2017
Ripening dynamics in Napa

Berry active sugar loading

Berry volume evolution

Harvest position

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TASTE THE INNOVATION

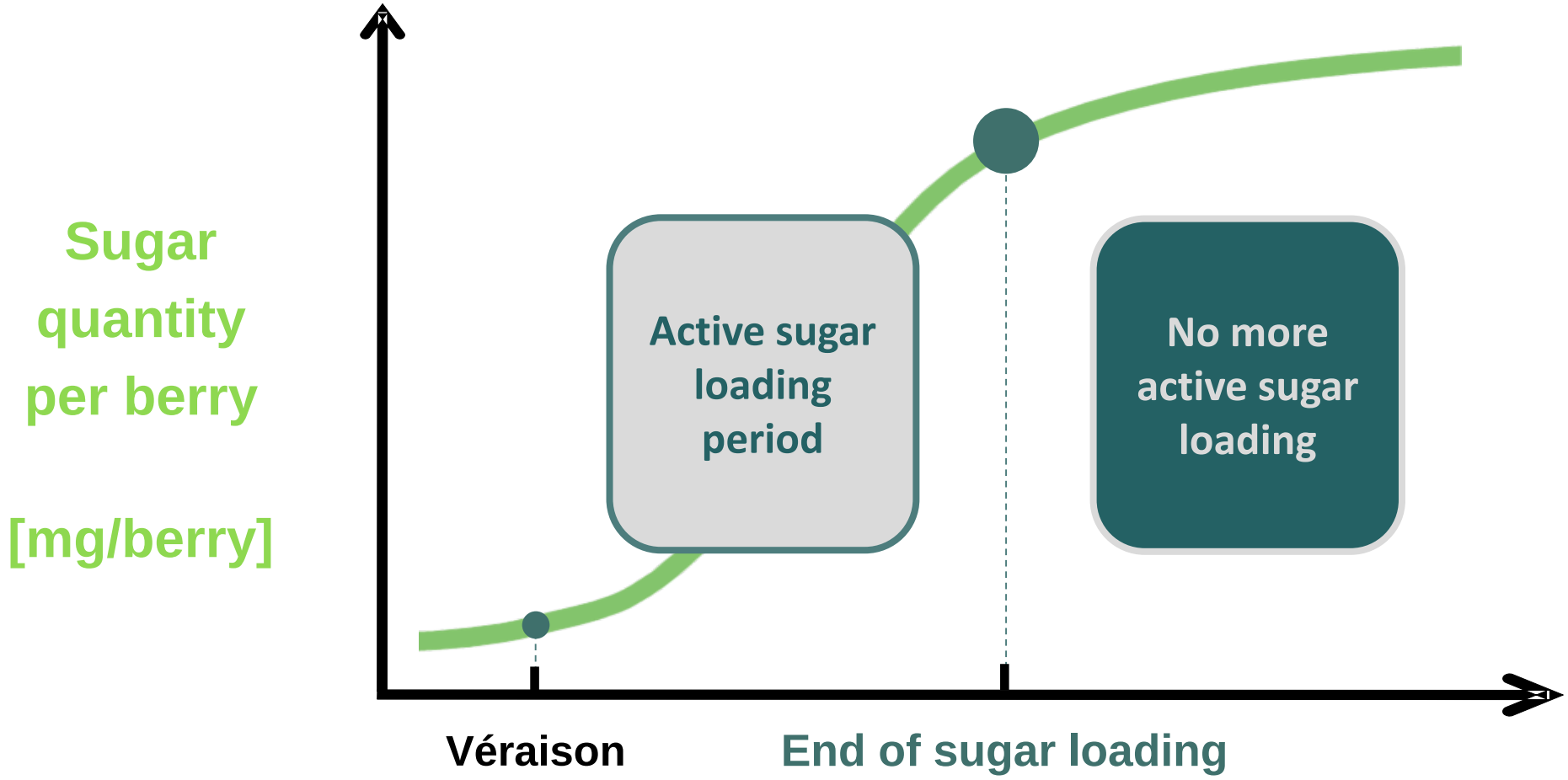
Berry active sugar loading

The berry sugar loading

= sugar quantity per berry evolution

Sugar quantity per berry	=	Sugar concentration of the juice	X	Berry average volume
[mg/berry]		[g/L]		[mL]

The berry sugar loading curve



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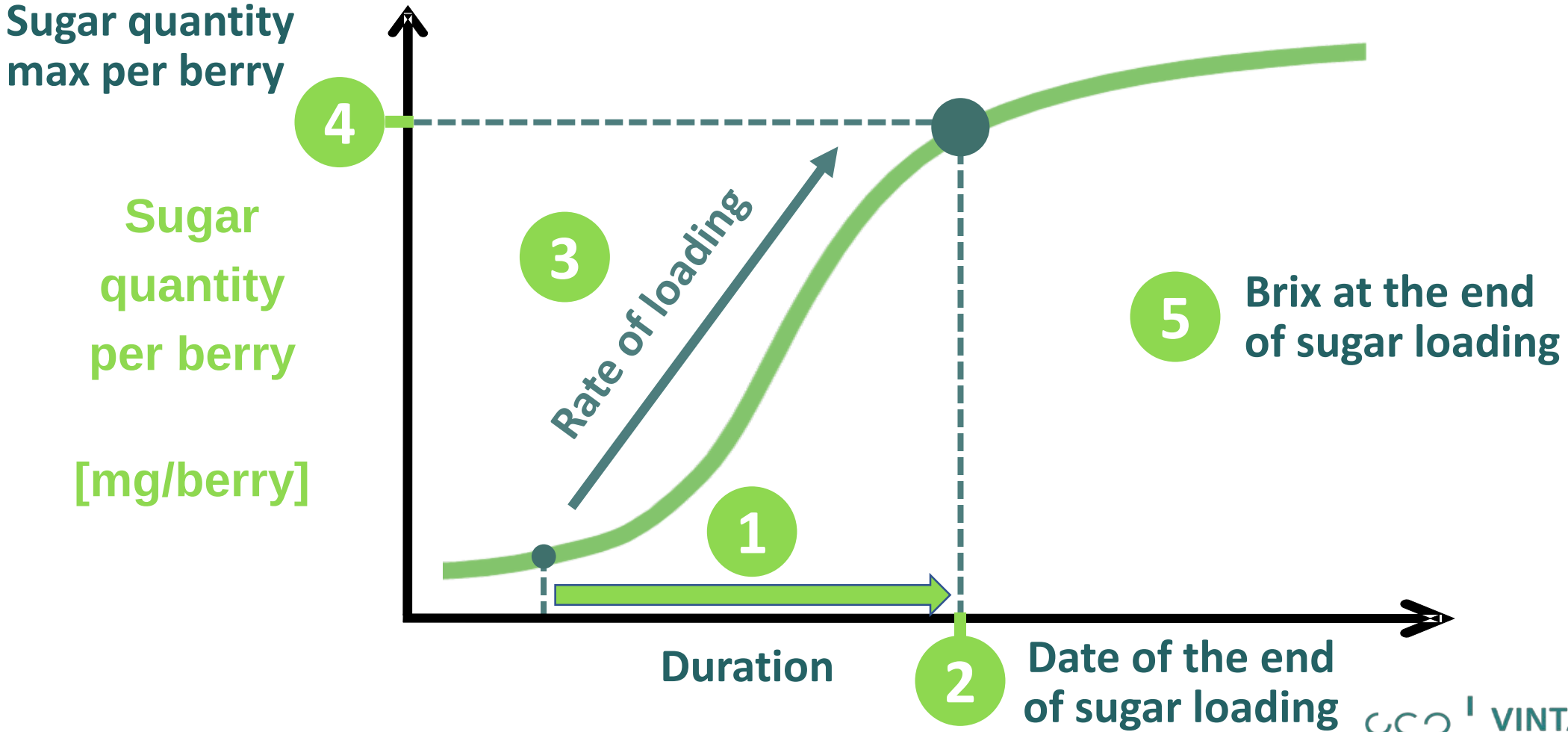
The 5 data of berry sugar loading



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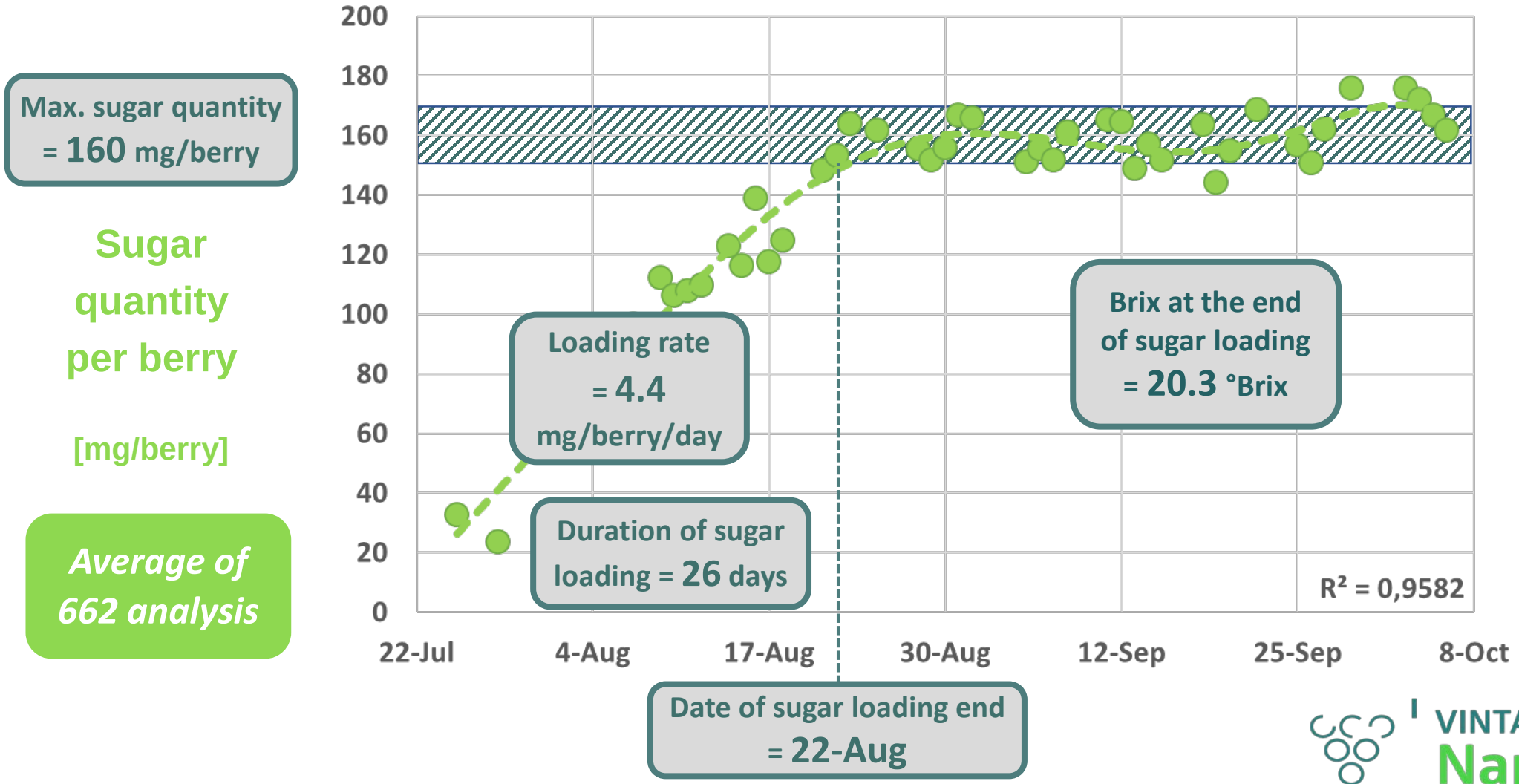
Average values of the last 5 years in California

	CABERNET SAUVIGNON	MERLOT	SAUVIGNON BLANC
Maximum sugar quantity per berry (mg/berry)	190	238	314
Rate of loading during the first phase (mg/berry/day)	4.2	5.4	7.6
Duration of sugar loading (days)	36	35	35
Average date of sugar loading end	Aug-25	Aug-29	Aug-21
Brix at the end of sugar loading (° Brix)	21.1	21.8	22.4

2017 Cabernet Sauvignon sugar loading in Napa



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2017 Cabernet Sauvignon vs 2016 & 2015

	CS Napa 2017	CS Napa 2016	CS Napa 2015
Maximum sugar quantity per berry (mg/berry)	160	175	172
Rate of loading during the first phase (mg/berry/day)	4.4	3.5	4.1
Duration of sugar loading (days)	26	35	29
Average date of sugar loading end	22-Aug	18-Aug	12-Aug
Brix at the end of sugar loading (° Brix)	20.3	21.1	20.9

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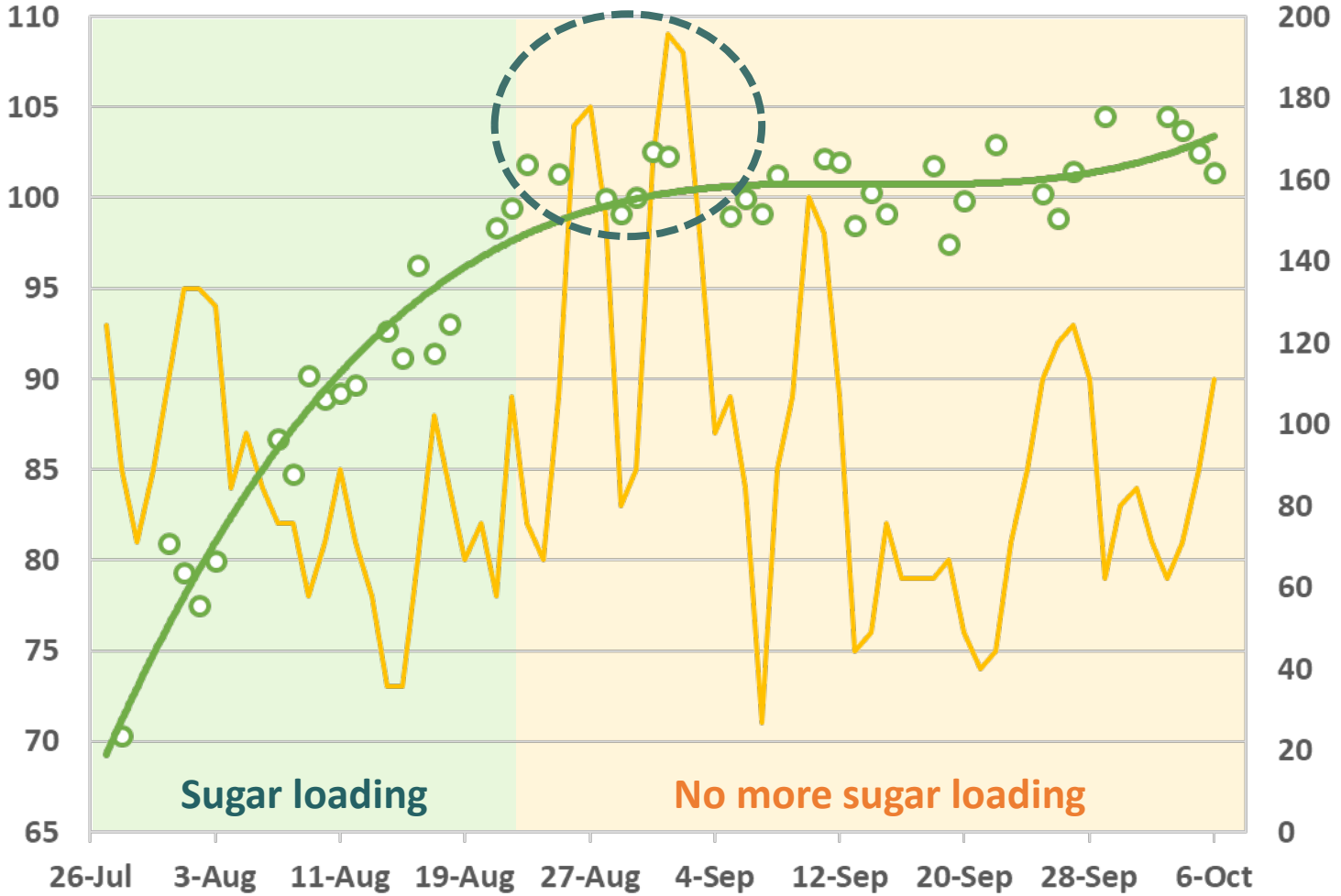
2017 : a shorter period of sugar loading

Maximum Temperature [°F] in Oakville

Source: University of California

http://cenapa.ucanr.edu



2017 sugar quantity per berry

[mg/berry]

Average of 662 analysis

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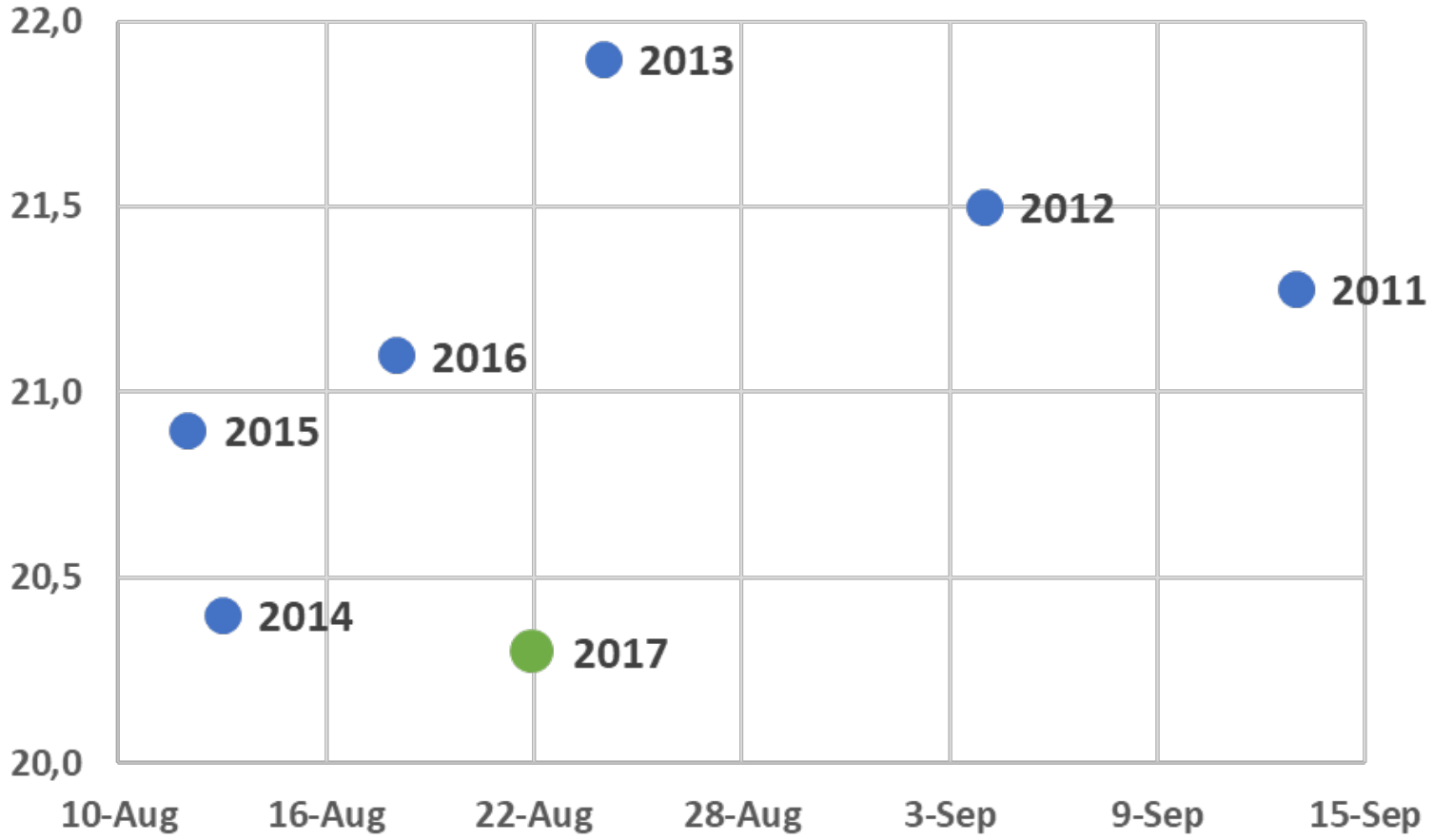
2017 : lower Brix at the end of sugar loading

Brix at the end of sugar loading

(° Brix)



Date of the end of sugar loading

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2017 Sugar loading conclusions (CS, Napa)

Strong impact of the heat wave last week of August

➔ **A shorter period of sugar loading (one missing week)**

- ***10 % less sugar per berry***
- ***0.7° Brix lower at the end of sugar loading (vs 2015 & 2016)***

➔ **Despite a higher rate of loading during the sugar loading period**

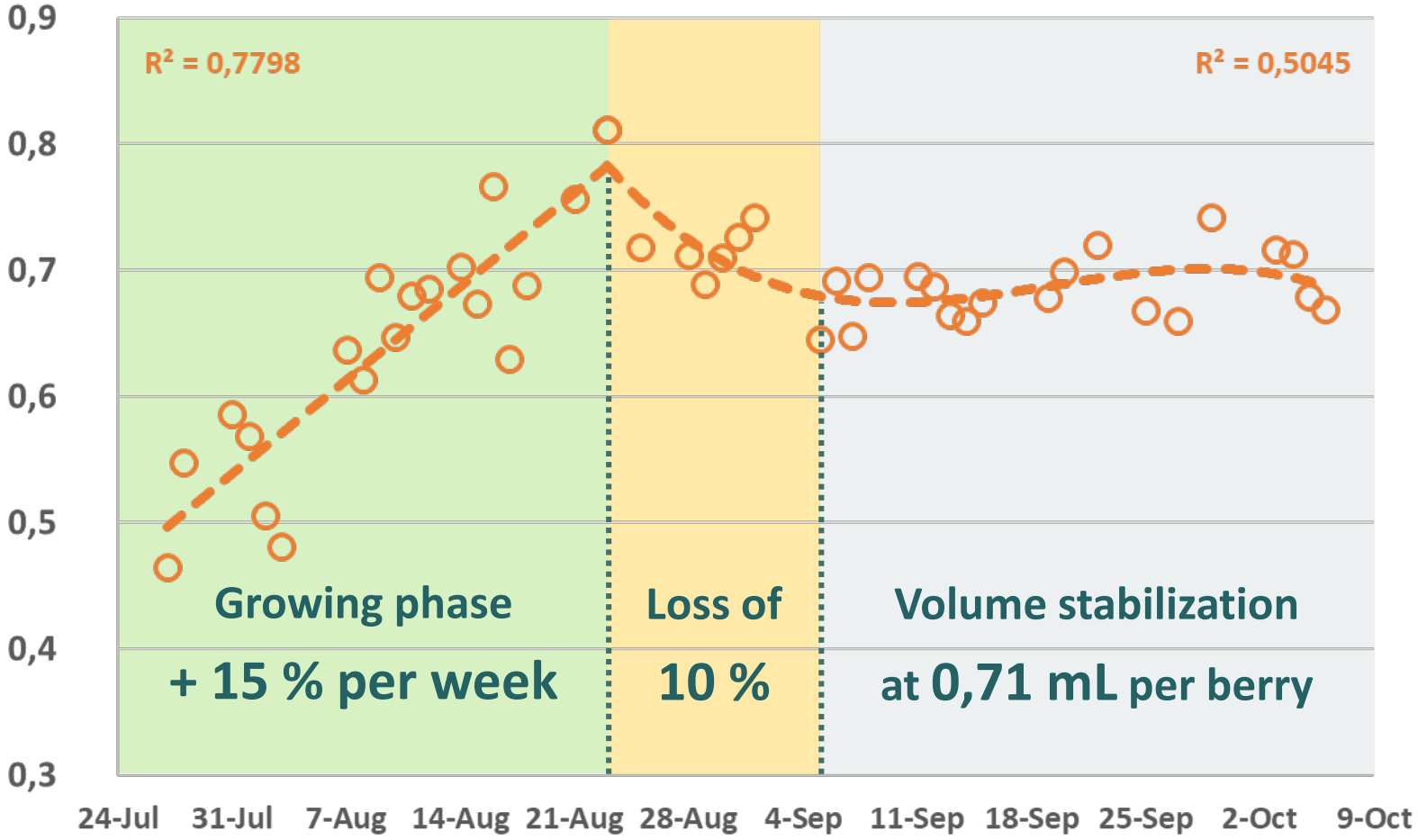
Berry volume evolution

2017 Cabernet Sauvignon berry volume in Napa

Berry volume

[mL/berry]

Average of 662 analysis



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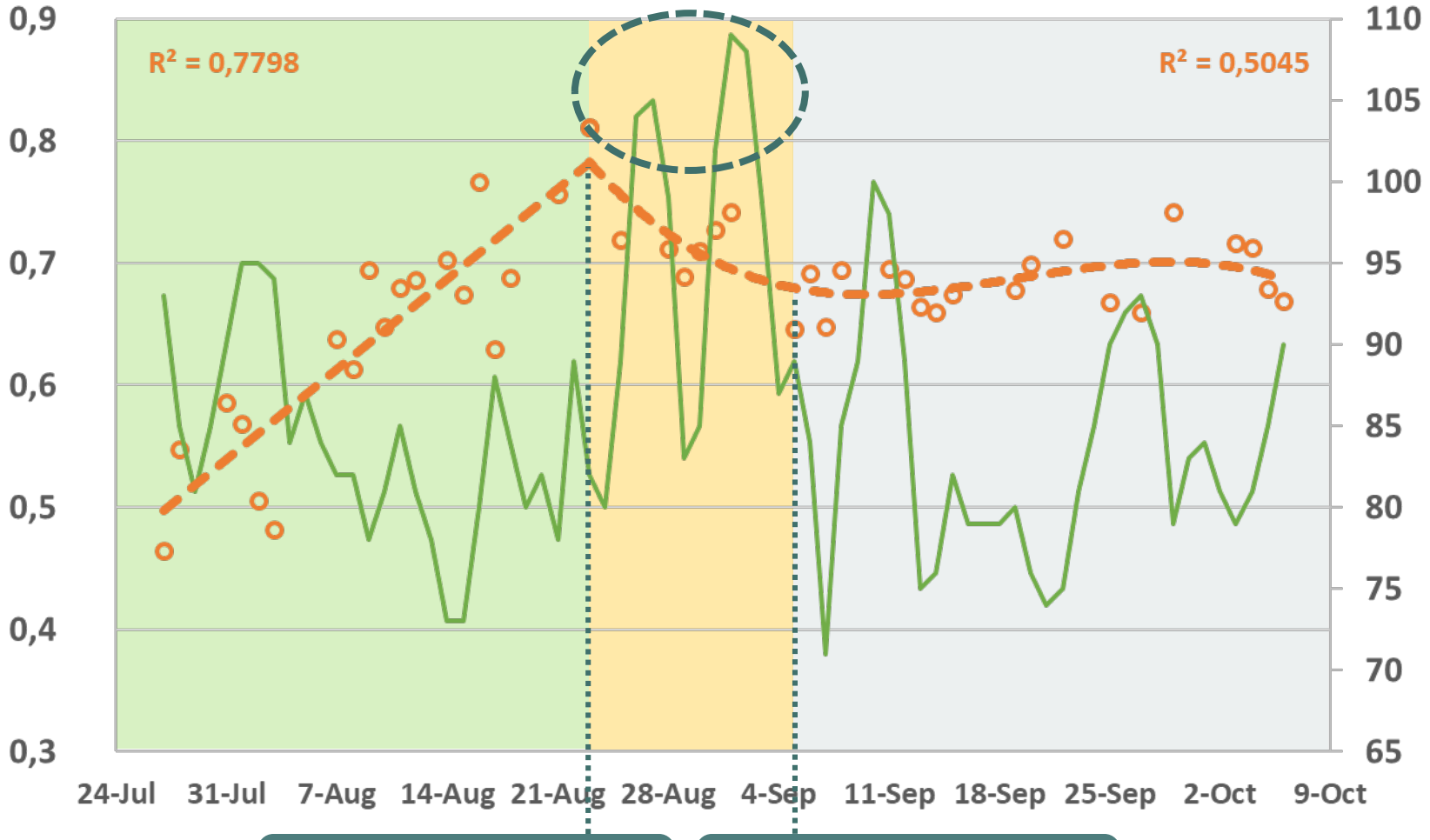
2017 Cabernet Sauvignon berry volume in Napa

Berry volume

[mL/berry]

Average of 662 analysis



Maximum Temperature [°F] in Oakville

Source: University of California

http://cenapa.ucanr.edu

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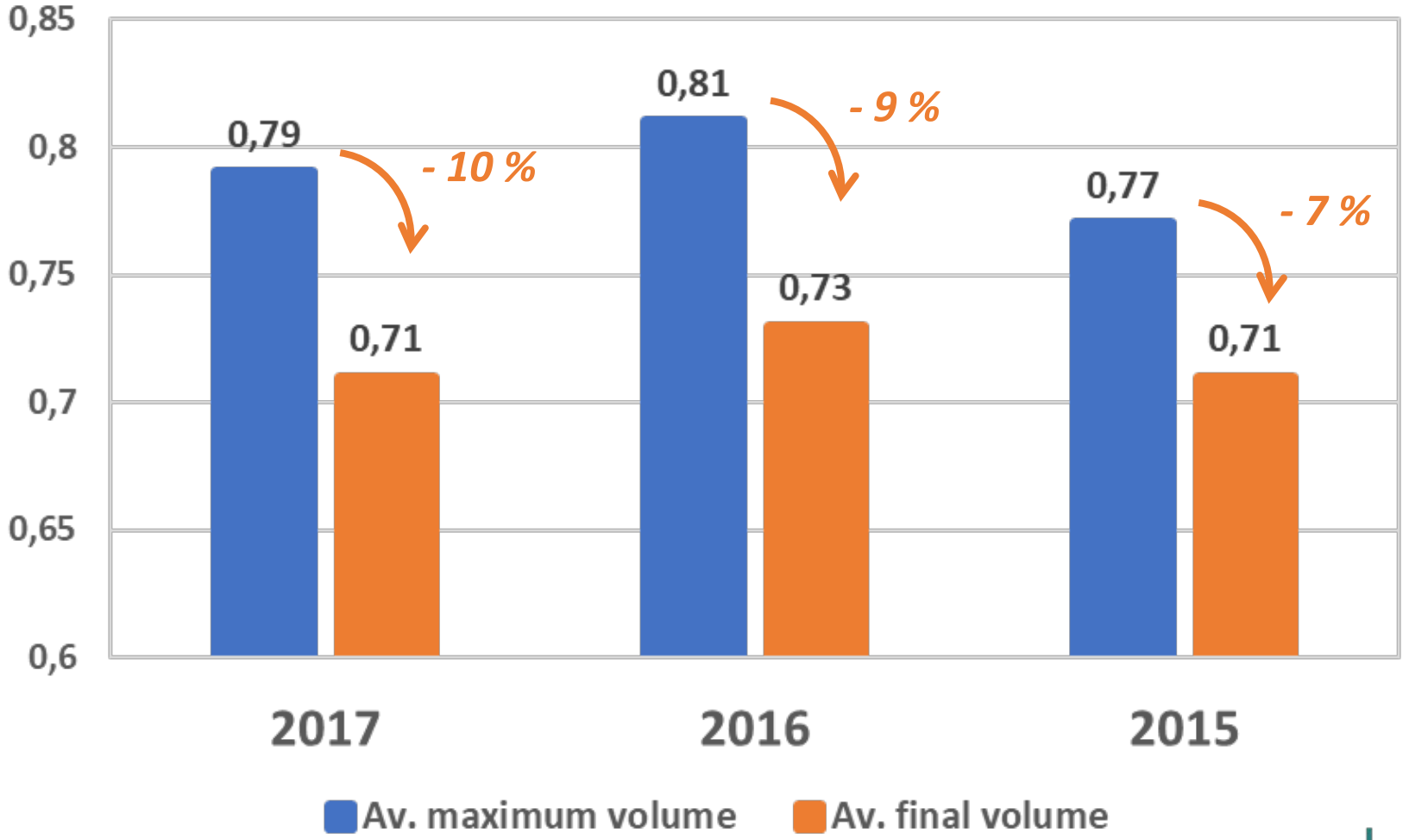
2017 Cabernet Sauvignon vs 2016 & 2015

Berry volume

[mL/berry]



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2017 Berry volume conclusions (CS, Napa)

Strong impact of the heat wave last week of August

➔ loss of 10 % of berry volume

➔ but final berry volume similar to 2016 & 2015
(0,7 mL / berry)

➔ thanks to a strong increase during the first phase
(+ 15 % per week, vs 10-12 % per week in general)

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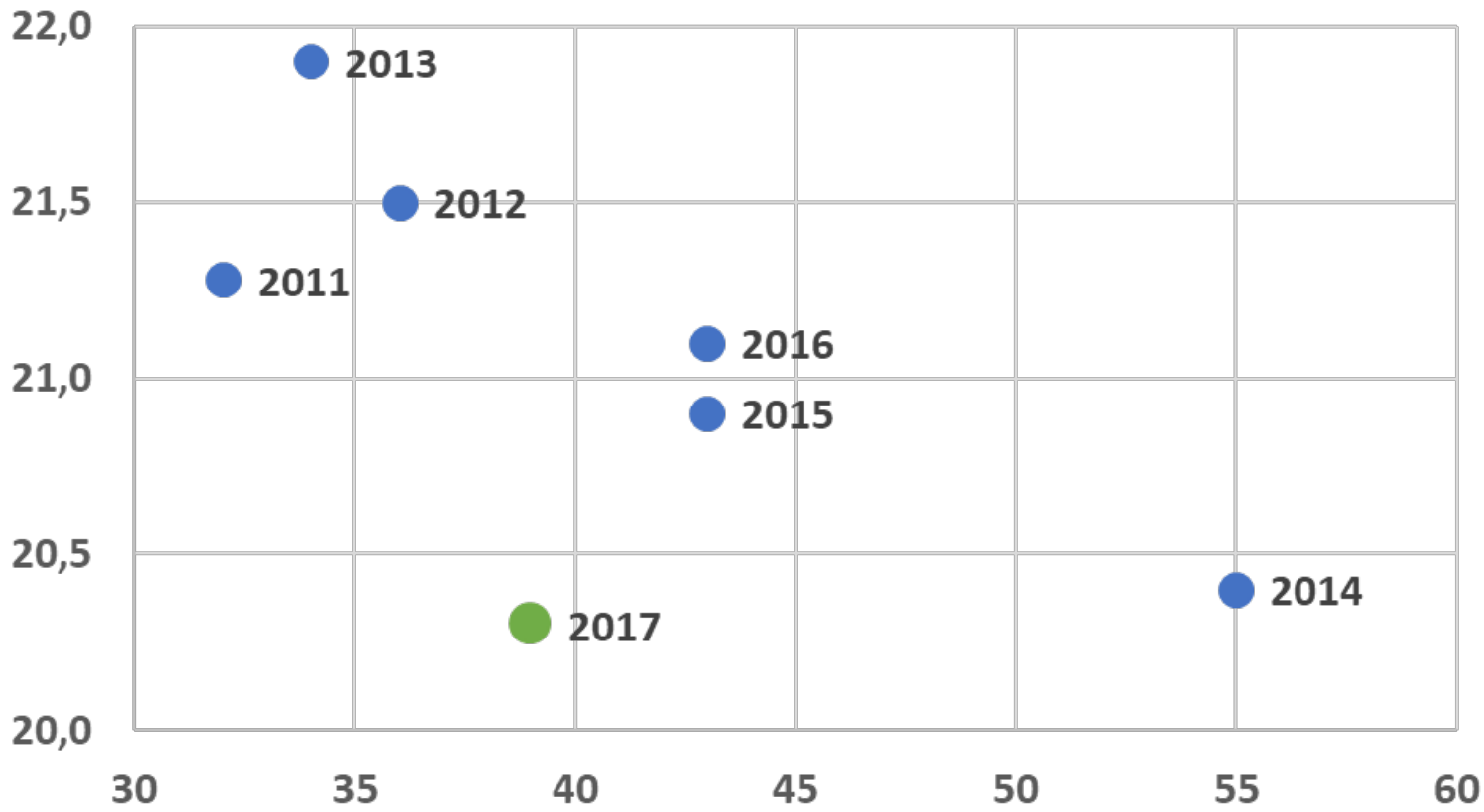
Harvest position

2017 Cabernet Sauvignon Harvest position

Brix
at the end
of sugar
loading

(° Brix)



Harvest position
(number of days after the end of sugar loading)

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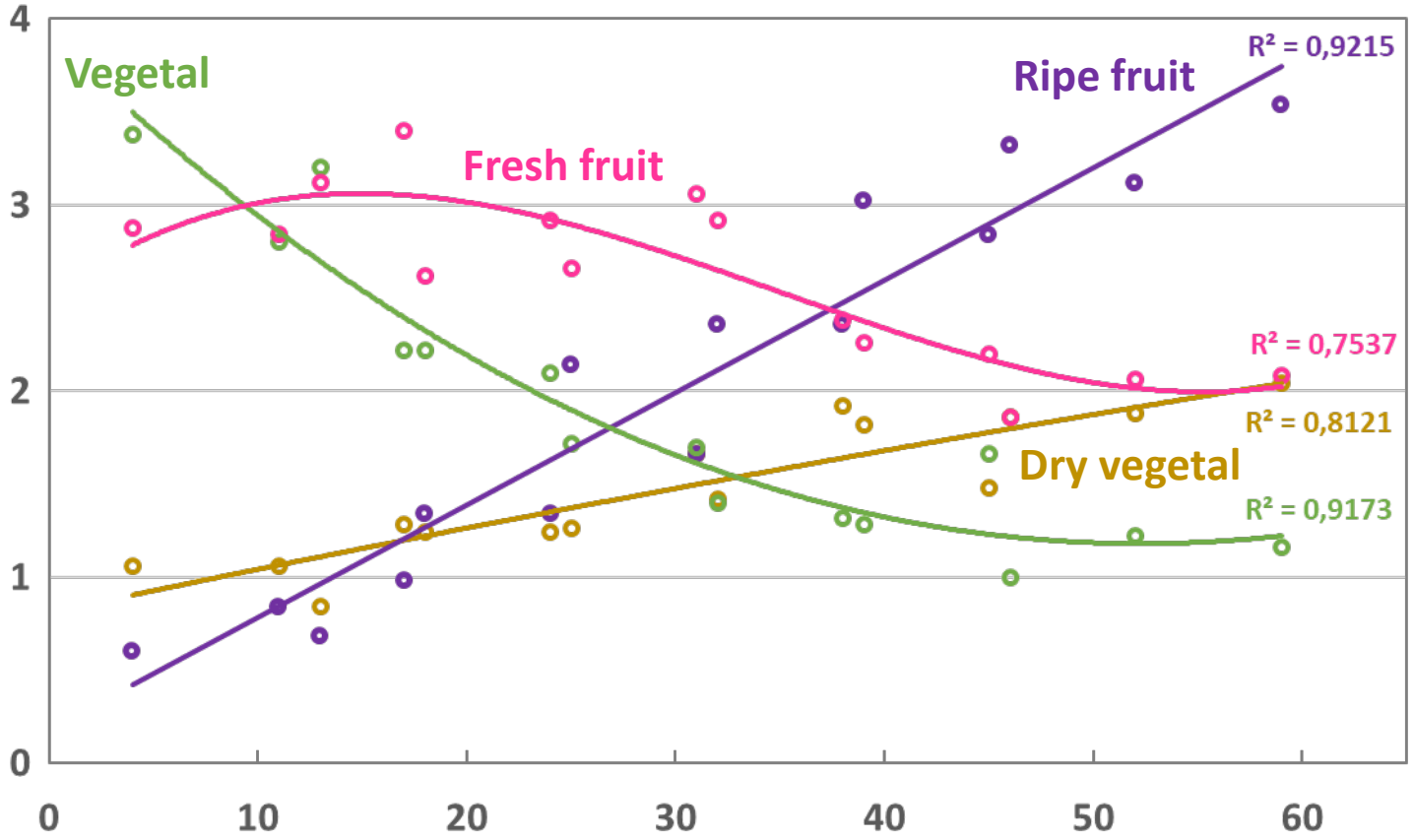
Wine aromatic profile & Harvest position

Tasting grade

(/ 5)



Harvest position
(number of days after the end of sugar loading)

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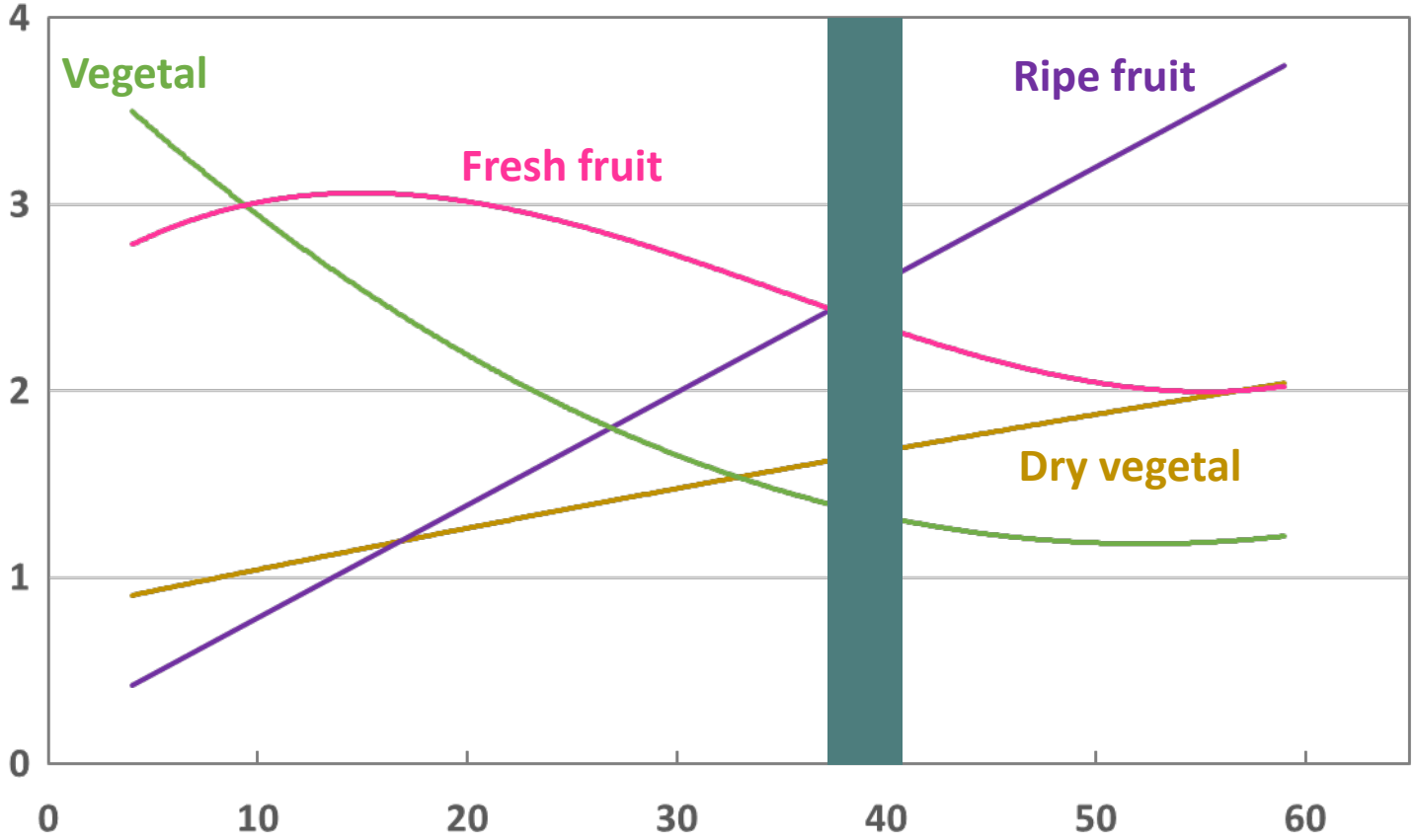
2017 Cabernet Sauvignon Harvest position

Tasting grade

(/ 5)



Harvest position
(number of days after the end of sugar loading)

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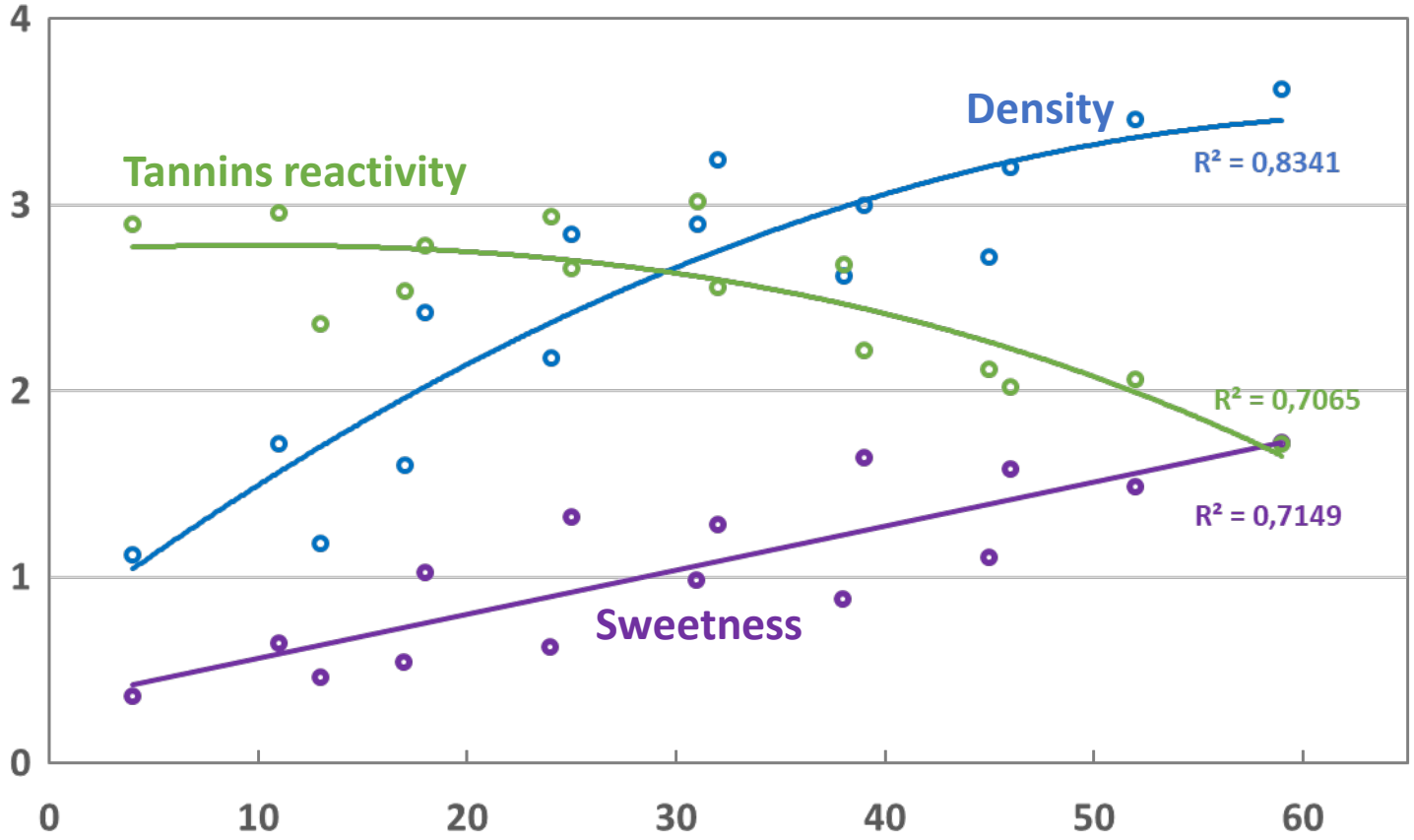
Wine mouthfeel profile & Harvest position

Tasting grade

(/ 5)



Harvest position
(number of days after the end of sugar loading)

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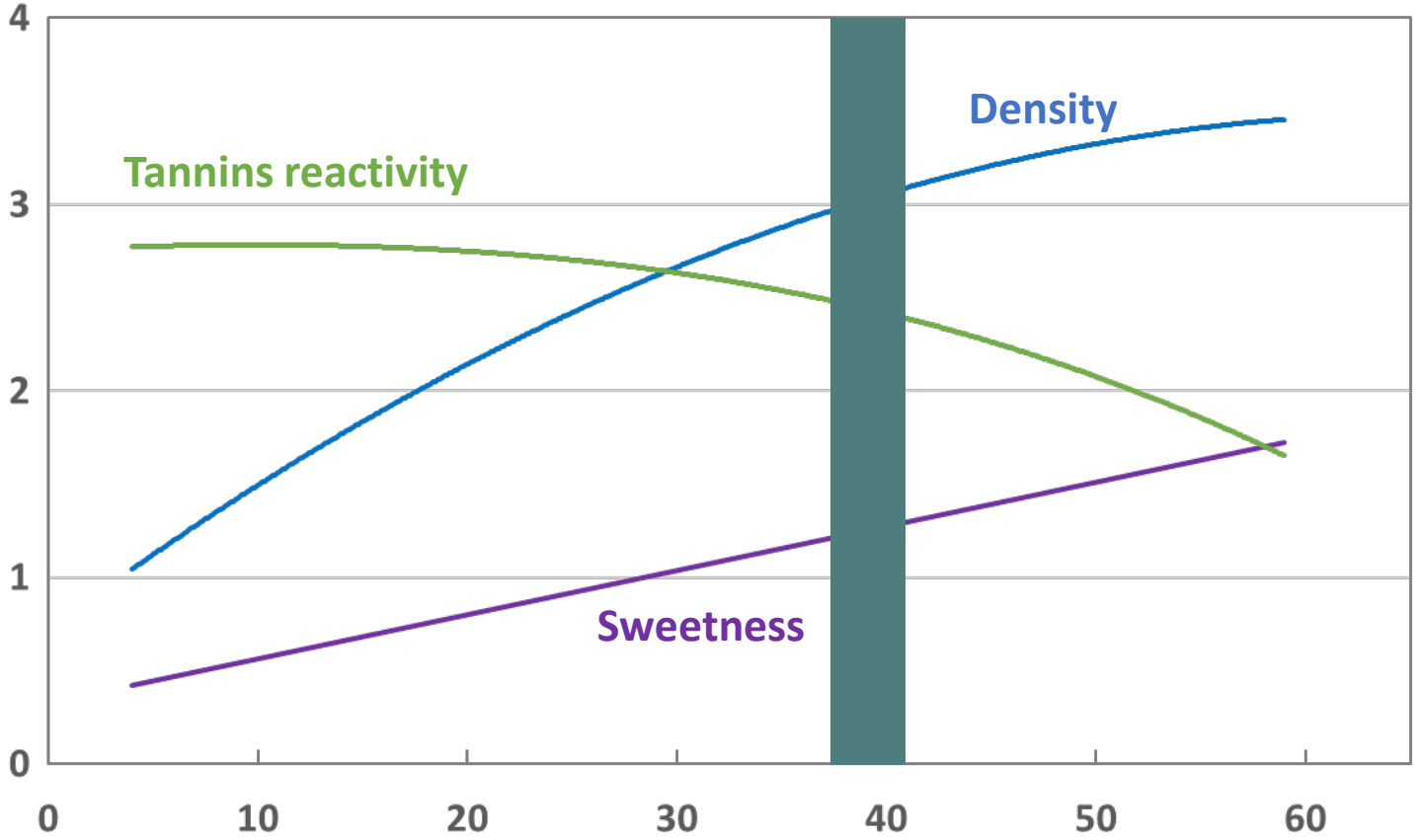
2017 Cabernet Sauvignon Harvest position

Tasting grade

(/ 5)



Harvest position
(number of days after the end of sugar loading)

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2017 Harvest position conclusions (CS, Napa)

➔ **A lower grape potential due to a shortened sugar loading**

➔ **A position of harvest closer to the end sugar loading, comparing with 2016 & 2015**

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Thank you for your attention