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## Meteorological considerations of grapevine damage due to temperature variations: the 2019 late spring frost and summer heat wave events in Burgundy.

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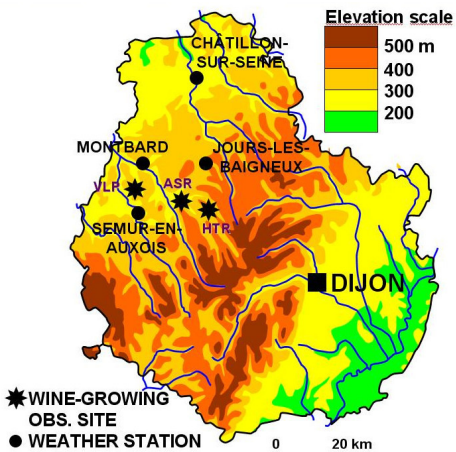
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# Meteorological considerations of grapevine damage due to temperature variations: the 2019 late spring frost and summer heat wave events in Burgundy

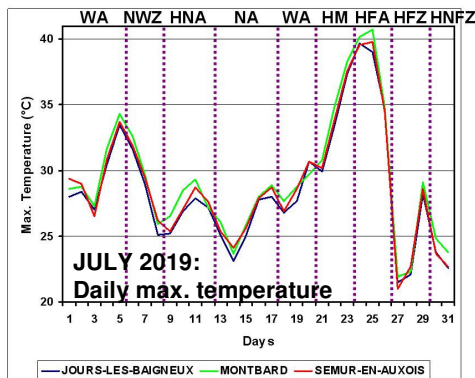
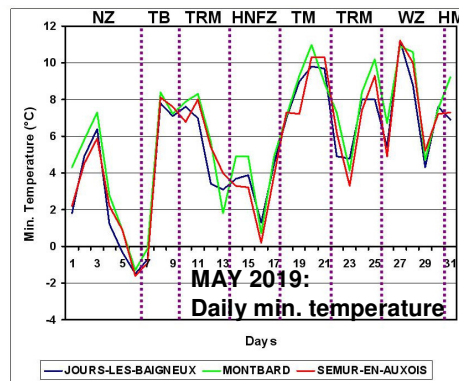
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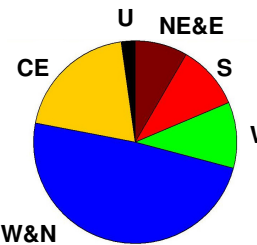
## Department of Côte-d'Or



**Hess-Brezowsky classification:**  
**Northeast & East** (NEA, NEZ, HFA, HFZ, HNFA, HNFZ), **South** (SWA, SWZ, SA, SZ, TB, TRW, SEA, SEZ), **West** (WA, WZ, WW, WS), **Northwest & North** (NWA, NWZ, NA, NZ, HNA, HNZ, HB, TRM), **Main high/low pressure area over Central Europe** (HM, BM, TM), **Unclassified** (U).



**CHÂTILLON-SUR-SEINE (1951-2020):**  
 Proportion of May frost days for each Hess-Brezowsky major type



Hess-Brezowsky classification / **Major types:** Northeast & East (NE&E), South (S), West (W), Northwest & North (NW&N), Main high/low pressure area over Central Europe (CE), Unclassified (U).

**CHÂTILLON-SUR-SEINE (1951-2020):**  
 Number of days with max. temp. ≥ 40°C and « HB » associated types

- 1983: 1 (07/28-31: BM)
- 2003: 4 (07/22-08/04: BM)  
(08/05-13: HNA)
- 2012: 1 (08/16-18: HM)  
(08/19-26: WZ)
- 2019: 2 (07/21-23: HM)  
(07/24-26: HFA)
- 2020: 1 (07/29-31: HM)

