INDICE	CALCULATION	MEANING
SU35 – Number of heat stress days	annual count of days when daily maximum temperatures exceed 35°C	35°C is the average established threshold for photosynthesis to occur in the grapevine. Above this temperature, the plant closes its stomata. If this situation occurs after veraison, maturation will be arrested for as long as the situation holds, decreasing sugar, polyphenol and aroma precursor levels, all essential for grape and wine quality. Deprived from its normal source of energy, the plant will turn to use organic acids which will lower berry acidity contents decreasing its quality. The plant will also use more water to cool down its tissues, mainly after temperatures decrease in the evening. The higher the index, the lower will be berry quality and aptitude to produce quality grapes. The loss of acidity will, even for lower index levels, mean higher costs from acidity correction and water needs. There are inter- and intra-varietal variations in grapevines towards this threshold.
SprR – Spring total precipitation	total rainfall from April 21st to June 21st (Northern Hemisphere)	Dry springs will delay vegetative growth and reduce vigour and leaf area total surface. Fungal disease pressure will be lower and therefore there will be less need for protective and / or curative treatments, translating as less costs. Wet springs will promote higher vigour, increase the risk of fungal disease and disrupt vineyard operations as it may prevent machinery from getting in the vineyard due to mud. They are usually associated with higher costs.
GST – Growing Season Average Temperature	average of daily average temperatures between April 1st and October 31st (Northern Hemisphere)	GST provide information onto which are the best suited varieties for a given site or inversely, which are the best places to grow a specific variety. In a climate change scenario, it becomes an important index to use when making decisions about planting or replanting a vineyard. For existing vineyards, GST also informs on the suitability of its varieties for the climate of specific years, explaining quality and production variation. This index became popular when climate change started becoming an issue, as a clear and intuitive way to have a general idea of which areas would gain or lose suitability to produce quality wines. Many grapevine varieties across the world have been characterized in function of their GST optimum.
GDD – Growing Degree-Days	summation of daily differences between daily temperature averages and 10 (vegetative growth minimum temperature) between April 1st and October 31st (Northern Hemisphere)	GDD is arguably one of the first bioclimatic indices to be used in viticulture, mostly applied to the characterization of wine-growing areas towards their suitability to produce specific types of wines (white, red, sparkling, fortified) and grapes (wine, table, raisins). It correlates quite well with GST and is today mostly considered old-school, but still very much in use for strategic decision-making in the wine business.
WSDI – Warm Spell Duration Index	Annual count of days with at least 6 consecutive days when the daily temperature maximum exceeds its 90th percentile.	Considered an index for heatwaves, the same considerations as SU35 apply here. This index, however, signals when warm regions start to become too extreme and causing additional losses because of flowering disruption (when too early in the season) or extreme berry and leaf dehydration and scalding (berry skin sunburn, leaf and shoot desiccation), on top of excessive water depletion