

METEOCLIMATIC REPORT

March 2020

The FIRST MONTH OF THE SPRING 2020 showed a moderate synoptic dynamism, with alternating moderate westerly, prolonged expansions of the subtropical anticyclone and above all, in the third decade of the month, an intense sinking of continental polar air responsible for a meteorological episode of winter weather

The result was an overall cooler thermal picture than in recent years but overall milder if we consider the last thirty years. Precipitation proved to be very abundant but concentrated in about 72 hours.

After a first mild and meteorologically variable decade due to the predominance of weak disturbed passages from the Atlantic, the polar vortex recomposes and dominates a field of high pressures which determines stable and sunny weather, with strong diurnal temperature excursions (fig. 1)

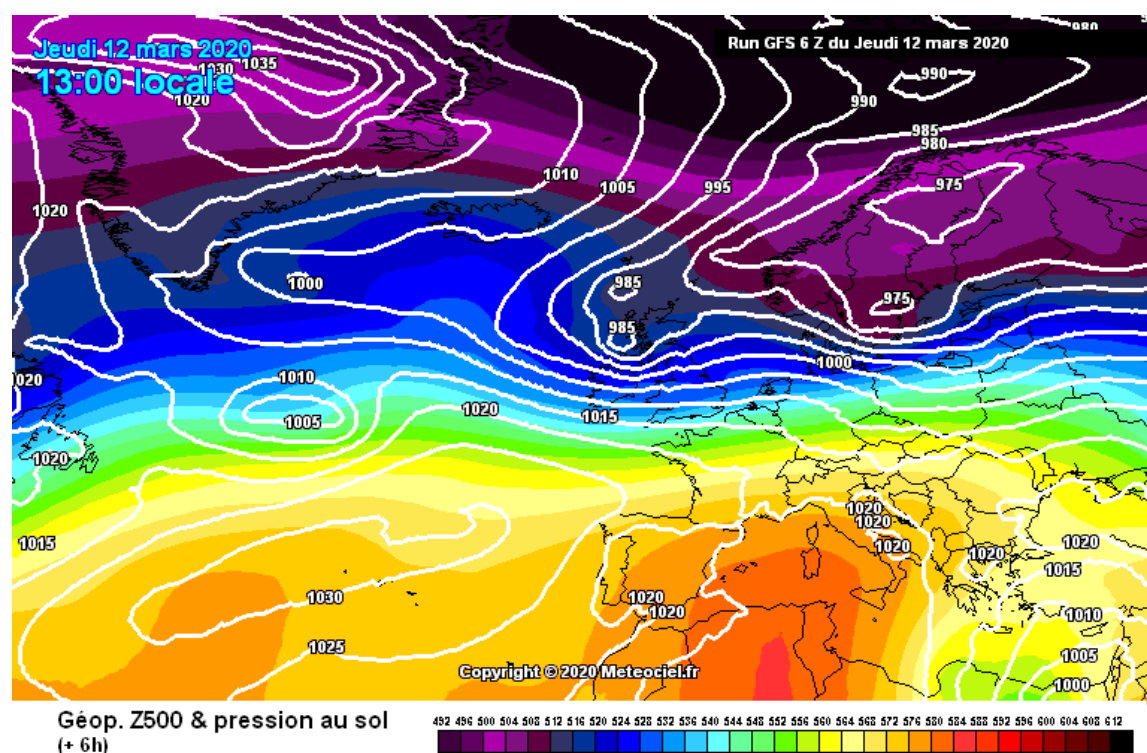


Figure 1 - ground pressures and geopotential at 500 hPa referring to 6Z on March 12th

This synoptic picture is interrupted on day 22 when air infiltrations gradually cooler but initially dry begin to arrive from Russia, capable of causing an intense worsening of the weather in the following days, more decisive on the days of 26 and 27. in the municipal area on Wednesday 25, snowfalls it up to the bottom of the valley but with maximum thickness on the ground not exceeding 2 cm (figs. 2 and 3).

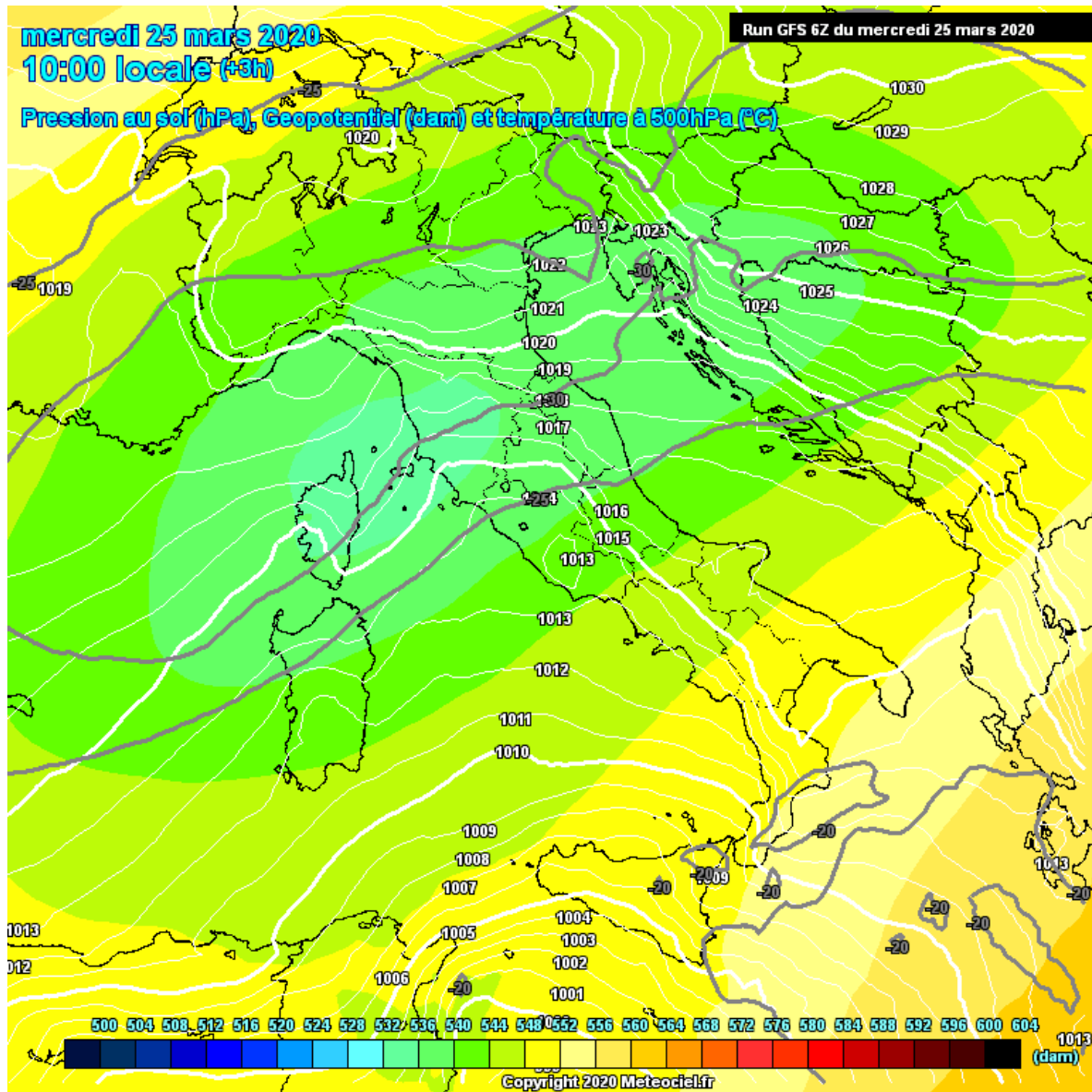


Figure 2 - ground pressure and geopotential 500 hPa, relating to the 06Z of March 25th

The very abundant precipitations that occurred on days 26 and 27 (over 130 mm / 48 hours) are due to the displacement of the low pressure minimum on the central Tyrrhenian Sea. This type of ground circulation is climatologically the most harbinger of phenomena of important magnitude.

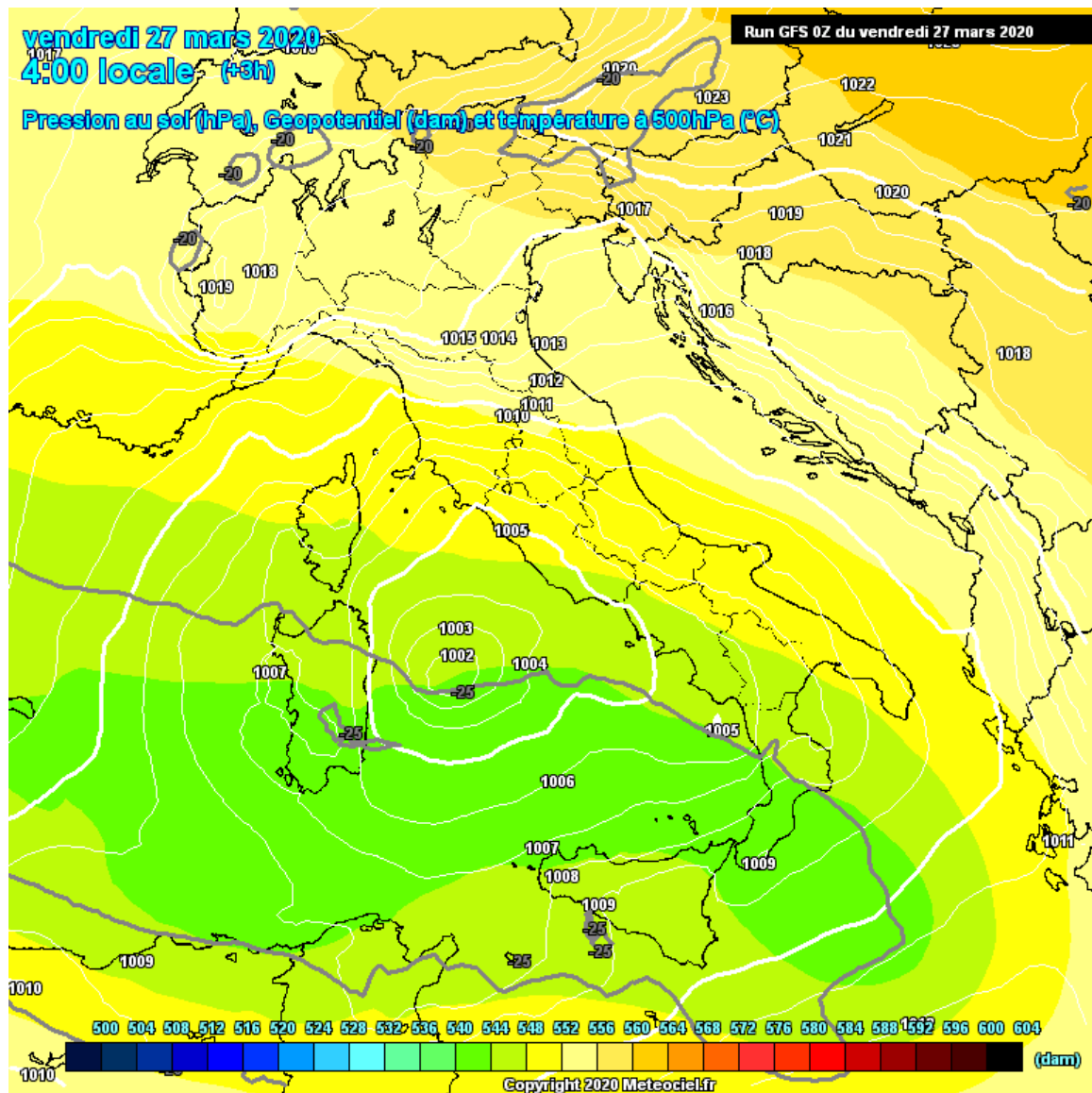


Figure 3 - ground pressure and geopotential 500 hPa, relating to the 04Z of March 27th

The analysis of the complete thermometric data (tab.1) shows that the average monthly temperature was about 9.7°C - therefore lower than that recorded in February -, the minimum one of 4°C and the maximum one of 15.4°C ; as a consequence, the monthly temperature range was around 11.5°C .

From the comparison with the average values for the thirty-year period CLINO 1981-2010 for the Ascoli Piceno station, there is a slight thermal surplus of about 0.4°C with lows of about a degree lower than the average but with maxima higher than it about 2°C .

On the other hand, if you compare the data with those for the last fifteen years for the same station in Brecciarolo, a lower than average value of about 1.7°C emerges

With regard to rainfall, after an extremely dry quarter, there was a significant water surplus (177 mm Vs 64 mm of climatic average) but, as previously highlighted, 90% of the rainfall was concentrated between the 25th and 27th of the month, a signal that once again confirms a significant extremeization of the precipitation fields. Consequently, the abundant rains did not have particularly important effects on the recharge of the surface aquifers.

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

Year	Month	Day	AvTmin	Av Tmed	Avtmax	Prec mm	RD	SD	ID
2020	3	1	4	9,9	15,7	1,8	*		
2020	3	2	13,1	17,0	20,8	0,8			
2020	3	3	7,2	12,4	17,5	0			
2020	3	4	2,7	9,0	15,2	0			
2020	3	5	1,4	8,3	15,2	0			
2020	3	6	6	11,9	17,8	0,6			
2020	3	7	3,3	7,4	11,5	4,2	*		
2020	3	8	2,3	7,4	12,4	3,6	*		
2020	3	9	0,6	7,5	14,3	0			
2020	3	10	5,1	10,5	15,8	0			
2020	3	11	3,1	11,8	20,5	0			
2020	3	12	3,8	12,2	20,5	0			
2020	3	13	4,3	12,8	21,2	0			
2020	3	14	5,7	12,3	18,9	0			
2020	3	15	1,7	8,1	14,5	0			
2020	3	16	0,5	8,1	15,6	0			
2020	3	17	1,5	9,6	17,7	0			
2020	3	18	1,6	10,6	19,6	0			
2020	3	19	5,7	13,5	21,2	0			
2020	3	20	3,8	12,2	20,5	0			
2020	3	21	6	12,7	19,3	0			
2020	3	22	6,5	10,5	14,5	0			
2020	3	23	2,6	6,0	9,4	0			
2020	3	24	1,5	4,3	7,1	6,8	*		
2020	3	25	1,6	3,2	4,8	14,8	*	*	
2020	3	26	2,6	4,6	6,5	60,6	*		
2020	3	27	6,5	8,9	11,2	70,6	*		
2020	3	28	5,5	10,2	14,8	2,8	*		
2020	3	29	4,9	11,7	18,5	0			
2020	3	30	4,5	10,3	16	0,2			
2020	3	31	5,2	7,8	10,4	11,6	*		
AVER			4,0	9,7	15,4	176,6	9	1	
AVER 81-10			5,2	9,3	13,2	64			
AVER 03-18				11,4					

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; Id: frost days (tmin>0°C); sd = snowy days

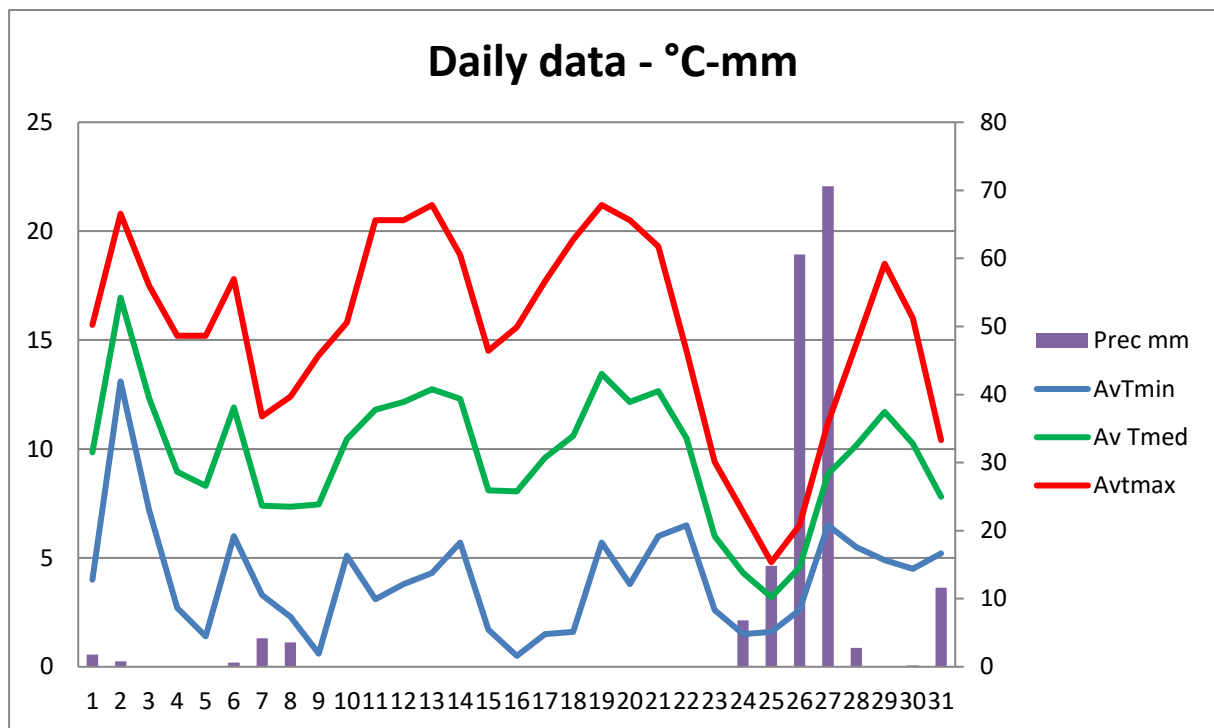


Figure 4 – graph of thermo- meteoric daily data