COMPARE & CONTRAST NAPA VALLEY, NESTED AVAs	Station name, March 1-Oct 31, 2025 Source: WESTERN WEATHER GROUP	Avg high (F)	Avg low (F)	Avg diurnal range in F	2025 highest temp (F)	2025 lowest temp (F)	Max wind gust avg (MPH)	Max wind gust (MPH)	*Notes: Averages reflect "climate." Highest and lowest represent "weather" and hazards. General styles and winemaking differences vary. All AVAs are "Mediterranean" in nature.*
Crystal Springs of Napa Valley AVA	Deer Park	80.2	51.2	29	103.8	35	15.4	31.8	Napa Valley, **hillside terroir**: No frost hazard due to hillside dynamics. Large diurnal temperature range. Cooler than adjacent valley floor due to altitude and afternoon breezes. Well-drained, 100% volcanic and rocky soils with drier growing conditions from drainage and air movement with all day sunshine from SW exposure. Wines have the highest depth and intensity, thence high-tannin oak should be avoided.
Howell Mountain AVA	Howell Mountain	73.6	54.9	18.7	95.5	31.7	15.4	41.8	Renowned region with growing season typically with cooler days, warmer, inversion-layer nights. The resulting smaller diurnal temperature due to altitiude and inversion layer. "Above the fog." Frost issues vary: Sloped sites have less frost while topographic depressions pool cold air on still nights. Site specific wines and oak use.
	Howell Mtn Pioneer	75.2	43.9	31.3	96.5	26.6	14.2	29.7	
Warmer, valley-floor AVAs: Saint Helena, Calistoga, Rutherford, Oakville with Yountville and Oak Knoll.	Calistoga TWY	81.8	46.2	35.6	104.7	30.6	13.4	26.4	"Classic" and familiar Napa Valley climate scenarios. Cool visible (fog) or invisible air from Pacific Ocean at night and warm to hot days. Frost concerns typically alliviated by April, but vineyards require orchard fans, sprinklers, etc. Exposure and topography varies from riparian areas to toe slope exposures of every direction. Largest diurnal temperature swings. Site specific details of vineyard are paramount to recognizing terroir. Valley floor wines are typically classic to opulent and profits/ balances with generous oak depending on harvest decisions.
	Calistoga North	81.9	48.5	33.4	103.8	31.5	NA	NA	
	SH North	82.7	49.6	33.1	105.5	32.2	12.9	29.2	
	SH NVV office	82.5	50.6	31.9	106.4	33.1	10.8	21.6	
	Rutherford Mee Lane	80.8	46	34.8	105.5	30.6	16.1	32.2	
	Oakville	78.8	46.6	32.2	103.7	31.1	16.5	33.3	
	Oakville SVO	79	47	32	103.4	30.6	16.5	33.1	
	Oakville TKO	79.6	47.5	32.1	105.4	31.4	15	31.4	
	Yountville South	79.3	41.1	38.2	102.9	31.5	12.6	26.7	
	Napa NW Ranch 54	80.1	48.2	31.9	104	33.6	10	22.5	
Cooler, valley-floor AVAs: Carneros, lower Coombsville, American Canyon area.	Carneros SBY	75.2	48.5	26.7	99.4	33.9	18.2	29.5	Smallest diurnal temperature range due to strong marine influence all day south of Yountville hills and Stag's Leap hills via Petaluma Wind Gap via Carneros and lower Mayacamas range. Excepting vineyards near Sonoma County line on toe slopes, all vineyards experience frost concerns during growing season. Red wines are higher in acid and have red fruit flavors vs black fruit flavors and benefit from judicious oak use.
	Carneros Milton	75.3	47.1	28.2	98.9	33.5	NA	NA	
	Carneros Ranch 71	75	50.8	24.2	98.8	37.1	20	33.5	
	Sunset Road	76.4	47.5	28.9	100.2	33	15.9	25.3	
	Suscol Lower Ranch 35	75.9	48.4	27.5	99.7	33.2	17	32.4	
Other Mountain AVAs: Atlas Peak, Diamond Mountain, Spring Mountain, Mount Veeder AVAs all include areas above and below the inversion layer and require site-specific analysis to categorize terroir. Lack of networked weather stations prevents detailed analysis. 1400' elevation for inversion layer assumed due to lack of networked weather stations.	Diamond Mtn over 1400'								Inversion layer nights and afternoon Westerlies direct from Pacific via Russian River area. Frost concerns from radiant frost and altitude. Well-drained, rocky soils.
	Diamond Mtn under 1400'								Marine influence nights via Calistoga Gap with warmer days. Well-drained soils.
	Spring Mountain over 1400'								Inversion layer nights and afternoon Westerlies direct from Pacific via Russian River area. Frost concerns from radiant frost and altitude. Well-drained, rocky soils.
	Spring Mountain under 1400'								Marine influence nights via Calistoga Gap with warmer days. Well-drained soils.
	Mount Veeder over 1400'								Inversion layer nights and afternoon breezes from Pacific. Frost concerns from radiant frost and altitude. Well-drained, rocky soils.
	Mount Veeder under 1400'								Marine influence nights via Russian River and Petaluma Wind Gap with warmer days. Well-drained soils.
	Atlas Peak AVA over 1400'								Inversion layer nights and afternoon breezes from Pacific. Frost concerns from radiant frost and altitude. Well-drained, rocky soils.
	Atlas Peak AVA under 1400'								Marine influence nights via Petaluma Wind Gap and Carneros with warmer days. Well-drained soils.