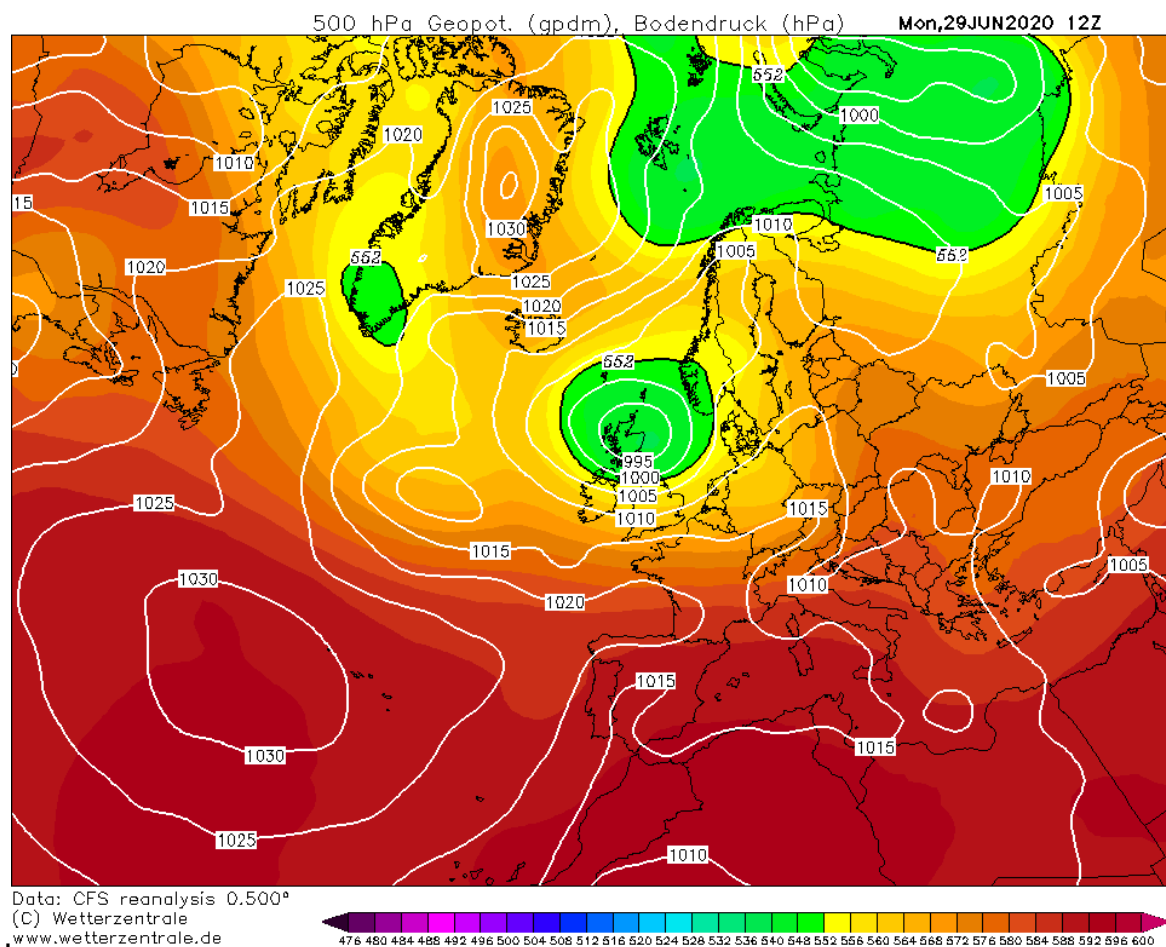


**Figure 1** - ground pressures and geopotential at 500 hPa referring to 18Z on June 16<sup>th</sup>

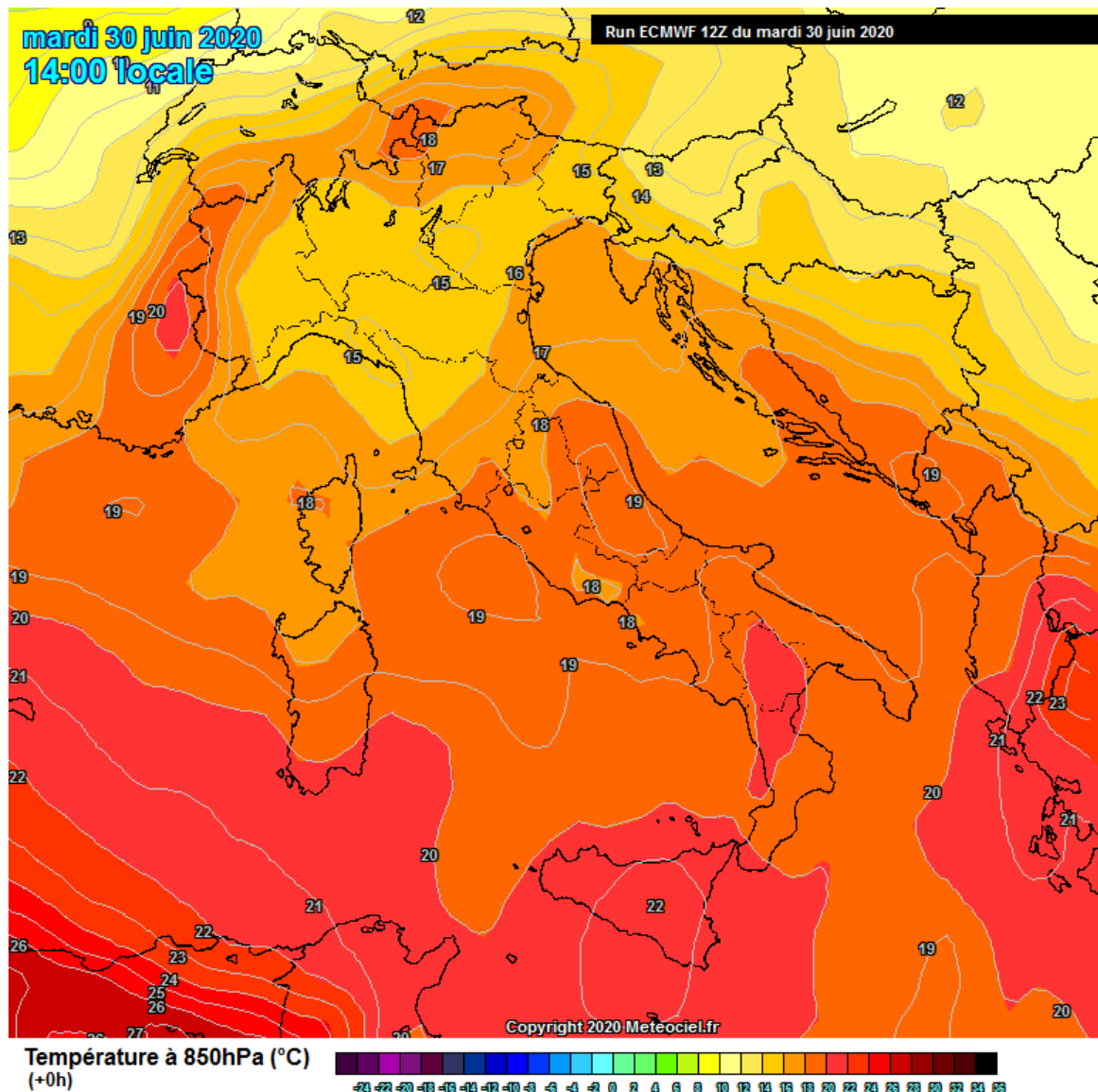
As previously highlighted, the precipitations related with the frontal passages proved to be modest, except between 15 and 16, when the cumulative deriving from two short storms slightly exceeded 30 mm. Moreover, the total monthly cumulative, of about 69 mm, was obtained in 10 rainy days.

Since day 19, the high pressure of the Azores has shown itself to be very dynamic, extending with greater decision towards the Mediterranean basin; the result is a typical summer time, with remarkable serenity of the sky and not particularly high temperatures. In the last three days of the month, the continental subtropical anticyclonic component showed some activity, extending to the central regions and causing a certain increase in temperatures which, for the first time in 2020, exceeded 35 ° C on day 29 (figs . 2 and 3).

It should be noted, however, that the temperatures at the geopotential 850 hPa (around 1560 m.) Did not exceed 19 ° C, an evident sign that the peaks of heat reached were affected by strong thermal gradients also due to the winds of fall from the Apennines in within their south-western component (garbino)



**Figure 2** - ground pressures and geopotential at 500 hPa referring to 12Z on june 29<sup>th</sup>



**Figure 3** – field pressure and temperatures and 850 hPa geopotential referring to 12Z on June 30<sup>th</sup>

From the analysis of the complete thermometric data (tab.1), it is clear that the average monthly temperature was around 20.7 ° C; the minimum one of 14.9 ° C the maximum one of 26.6 ° C; consequently the monthly temperature range was around 11.7 ° C. Note that on day 29 the first very hot day of the 2020 season occurred - 35.2 ° C.

The comparison with the average values for the thirty-year period CLINO 1981-2010 for the Ascoli Piceno station, show a slight "*under average*" of about 0.3 ° C despite the presence of a more continental overall signal, given that the minimum values were a degree lower than the average and the maximum just above the average climatic values.

On the other hand, if you compare the data with those concerning the last fifteen years for the same station in Brecciarolo, a much more significant lower than average value emerges - of about 2.5 ° C - 20.7 Vs 23.3 ° C.

With regard to rainfall, the signal was characterized by a slight meteoric surplus - about 10% (69 mm Vs 58 mm of climatic average) with rainfall distributed over 10 days (average 8.4 days). The stormy days were 4 ma without noteworthy associated meteorological phenomena.

Table 1 and figure 4 show daily climatic data with the respective monthly averages and the relative thermo-rainfall graph

Y	M	D	Tmin	Av T	Tmax	Prec. mm	RD	TS	HotD	Trnig
2020	6	1	11,3	16,6	21,8	0				
2020	6	2	10,9	18,2	25,5	0				
2020	6	3	12,2	19,3	26,4	1,4	1			
2020	6	4	12,8	17,9	23	1,4	1			
2020	6	5	14,6	18,4	22,1	7,2	1	1		
2020	6	6	12,9	19,9	26,9	0,2				
2020	6	7	13	19,9	26,8	0				
2020	6	8	15,9	19,4	22,9	6	1			
2020	6	9	13,6	18,3	23	13	1	1		
2020	6	10	11,4	17,5	23,5	2,8	1			
2020	6	11	12,8	18,4	23,9	0,4				
2020	6	12	11,7	18,3	24,9	0,2				
2020	6	13	13,6	20,5	27,4	0				
2020	6	14	16,1	20,5	24,9	4,4	1			
2020	6	15	14,8	19,1	23,4	14	1	1		
2020	6	16	16,4	20,5	24,5	16,8	1	1		
2020	6	17	15,4	20,9	26,4	1,2	1			
2020	6	18	12,8	19,7	26,5	0,2				
2020	6	19	14,5	20,3	26	0				
2020	6	20	13,3	19,5	25,7	0				
2020	6	21	14,4	20,4	26,3	0				
2020	6	22	19,4	23,5	27,6	0				
2020	6	23	17,2	22,9	28,5	0				
2020	6	24	15,5	22,2	28,9	0				
2020	6	25	15,3	22,4	29,5	0				
2020	6	26	18,1	24,4	30,6	0			1	
2020	6	27	17,9	24,5	31	0			1	
2020	6	28	18,9	25,2	31,4	0			1	
2020	6	29	20,1	27,7	35,3	0			1	1
2020	6	30	19	25,5	32	0				
average			14,9	20,7	26,6	69,2	10	4	4	1
av.81-18			16	21	26	58	8,4			
av 03-19				23,3						

**Table 1**– Daily summary of weather data available for December 2018. LEGEND: AvTmin: minimum temperature; AvTmed: average temperature; AvTmax: maximum temperature; prec mm: daily precipitation; RD= rainy days> 1mm; TS: Thunderstorms; Hd: hot days (with Tmax≥30°C). Trnig: ,tropical night; (with Tmin>20°C)

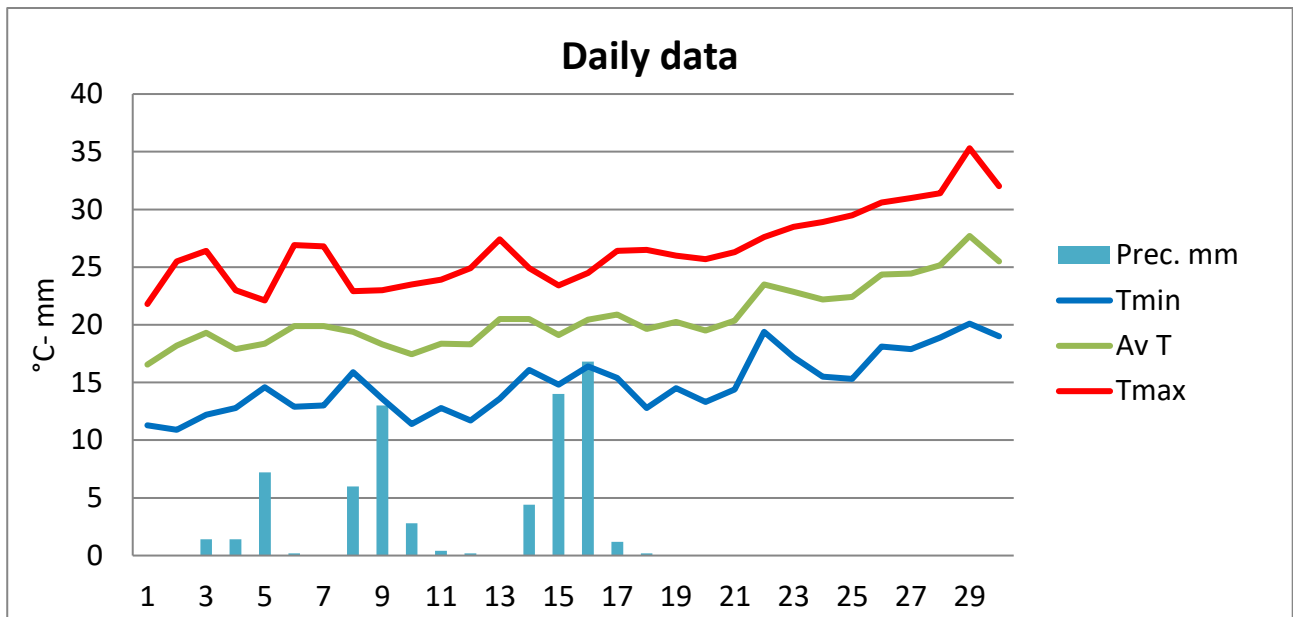


Figure 4 – graph of thermo- meteoric daily data