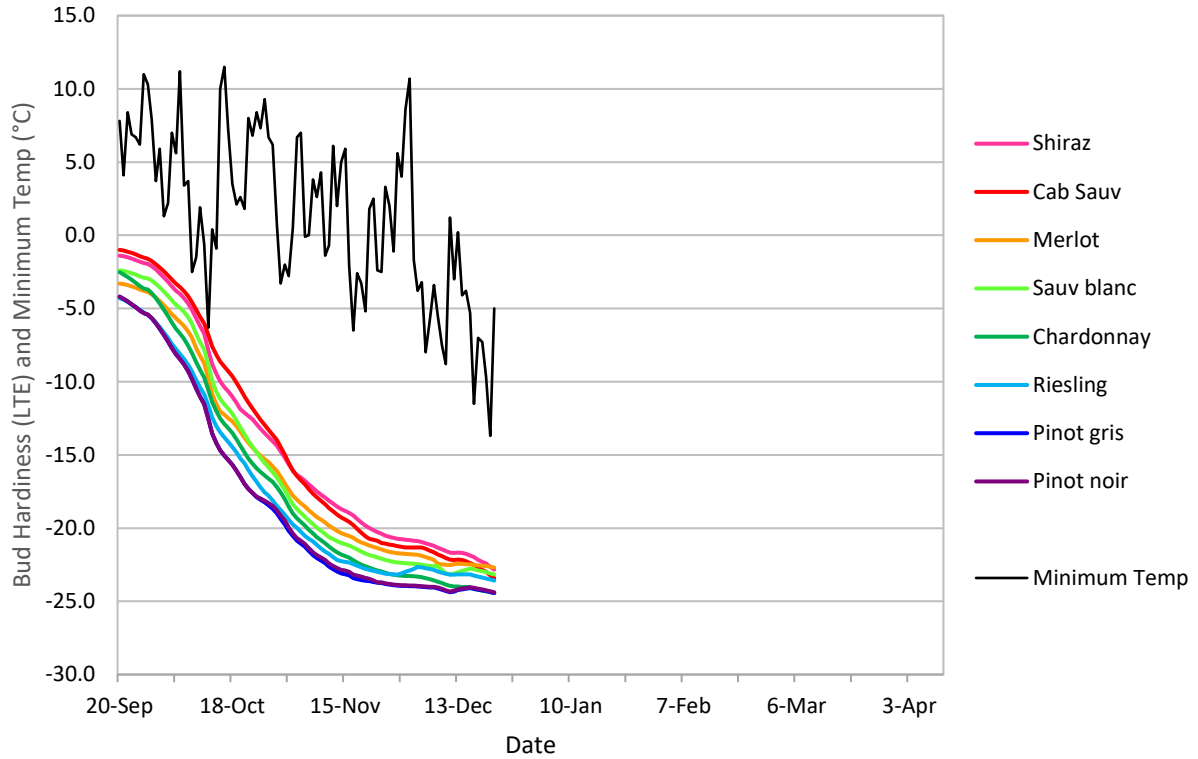


## Predicted Grape Bud Hardiness and Minimum Temperature in the Okanagan Valley during Winter 2021 - 2022



The chart above shows daily minimum temperatures and the progression of model-predicted bud hardiness for eight cultivars grown in the Okanagan Valley. The model was developed using the measured hardiness of buds sampled from multiple vineyards per cultivar over nine years (2012-2021). Temperature was measured at the Environment Canada weather station in Penticton, BC. Bud hardiness and minimum temperatures vary spatially in the Okanagan Valley due to local topography and site conditions, which must be considered when assessing the risk of winter injury.

The table below compares model-predicted with the average sample-measured bud hardiness for the eight cultivars on December 22, 2021. The average hardiness measured on sampled buds may differ from the true average due to variability in hardiness among and within vineyards, and to the limited sample sizes.

Bud Hardiness	Date	Shiraz	Cabernet Sauvignon	Merlot	Sauvignon blanc	Chardonnay	Riesling	Pinot gris	Pinot noir
Model-predicted	22-Dec-2021	-22.8	-23.4	-22.7	-23.2	-24.4	-23.6	-24.4	-24.4
Sample-measured	22-Dec-2021	-23.6	-23.2	-24.1	-24.1	-24.7	-24.5	-25.4	-25.7