

**The 2010 vintage at the beginning of ageing :  
another very great one for both red and white wines  
Professor Denis Dubourdieu**

After the much-awaited and much-vaunted 2009 vintage, which has fully lived up to expectations, could Bordeaux really be blessed with another great vintage the following year? Considering the weather patterns over the summer and analysis of the grapes during the 2010 harvest, the cautious answer was "Yes, maybe". However, once fermentation finished, the answer became "Yes, probably". And now that the wine has been put into barrel, malolactic fermentation is over, and the strategy for the final blend almost decided at the end of February, we can answer that 2010 will most certainly be a great and even a very great year for both red and white wines.

As an introduction to this vintage appraisal, it is always useful to refer to the five conditions that "make" a perfect vintage for red Bordeaux.

- (1) (2) Early, rapid flowering and fruit-set during weather that is sufficiently warm and dry to ensure pollination and predispose toward simultaneous ripening.
- (3) The gradual onset of water stress thanks to a warm, dry month of July in order to slow down and then put a definitive stop to vine growth during *véraison* (colour change).
- (4) Full ripening of the various grape varieties thanks to dry and warm (but not excessively so) weather in the months of August and September.
- (5) Fine (dry and medium-warm) weather during the harvest making it possible to pick at full ripeness without running the risk of dilution or rot.

Even though flowering in Merlot was not ideal due to slightly cool, wet weather in June that caused *coulure* (shot berries), *millerandage* ("hens and chickens"), and low yields, 2010 fits all the above conditions thanks to a remarkably dry summer (but without any heat waves) that continued into a sunny, medium-warm autumn with average precipitation. The vines underwent greater and more widespread water stress in 2010 than in 2009. In that respect, 2010 is more similar to 2005 than 2009.

The moderately warm daytime temperatures and cool nights in August and September encouraged the synthesis of aroma precursors and maintained good acidity in the grapes. This means that 2010 was also a very great vintage for white wines, i.e. for both Sauvignon Blanc and Sémillon grapes.

The development of noble rot at the right time, as soon as the grapes are ripe, i.e. sufficiently sweet, but potentially fruity and still retaining good acidity, determines whether a vintage is great in Sauternes and Barsac. This calls for alternating periods of mist or fog (conducive to the spread of *botrytis*) and drier, warmer, or more windy periods to concentrate the grapes. While not as tremendously concentrated as 2009, 2010 will undoubtedly be a great vintage for sweet white Bordeaux and a fitting end to an outstanding decade with an uninterrupted run of good-to-excellent vintages, the like of which has never before been seen in the region.

**Early and fairly quick flowering in early June followed by satisfactory fruit set in all grape varieties except for Merlot (affected by *coulure* and *millerandage*)**

Marked by three cold waves in mid-December, early January, and mid-February, the winter of 2010 was as grey, long, and harsh as that of 2009. Subsequent to a cold winter and a month of March close to the seasonal average, it was impossible for bud break to happen early. This occurred from early to mid-April, just a few days later than in 2009 and 2008. However, the vines made up for this slight delay thanks to a sunny, warm, and remarkably dry month of April (Tables I-III). May was also relatively dry, but somewhat more cool and overcast than in 2009. Flowering began in late May and mid-flowering in Merlot and Cabernet took place from the 4<sup>th</sup> to the 7<sup>th</sup> of June. While flowering in almost all the red and white vine varieties led to satisfactory fruit set, Merlot was affected by *coulure* (shot berries) and *millerandage* (hens and chickens), probably because of the cold night on the 7<sup>th</sup> of June followed by fairly heavy showers the next day and again in mid-June (figure 1). As usual, old Merlot vines, often affected by viral diseases, suffered the heaviest crop losses. The disrupted flowering of Merlot is the only shortcoming of the 2010 vintage.

**Table I: Rainfall (mm) from March to June 2009 and 2010  
(Météo France Bordeaux Mérignac)**

	<b>2010</b>	2009	Average 1971-2000
March	<b>68</b>	31	70
April	<b>27</b>	116	80
May	<b>41</b>	78	83
June	<b>102</b>	75	63

**Table II: Sunshine (hours) from March to June 2009 and 2010  
(Météo France Bordeaux Mérignac)**

	<b>2010</b>	2009	Average 1971-2000
March	<b>187</b>	221	180
April	<b>250</b>	160	177
May	<b>193</b>	235	222
June	<b>102</b>	293	225

**Table III: Average minimum and maximum temperatures  
from March to June in 2010 and 2009  
(Météo France Bordeaux Mérignac)**

	Average minimum temperatures			Average maximum temperatures		
	<b>2010</b>	2009	average *	<b>2010</b>	2009	average *
March	<b>4.3</b>	4.9	4.6	<b>14.4</b>	15.3	14.5
April	<b>8.3</b>	7.4	6.6	<b>19.8</b>	13.4	16.5
May	<b>10.4</b>	12.3	10.3	<b>19.9</b>	22.2	20.5
June	<b>14.3</b>	15	13	<b>24.5</b>	25.6	23.5

\* Average 1971-2000

The temperature increased starting on the 20<sup>th</sup> of June, marking the beginning of a summer that was particularly dry, but not excessively hot, which determined the character and success of the 2010 vintage.

**A hot, sunny, and dry month of July entailing a slowing down and stoppage of vine growth at the beginning of *véraison* (colour change)**

July 2010 was warmer than that same month in either 2009 or 2005, but without a heat wave as such since the maximum temperature only went above 30°C on three or four days (Table IV and figure 2). July 2010 also had slightly above-average sunshine and, significantly, was much more dry (figures 3 and 4) than usual. Precipitation during this month (less than 20 mm) was only a third of that in July 2009 and even less than in July 2005. Water stress thus gradually set in starting in late July 2010. This brought about a complete halt to vine growth between the onset of *véraison* and mid-*véraison*. In 2009, because of greater rainfall in July, this condition *sine qua non* for successful red wine vintages in Bordeaux was only satisfied on soils with the lowest water reserves (mainly gravel and certain clay soils) i.e. the finest *terroirs* in Bordeaux. The halt to vine growth at the appropriate time was much more widespread in 2010 than in 2009.

Mid-*véraison* (colour change) occurred about the 6<sup>th</sup> of August for Merlot and around the 11<sup>th</sup> of that same month for Cabernet Sauvignon, i.e. 3-4 days later than in 2005 and 2009, and 4 days later than in 2008 or 2004.

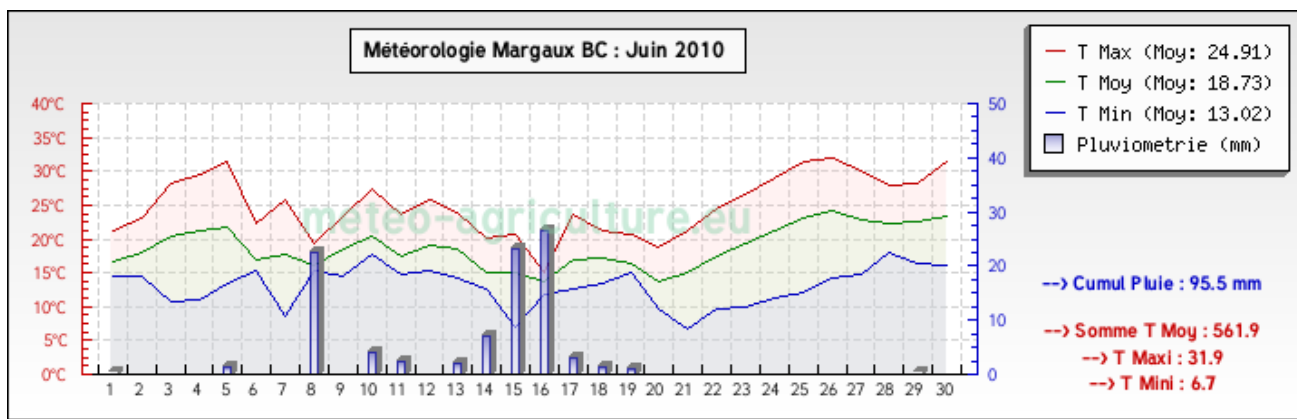


Figure 1: Daily temperatures and precipitation (mm) in June 2010 during flowering and fruit set (statistics from the Margaux weather station)

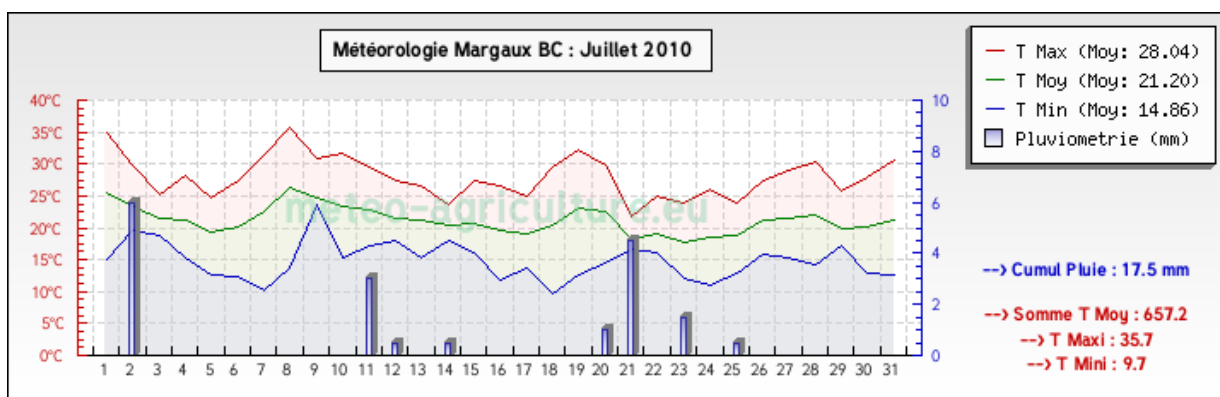
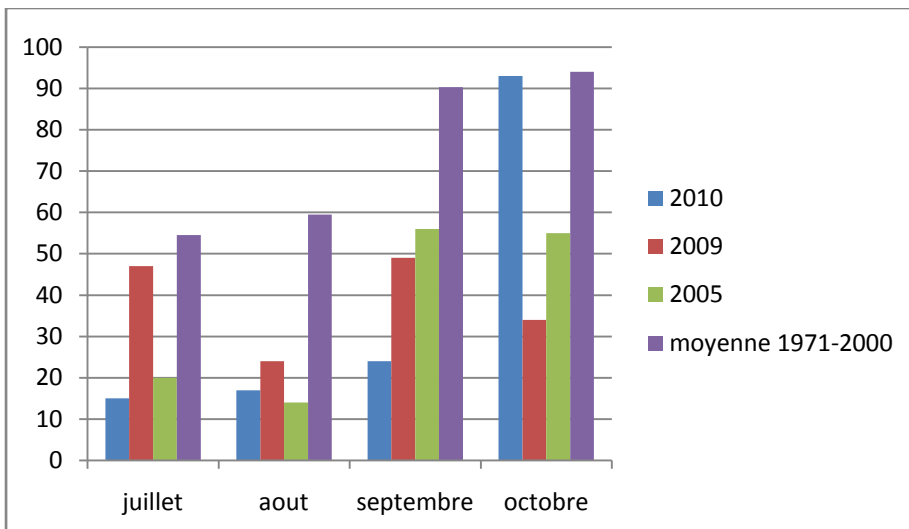


Figure 2: Temperature and precipitation (mm) in July 2010 in Margaux

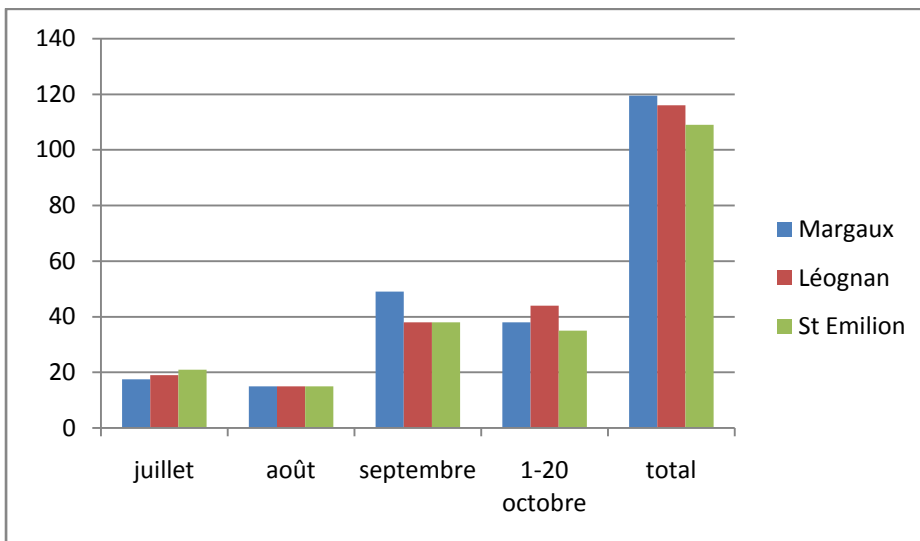
**Table IV: Average minimum and maximum temperatures from July to October 2009 (Météo France Bordeaux Mérignac)**

	Average minimum temperatures				Average maximum temperatures			
	2010	2009	2005	average *	2010	2009	2005	average *
July	16.6	15.9	16.8	15.1	28.2	27.1	27	26.4
August	14.9	16.2	15.1	15.2	26.8	28.5	27.3	26.6
September	12.3	13.2	13	12.5	24.4	25.7	24.1	23.7
October	9.2	10.9	12.6	9.5	18.7	20.8	21.5	18.8

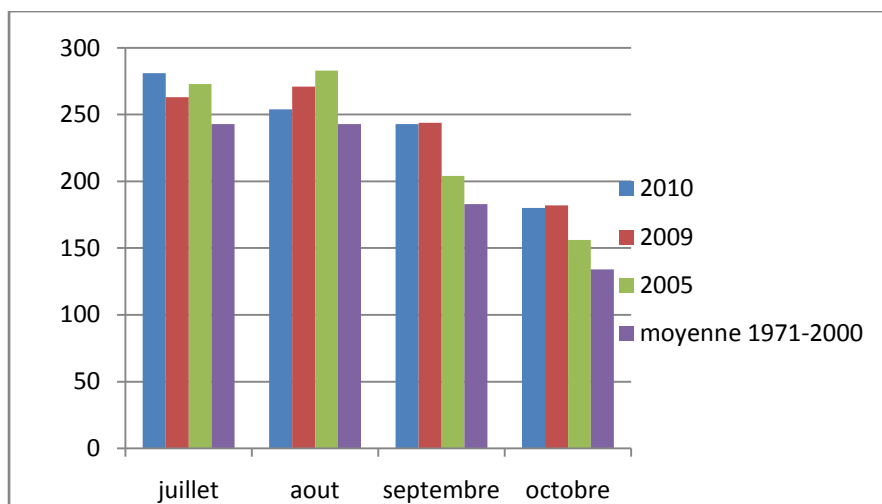
\* 1971-2000 average



**Figure 3: Rainfall from July to October in 2010, 2009, and 2005 (Météo France Bordeaux Mérignac)**



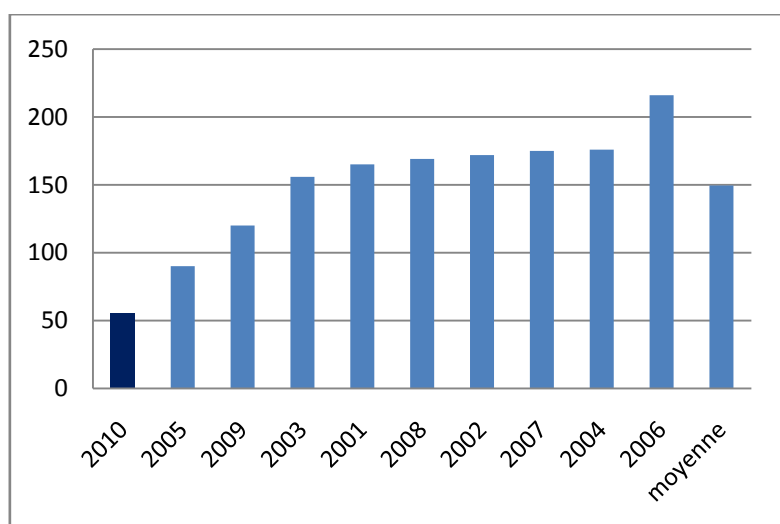
**Figure 4: Rainfall (mm) in July, August, and September 2009 in various communes**



**Figure 5: Sunshine (hours) from July to October in 2010, 2009, and 2005 (Météo France Bordeaux Mérignac)**

**Ideal ripening for all grape varieties throughout Bordeaux thanks to exceptionally dry weather in August and September, without excessive heat.**

In 2009, only the Médoc was spared by August storms, and the Libourne region experienced significant rainfall around the 20<sup>th</sup> of September. In 2010, August and, to an ever greater extent, September were very dry in all Bordeaux appellations (figures 3 and 4). Precipitation in August amounted to less than a third of the average over the past ten years, and September rainfall was hardly a quarter of this average. With just 50 mm of precipitation from July to September, the 2010 vintage was the driest of the past decade (figure 6), even more than in 2005, which had nearly twice as much rain over the same period.



**Figure 6: Ranking of vintages by order of precipitation from July to September over a 10-year period (2001-2010). (Météo France Bordeaux Mérignac)**

August 2010 was cooler than the same month in 2009 or 2005, while remaining close to the 30-year average (Table IV). The sum of average daily temperatures in Margaux in August 2010 was 605°C compared to 650 in 2009 and 625 in 2005. There were 6 very hot days in 2010, 8 in 2009, and 7 in 2005. The temperature was less than 15°C on 21 nights in August 2010, compared to 18 in 2009 and 22 in 2005 (Table V).

**Table V: Sum of average temperatures, number of very hot days, and number of cool nights in August 2005, 2009, and 2010**

	Sum of average daily temperatures (°C)	Number of very hot days (maximum temperatures > 30°C)	Number of cool nights (minimum temperatures < 15°C)
2005	625	7	22
2009	650	8	18
<b>2010</b>	<b>605</b>	<b>6</b>	<b>21</b>

Less warm than in 2009, September 2010 had maximum temperatures comparable to 2005, but markedly cooler night time temperatures (Table IV).

Sunshine in August 2010 was close to the seasonal average. On the other hand, September and October 2009 were much sunnier than usual (figure 5).

The vines resisted the drought conditions astonishingly well, especially in vineyards with ploughed soil. Ripening was only stymied in a few plots with young wines on very permeable soil on the Left Bank.

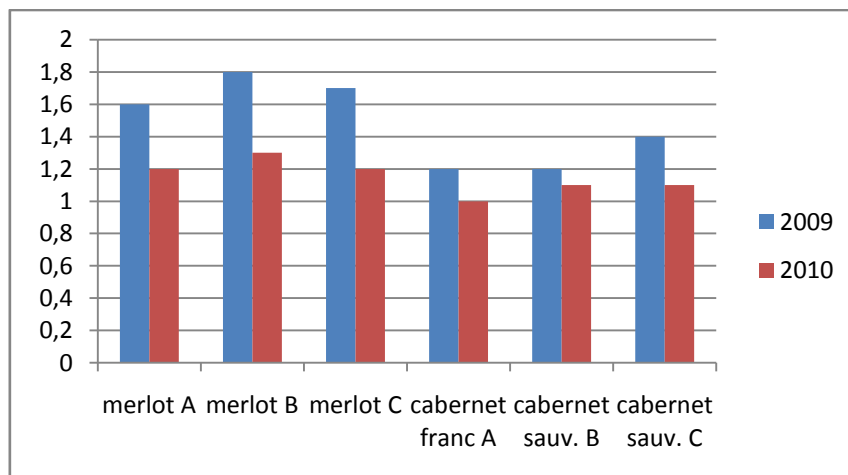
Due to *coulure* in Merlot, vineyard operations such as leaf thinning and bunch thinning were done even more meticulously than usual. It was wise removing bunches of Merlot and Cabernet Franc with berries affected by *millerandage* (“hens and chickens”) because these aborted berries were less sweet, more acidic, and had less colour than normal ones. They also displayed more astringent, herbaceous flavours. Furthermore, even normal berries inside bunches with *millerandage* were less desirable than berries from normal bunches. It is never a joyous thing to remove bunches during green harvesting in plots where the yields are already very low due to *coulure*. This is nevertheless what it took to make the best of this vintage.

In a nutshell, summer and early autumn 2010 were drier and less warm (except for July) than 2009 or 2005. The limited rainfall from July to mid-October was certainly the key factor in the success of 2010 red wines because in an oceanic climate with wet winters like Bordeaux, every dry summer produces very great vintages with no exceptions to this rule. The reverse, however, is not necessarily true. Good wines are sometimes made in years with average rainfall in the month of August and September provided that July was dry enough to put a stop to vine growth at *véraison*, as was the case in 2008. The relatively cool, sunny weather that prevailed during ripening in 2010 was propitious to preserving fruit and acidity. This was decisive for both the quality of white wines and the style of red wines.

## Ideal conditions from beginning to end of the harvest making it possible to pick each plot and each grape variety at optimum maturity

Picking of white wine grapes began on the 2<sup>nd</sup> of September in the most early-ripening plots of Sauvignon Blanc and the harvest was widespread from the 6<sup>th</sup> to the 15<sup>th</sup>. Sémillon grapes at estates in the Graves and Pessac-Léognan appellations were picked between the 15<sup>th</sup> and the 20<sup>th</sup> of September. The 2010 white wines had sugar levels comparable to 2009 and 2005, with slightly higher acidity, close to 2008, provided they were picked at the right time. When the grapes were tasted, the aromatic potential of Sauvignon Blanc and Sémillon, especially from limestone and clay soils, seemed greater than in 2009. However, great care needed to be taken in selecting juice out of the winepress because the potassium content of the skins was very high. In order to maintain acidity, skin contact had to be limited and the juice separated fairly early.

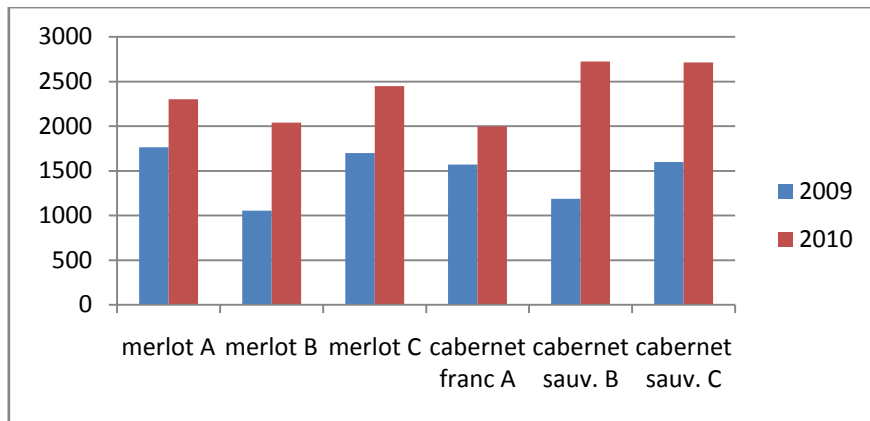
The earliest-maturing Merlot grapes were picked on about the 21<sup>st</sup> of September and the Cabernets in the first half of October. These dates are fairly similar to 2009. All of the 2010 red wine varieties had two outstanding characteristics indicative of their excellent quality: the berries were both very small and deeply coloured, and had greater anthocyanin content than in 2009 or even 2005 (figure 7 and 8).



**Figure 7: Weight of Merlot, Cabernet Franc, and Cabernet Sauvignon grapes in 2009 and 2010 in plots of classified growth vineyards in Saint Emilion (A), Léognan (B) and Pauillac (C)**

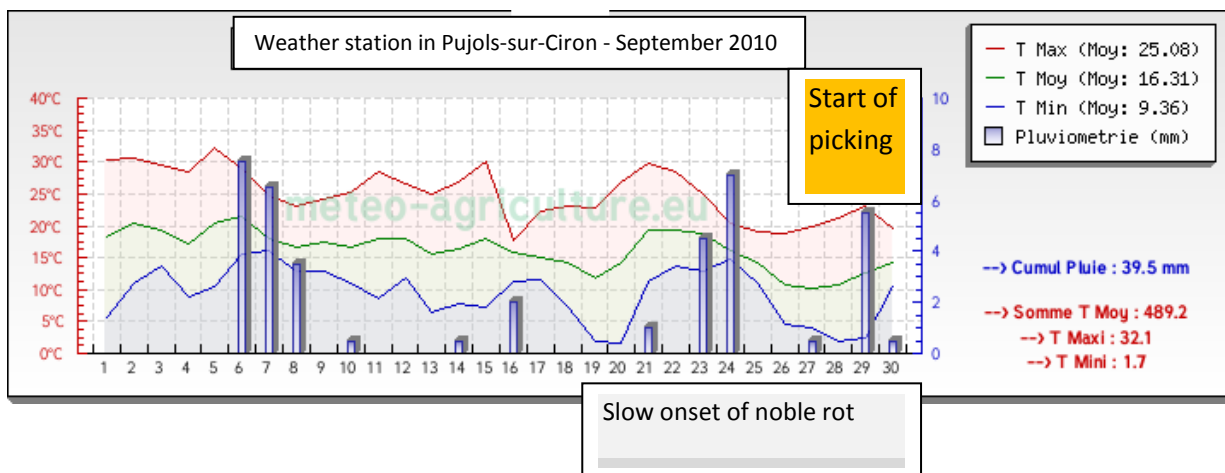
The sugar levels in 2010 red wine musts were generally and significantly higher than in either 2009 or 2005, especially for the Cabernets. As a rule, acidity levels in the various grape varieties in 2010 were higher than in 2009 or 2005. In those plots where appropriate green harvesting took place, the grapes displayed bright fruit and were devoid of any herbaceous character.

As in 2009, the harvest dates for the same grape variety on comparable *terroirs* varied significantly according to the estate, some of which were looking for a degree of over ripeness resembling raisining, while others chose to avoid this. The style of wine thus depends considerably on what choice was made in this respect.



**Figure 8: Total anthocyanin content (mg/L) of Merlot, Cabernet Franc, and Cabernet Sauvignon grapes in 2009 and 2010 in plots of classified growth vineyards in Saint Emilion (A), Léognan (B), and Pauillac (C)**

In the Sauternes region, the harvest did not really begin until late September. The onset of *botrytis* depended on the *terroir* and the estate (Figure 9). Noble rot became widespread in October further to showers on the 3<sup>rd</sup> and 4<sup>th</sup>, and then again on the 9<sup>th</sup> and 10<sup>th</sup> of that month. The resulting concentration over the following two weeks without rain was remarkable (20-22 degrees potential alcohol), but not as impressive as the 2009 vintage. The sugar content was greater in those vineyards where *botrytis* arrived early and was therefore able to concentrate the grapes in the first two weeks of October, before the temperature dropped.



**Figure 9: Temperatures (°C), precipitation (mm) in September 2010 in the Sauternes region: beginning of picking at the end of the month**

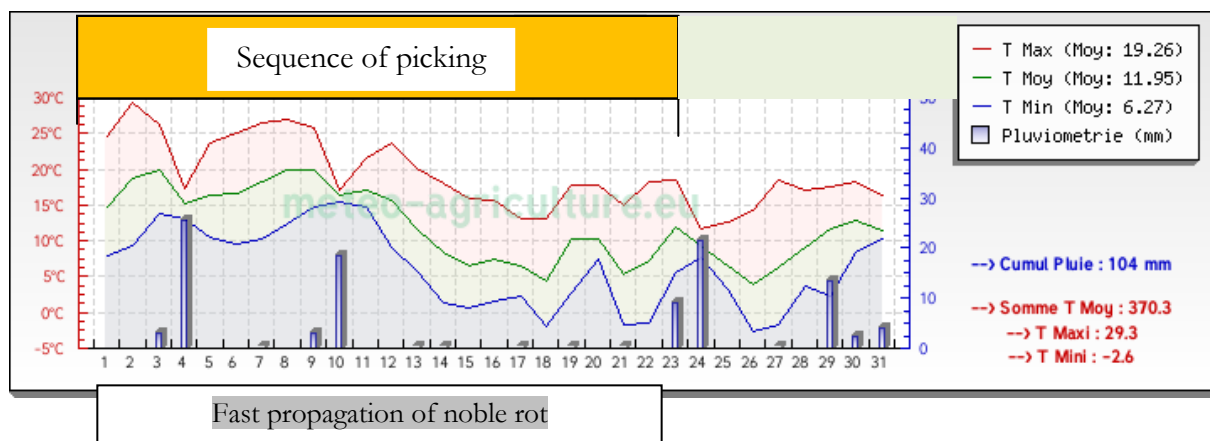


Figure 10: Temperatures (°C), precipitation (mm) in October 2010 in the Sauternes region

### Great white wines and very great red wines

It is now possible to evaluate the 2010 dry white wines. These have bright fruit and are remarkably smooth. They are even more complex than the 2008s and 2007s, and more vibrant than the 2009s.

2010 Sauternes and Barsac 2010 are aromatic, concentrated, tasty, and without heaviness. They are hardly any less powerful than the prodigious 2009 vintage, but may be more "digestible".

The 2010 red wines have all the hallmarks of a very great Bordeaux vintage on both banks, and for both Merlot and Cabernets. It is premature to describe the wines in detail, but their deep colour, complexity, intense fruit, freshness, and tannic density already indicate enormous potential. Liquid beauty!