<table>
<thead>
<tr>
<th>Agroclimate Metric</th>
<th>Calculation</th>
<th>Relevance to Specialty Crop Production</th>
</tr>
</thead>
</table>
| **Growing Degree Days (GDD)** | GDD is calculated following [28] using $T_{base} = 10 \ ^\circ C$. | - Use in crop and pest phenology models  
- Can inform crop or cultivar growing location [29] |
| **Chill Accumulation (as Chill Portions, CP)** | Chill accumulation is calculated as chill portions (CP) [30] using hourly T calculated following [31]. Annual CP are accumulated 1st Nov–1st Mar [32]. | - Sufficient chill is necessary for fruit development and good crop yield [33]  
- Frost damages have significant economic consequences [34,35]  
- Frost risk is a top grower concern [17] |
| **Frost Days (FD)** | FD are the number of days per year with minimum temperatures (Tn) ≤ 0 °C. | - Consideration for early-blooming and frost-sensitive perennials  
- Governs transplant dates for annual crops [36]  
- Earlier LSF can increase pest pressure [37] |
| **Last Spring Freeze (LSF)** | The LSF is defined as the last day of the calendar year prior to 30 June with $Tn ≤ 0\ ^\circ C$. | - Important for late-maturing crops that can suffer fruit damage from a fall freeze [35]  
- Can serve as a guide for planting dates of late-season annual crops |
| **First Fall Freeze (FFF)** | The FFF is defined as the first day of the calendar year commencing 1 July with $Tn ≤ 0 \ ^\circ C$. | - Can inform the geography of crop cultivation  
- Longer FFS can increase pest pressure [37] |
| **Freeze-Free Season (FFS)** | The FFS is calculated as the difference between the LSF and FFF (FFF [minus] LSF). | |
| **Tropical Nights (TRN)** | TRN are calculated as the number of nights per year with $Tn > 20 \ ^\circ C$. | - Can reduce fruit set in tomatoes [25]  
- Impacts winegrape berry chemistry [38], pathogen susceptibility [39], and yield [40]  
- May decrease yield of table grapes [13] |
| **Hot Days (HD)** | The number of days per year with $Tx > 38 \ ^\circ C$ [41,42]. | - Can negatively affect plant development and crop yield  
- Impacts are dependent on HD timing and crop heat tolerance |
| **Extreme Heat Days (EHD)** | EHD are the number of days per year with $Tx > 98$th percentile of summer (June-August) $Tx$ for the 1981–2010 period [42]. | - EHD percentile threshold allows local heat impacts to be explored. For example, heat intolerant crops (e.g., broccoli, lettuce [43]) may be impacted by exposure to temperatures below the HD threshold. |
| **Heatwaves (HW)** | HW events are defined as 3 + consecutive days [44,45] with $Tx > 98$ percentile of 1981–2010 summer $Tx$ (as in EHD). | - Impacts on crop yield and crop quality in winegrapes [46]  
- Impacts farmworker productivity and decreases occupational safety [47] |
| **Diurnal Temperature Range (DTR)** | DTR is the difference between daily $Tx$ and $Tn$. We calculate DTR over 1 March to 1 November. | - Reduced amplitude can alter winegrape berry chemistry [48,49], though effects can vary by cultivar [50] |
| **Reference Evapotranspiration (ETo)** | ET$_o$ is calculated following the FAO Penman–Monteith method [27]. We calculate summer (June-August) average ET$_o$ for each year 1981–2020 for our analysis. ET$_o$ units are mm. | - Commonly used in irrigation models and decision support systems [51]  
- Considered a proxy for plant water demand. |