# Supplemental Information

Figure S1. The study site, vineyard Fort Chabrol, in Epernay. Pinot Meunier (PM), Pinot Noir (PN) and Chardonnay (CH) sub-blocks are indicated.
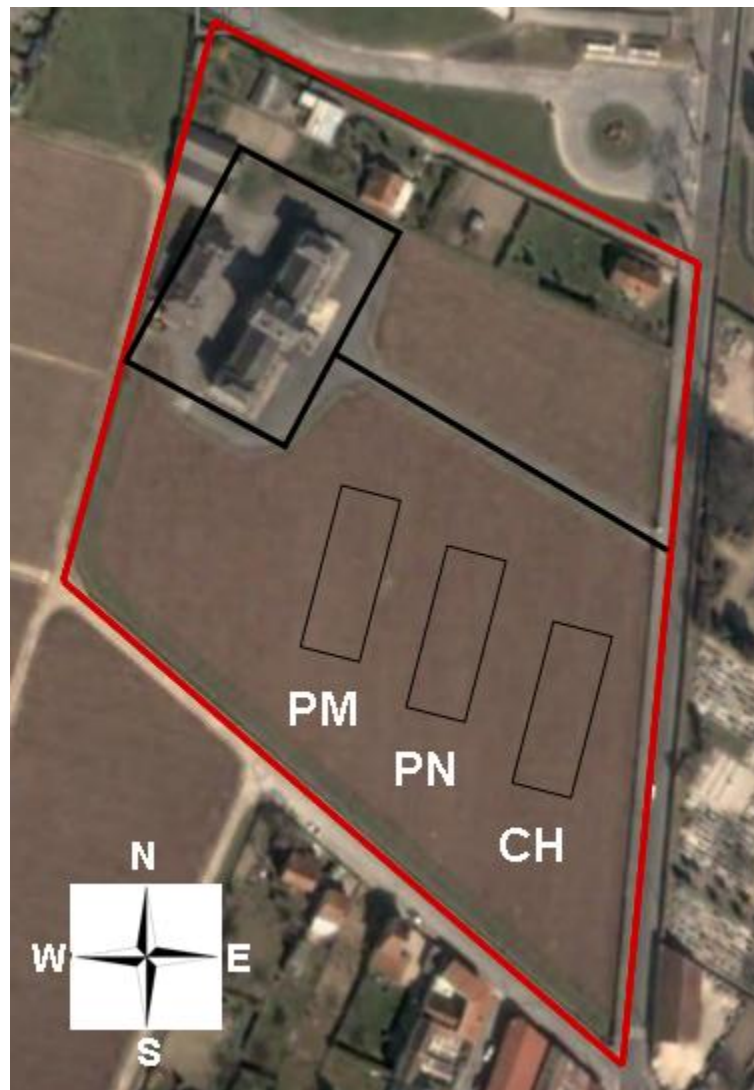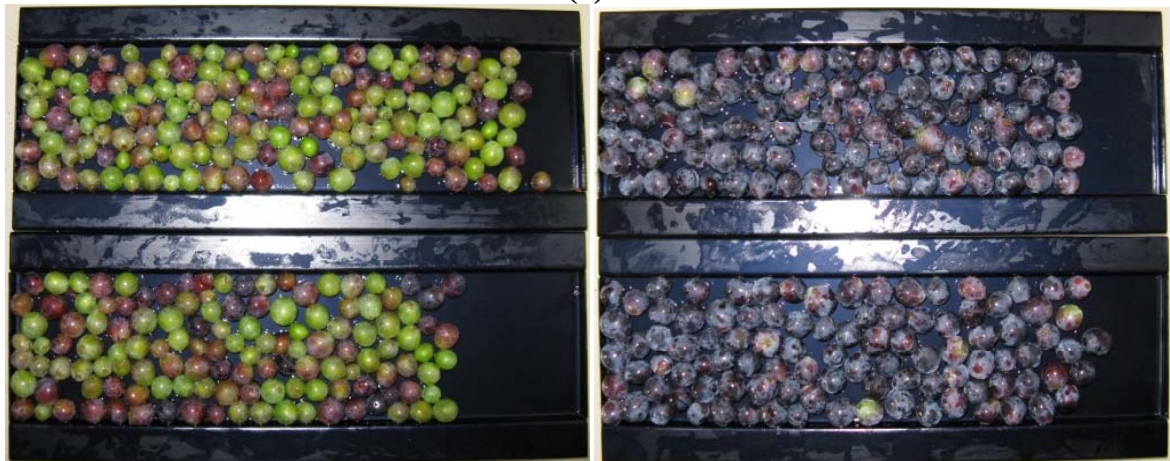
Figure S2. Berry samples: **(a)** for the effect of Multiplex-to-sample distance; **(b)** for *P*-model calibration; **(c)** for the validation of the combined *P*-model and *A*-model, and as an example of 200-berry samples; **(d)** 19-berry samples used for the calibration (*A*-model).
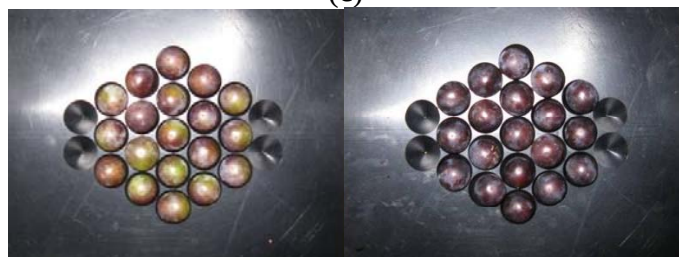
(a)

(b)

(c)

(d)

Figure S3. Predicted proportion of red berries and anthocyanin content using the combination of FRF_B and FRF_G (upper graph) or FRF_R and FRF_B (lower graph) signals in the combined *P* and *A* model. Sigmoid fit for *p* and linear fit for Anth.