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The impact of temperature on 'Pinot Noir' berry and wine quality in a steeply sloping cool climate vineyard in South Australia

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Table S1

ANOVA table for colour (mg anthocyanins per g berry weight) versus total soluble solids, for the linear phase only

Analysis of Variance Table for Total Anthocyanins						
Response: colour						
	Df	Sum Sq	Mean Sq	F value	Pr (> F)	
Brix x treatment	2	19.3454	9.6727	236.78	$< 2.20 \times 10^{-16}$	***
Residuals	45	1.8383	0.0409			

Signif. codes: 0; '***' 0.001; '**' 0.01; '*' 0.05; '.' 0.1; ' ' 1						

Table S2

ANOVA for wine, CIELab values (3 significant figures). Treatments are 'heated' or 'unheated (control)'. Levels are different locations on the slope, and are 'top', 'middle' or 'bottom'

Analysis of Variance Table for L						
Response: L						
	Df	Sum Sq	Mean Sq	F value	Pr (> F)	
Treatment	1	15.2	15.2	3.61	6.34×10^{-2}	
Level	2	79.2	39.6	9.40	3.57×10^{-4}	***
Treatment*Level	2	290	145	34.5	5.19×10^{-10}	***
Residuals	48	202	4.21			

Signif. codes: 0; '***' 0.001; '**' 0.01; '*' 0.05; '.' 0.1; ' ' 1						
Analysis of Variance Table for a						
Response: a						
	Df	Sum Sq	Mean Sq	F value	Pr (> F)	
Treatment	1	117	117	15.4	2.74×10^{-4}	***
Level	2	34.8	17.4	2.30	1.11×10^{-1}	
Treatment*Level	2	376	188	24.9	3.86×10^{-8}	***
Residuals	48	363	7.56			

Signif. codes: 0; '***' 0.001; '**' 0.01; '*' 0.05; '.' 0.1; ' ' 1						
Analysis of Variance Table for b						
Response: b						
	Df	Sum Sq	Mean Sq	F value	Pr (> F)	
Treatment	1	96.8	96.8	53.9	2.23×10^{-9}	***
Level	2	73.1	36.5	20.3	4.02×10^{-7}	***
Treatment*Level	2	39.8	19.9	11.1	1.11×10^{-4}	***
Residuals	48	86.2	1.80			

Signif. codes: 0; '***' 0.001; '**' 0.01; '*' 0.05; '.' 0.1; ' ' 1						

Table S3

ANOVA for wine, Somer's analysis results (3 significant figures). Treatments are 'heated' or 'unheated (control)'. Levels are different locations on the slope, and are 'top', 'middle' or 'bottom'













Analysis of Variance Table for Total Anthocyanins						
Response: Total Anthocyanins (mg·L ⁻¹)						
	Df	Sum Sq	Mean Sq	F value	Pr (> F)	
Treatment	1	3880	3880	13.6	3.565×10^{-4}	***
Level	2	43500	2170	76.5	$< 2.20 \times 10^{-16}$	***
Treatment*Level	2	8370	4180	14.7	2.418×10^{-6}	***
Residuals	102	29000	284			













Signif. codes: 0; '***' 0.001; '**' 0.01; '*' 0.05; '.' 0.1; ' ' 1						
Analysis of Variance Table for Colour density						
Response: Colour density (au)						
	Df	Sum Sq	Mean Sq	F value	Pr (> F)	
Treatment	1	1.41	1.41	14.7	2.18×10^{-4}	***
Level	2	12.8	6.39	66.7	$< 2.20 \times 10^{-16}$	***
Treatment*Level	2	18.5	9.25	96.5	$< 2.2 \times 10^{-16}$	***
Residuals	102	9.78	0.0959			

Signif. codes: 0; '***' 0.001; '**' 0.01; '*' 0.05; '.' 0.1; ' ' 1						
Analysis of Variance Table for Total phenolics						
Response: Total phenolics (au)						
	Df	Sum Sq	Mean Sq	F value	Pr (> F)	
Treatment	1	536	536	251	$< 2.20 \times 10^{-16}$	***
Level	2	233	116	54.5	$< 2.20 \times 10^{-16}$	***
Treatment*Level	2	357	179	83.5	$< 2.20 \times 10^{-16}$	***
Residuals	102	218	2.14			

Signif. codes: 0; '***' 0.001; '**' 0.01; '*' 0.05; '.' 0.1; ' ' 1						













Table S 4 - Phenology photographs




Date	Base, control	Base, treatment	Middle, control	Middle, treatment	Top, control	Top, treatment
11/11/2014						
26/11/2014						

Date	Base, control	Base, treatment	Middle, control	Middle, treatment	Top, control	Top, treatment
5/12/2014						
16/12/2014						

Date	Base, control	Base, treatment	Middle, control	Middle, treatment	Top, control	Top, treatment
8/1/2015						
15/1/2015						

Date	Base, control	Base, treatment	Middle, control	Middle, treatment	Top, control	Top, treatment
22/1/2015	 	 	 	 	 	 
30/1/2015	 	 	 	 	 	 

Date	Base, control	Base, treatment	Middle, control	Middle, treatment	Top, control	Top, treatment
9/2/2015						
17/2/2015						

Date	Base, control	Base, treatment	Middle, control	Middle, treatment	Top, control	Top, treatment
25/2/2015				Harvested 24/02/2015	Harvested 20/02/2015	Harvested 17/02/2015
At harvest (variable dates, as indicated)	