

METEOCLIMATIC REPORT

JANUARY 2020

After a rather mild and dry month of December, the first month of the year 2020 showed an almost total absence of rainfall in a "continental" thermal context - with cold nights and very mild days.

The persistent baric feature in the month was that of a modest or no ripple of the polar vortex, as a result the meridian heat exchanges proved to be practically non-existent, for NAO conditions almost always very positive. Obviously, the Atlantic fronts have followed more northern trajectories than the latitudes of central Italy; advances of intermediate or continental polar air masses (return from the east) harbingers of cold and perturbed or unstable weather conditions have practically not been recorded.

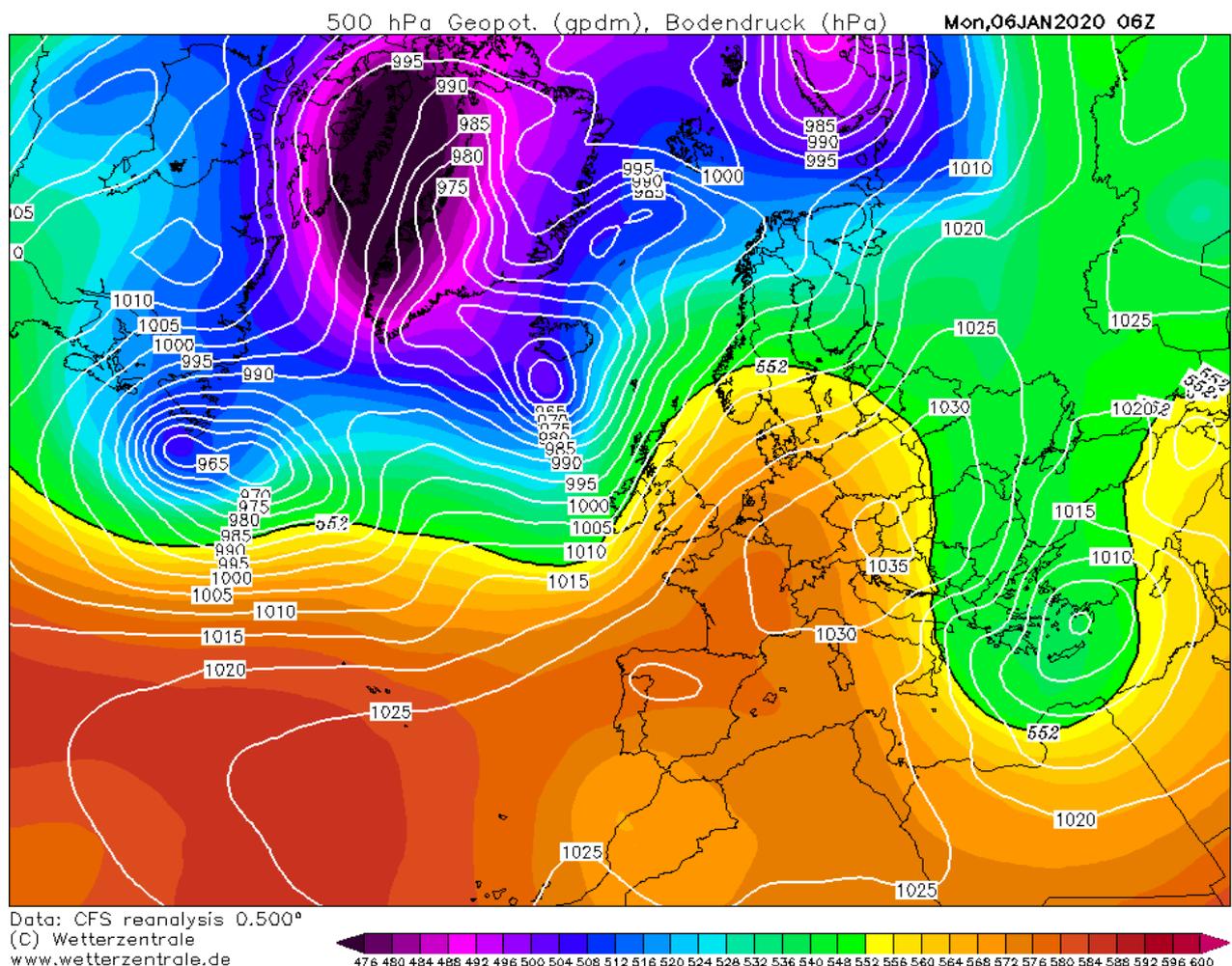


Figure 1 - pressure chart at ground and geo-potential 500 hpa, for 06Z hours on January 6th

Only between the 4th and the 7th of the month, the formation of a depression on the Ionian sea drew colder air masses with consequent lowering of the temperature and rather cold nights, with decided conditions of nighttime thermal inversion. In particular, at dawn on day 6 (fig. 1), the lows were significantly below zero. With values of -2.2°C at the Brecciarolo (79 m. asl), -0.1°C in Appignano (194 m.) And 2.8°C at 410 m., Although with mild maximum values thanks to the strong sunshine

In the last decade of the month, however, the maritime subtropical air masses prevailed, with a strong persistence of the sub-permanent anticyclone of the Azores which corresponded to a dry meteoric climate with cool nights and very mild days, with altitude of the thermal zerot often higher than 2500 meters. (Figure 2)

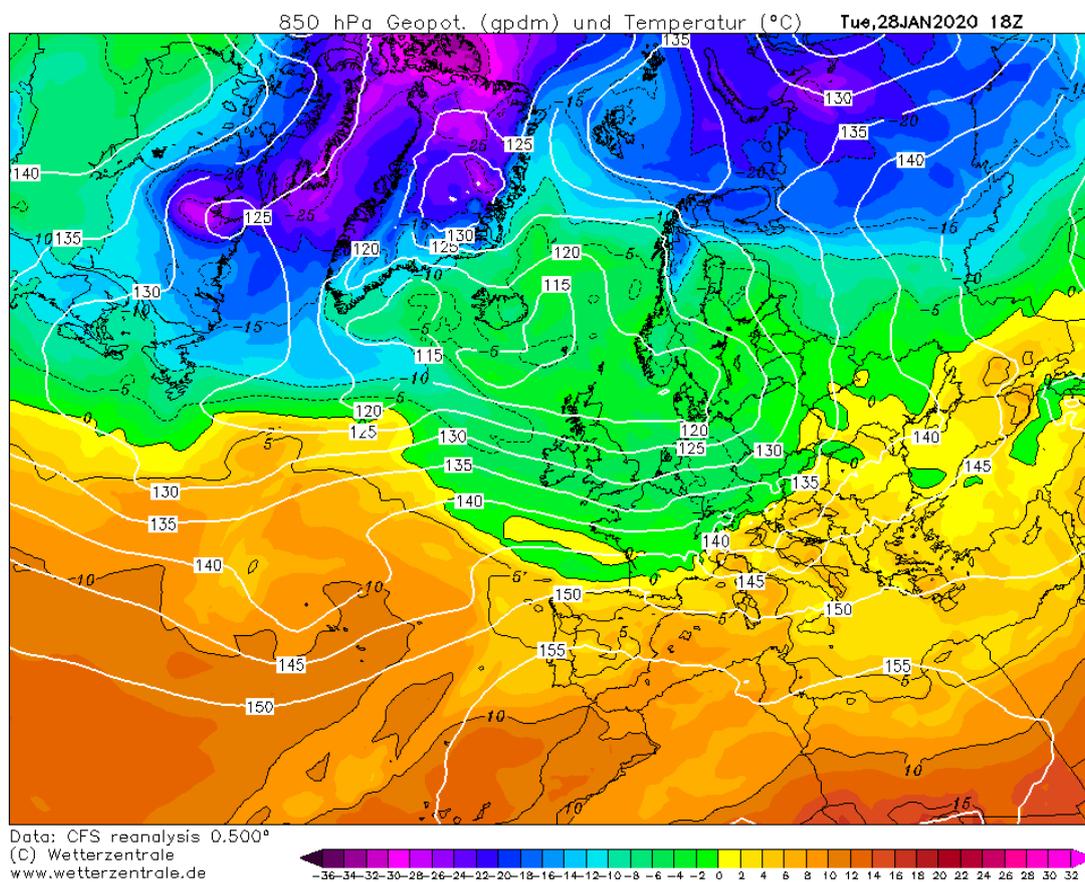


Figure 2 - thermal framework at geo-potential 850 hpa at 18Z on December 28 th

Only between 18 and 19 of the month, the passage of a weak Atlantic perturbation with mild cyclonegenesis on Salento produced weak precipitations, with a subsequent but short thermal drop, also extended to diurnal values.

From the analysis of the complete thermometric data (tab.1), it is clear that the average monthly temperature was about 7.1 °, the minimum one of 0.6 ° C and the maximum one of 13.6 ° C; as a consequence, the marked monthly temperature range was around 13 ° C.

From the comparison with the average values for the thirty-year period CLINO 1981-2010 for the Ascoli Piceno station, there is a thermal surplus of 1 ° C but with lower minimum values of about 1 ° C and higher maximum values of well 3 ° C.

On the other hand, if you compare the data with those for the last fifteen years for the Brecciarolo station itself, there is a thermal deficit of about 0.7 ° C

With regard to rainfall, the monthly cumulative barely exceeded 10 mm (10.8 mm) distributed over 2 days with precipitation (with cumulative > 1mm); the average meteoric intensity is about 5.5 mm / day

Referring to the climatic average of the monthly accumulations for the meteorological station of Ascoli Piceno - of about 87 mm - a huge deficit emerges.

Table 1 and Figure 3 show daily climatic data with the respective monthly averages and the corresponding thermo-pluviometric graph

Year	Month	Day	AvTmin	Av Tmed	Avtmax	Prec mm	RD	SD	ID
2020	1	1	-1,2	14,4	6,6	0			*
2020	1	2	-0,6	13,9	6,7	0			*
2020	1	3	-1,7	14,1	6,2	0,2			*
2020	1	4	0,2	13,1	6,7	0			*
2020	1	5	-1	14	6,5	0			*
2020	1	6	-2,2	10,5	4,2	0			*
2020	1	7	-1,2	11,1	5,0	0			*
2020	1	8	-0,9	12,6	5,9	0,2			*
2020	1	9	-1,3	14,7	6,7	0			*
2020	1	10	-1,9	13,9	6,0	0			*
2020	1	11	2	13,2	7,6	0			
2020	1	12	0	14,1	7,1	0			
2020	1	13	-1	12,4	5,7	0,2			*
2020	1	14	-1,1	13,6	6,3	0			*
2020	1	15	0,7	15	7,9	0			
2020	1	16	2,4	15,1	8,8	0			
2020	1	17	1,1	13,9	7,5	0			
2020	1	18	1,4	12,1	6,8	2,6	*		
2020	1	19	5,4	10,4	7,9	6,8	*		
2020	1	20	2,1	9,9	6,0	0,4			
2020	1	21	1,3	10	5,7	0			
2020	1	22	-0,8	11	5,1	0			*
2020	1	23	0	13,6	6,8	0,2			*
2020	1	24	-1	12,7	5,9	0,2			
2020	1	25	2,5	12,6	7,6	0			
2020	1	26	1	12,8	6,9	0			
2020	1	27	0,5	15,2	7,9	0			
2020	1	28	3,1	18,7	10,9	0			
2020	1	29	5	17,9	11,5	0			
2020	1	30	2,1	17,7	9,9	0			
2020	1	31	4	18	11,0	0			
AVER			0,6	13,6	7,1	10,8	2	0	14
AVER 81-10			1,8	10,4	6,1	65			
AVER 03-18					7,8				

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

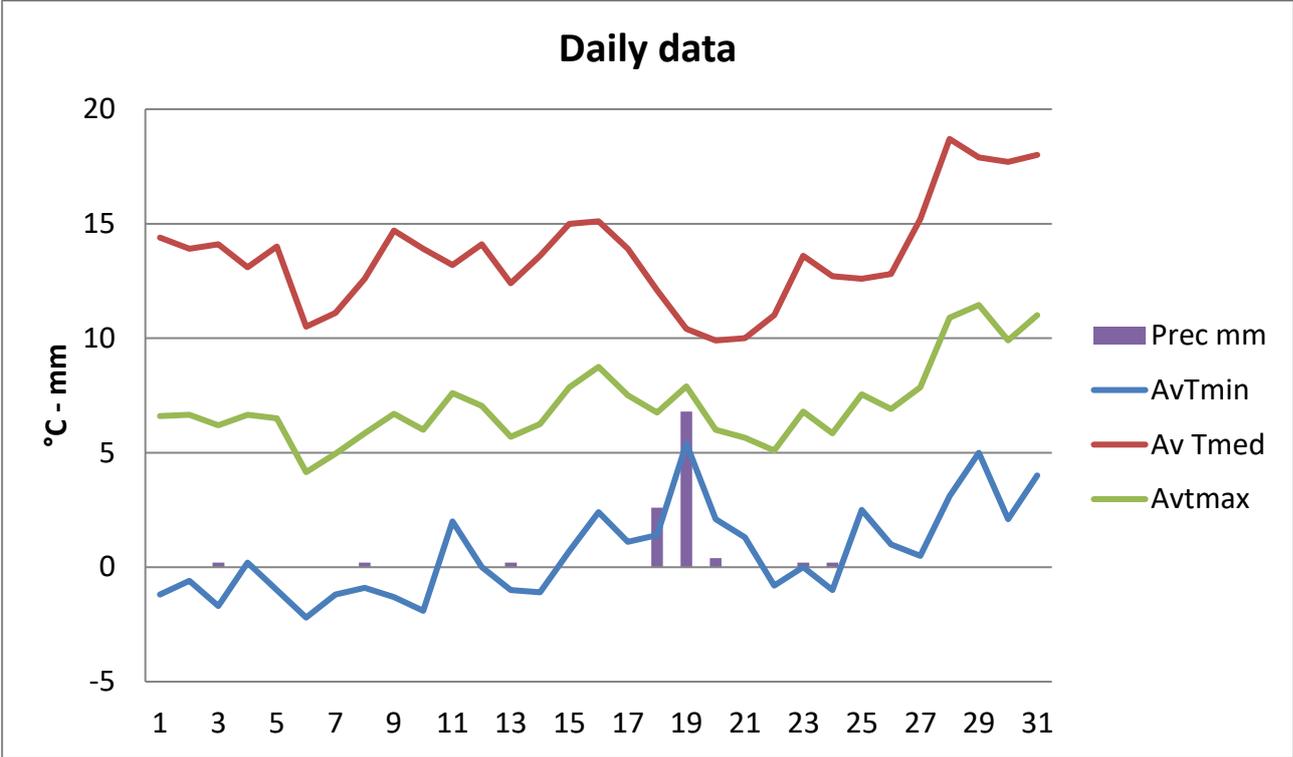


Figure 3 – graph of thermo- meteoric daily data

Year	Month	Day	AvTmin	Av Tmed	Avtmax	Prec mm	RD	TS	Iceday
2019	11	1	13,5	14,5	15,4	14 *			
2019	11	2	12,6	16,1	19,6	0			
2019	11	3	13,7	18,9	24,1	12,4 *			
2019	11	4	12,8	18,0	23,2	0,2			
2019	11	5	13,3	20,0	26,7	1 *			
2019	11	6	9,6	15,3	21,0	0			
2019	11	7	7,1	13,5	19,8	5,4 *			
2019	11	8	5,6	10,6	15,5	0			
2019	11	9	7,9	12,2	16,4	0,4			
2019	11	10	10,8	13,5	16,2	2,4 *			
2019	11	11	9,1	12,4	15,6	0,2			
2019	11	12	9,6	11,7	13,8	25,2 *		*	
2019	11	13	7,8	12,4	17,0	0,2			
2019	11	14	5,9	11,1	16,3	0,2			
2019	11	15	7,7	13,4	19,1	3 *			
2019	11	16	10,2	13,5	16,8	2,6 *			
2019	11	17	9,1	11,4	13,7	16,2 *			
2019	11	18	5,2	11,2	17,1	0			
2019	11	19	7,3	10,4	13,4	0,8			
2019	11	20	7,8	11,7	15,6	0,4			
2019	11	21	5,0	10,3	15,5	0			
2019	11	22	5,4	10,7	15,9	0,2			
2019	11	23	4,0	10,0	16,0	0,2			
2019	11	24	9,1	12,5	15,8	25,6 *		*	
2019	11	25	8,4	12,5	16,5	6,2 *			
2019	11	26	6,6	12,5	18,3	0,2			
2019	11	27	5,2	10,6	15,9	0,4			
2019	11	28	10,0	13,8	17,6	0,2			
2019	11	29	8,7	15,0	21,2	2,4 *			
2019	11	30	3,6	9,3	15,0	0,2			
average			8,4	12,9	17,5	120,2	11	2	
AVER 81-10			8,2	11,6	14,9	89			
AVER 03-18			8,2	12,5	16,7				

Table 1 - daily summary of available meteorological data. KEY: Tmin: minimum temperature; avT: average temperature; Tmax: maximum temperature; prev. mm: daily precipitation: monthly sum total rainfall; RD: days with precipitation > 1mm; TS: days with time; ice day: days with Tmin < 0 ° C;

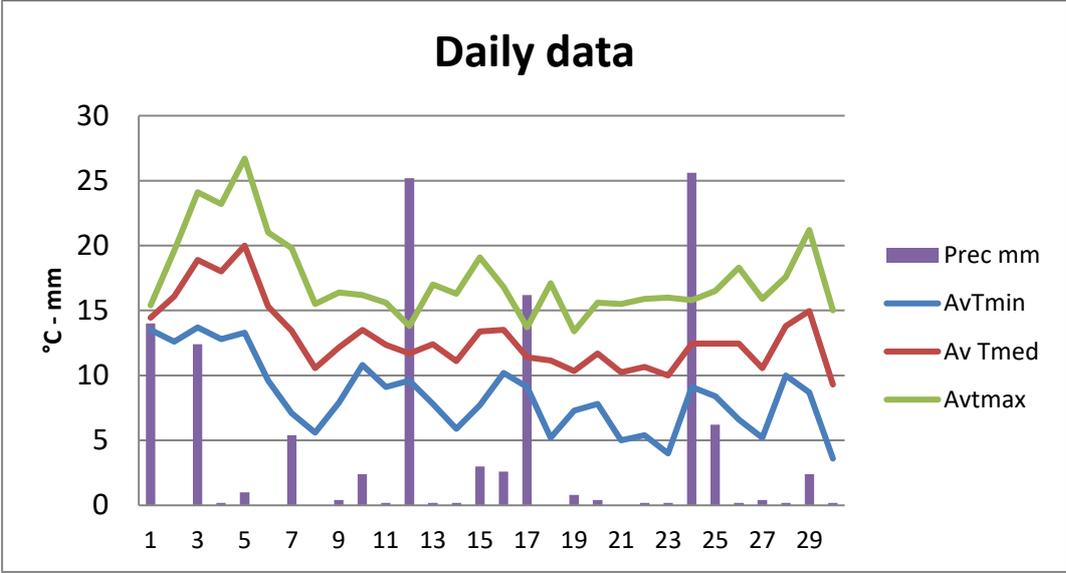


Figure 3 - graph of daily thermo-meteoric data