

# Use side-view HSI data to predict Vcmax on W13

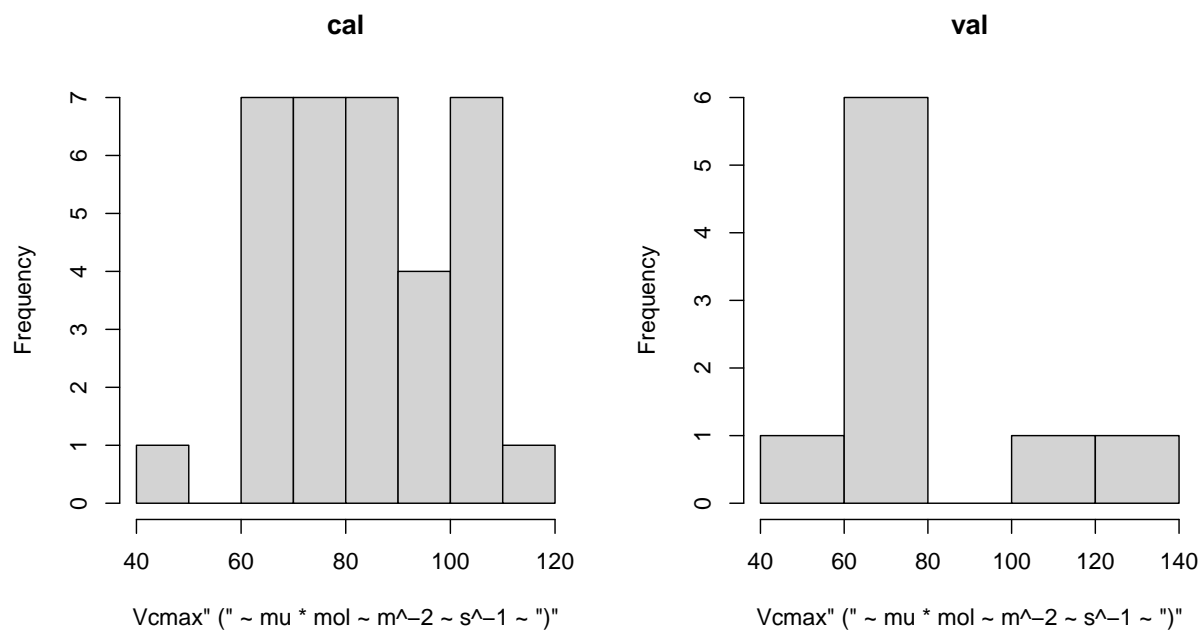
2023-08-08

```
## $plsralg
## [1] "oscorespls"

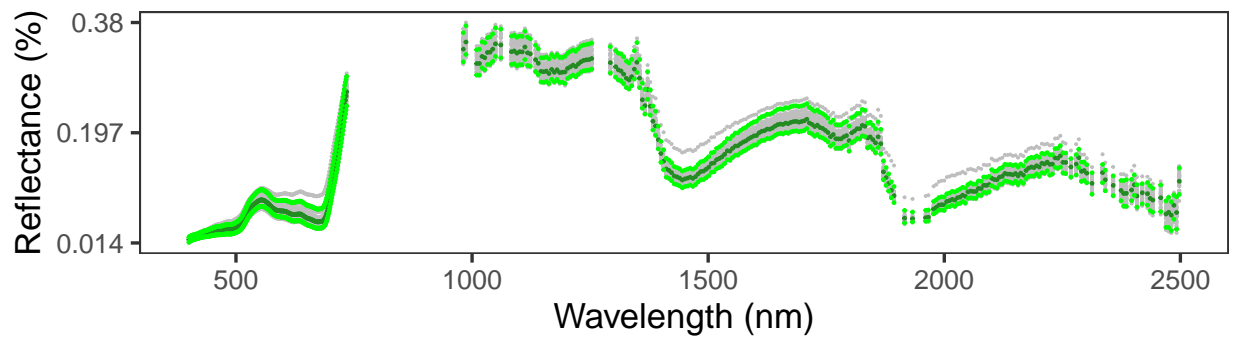
## [1] "943" "947" "903" "936" "939" "948" "915" "919" "934" "911" "917" "938"
## [13] "946" "914" "942" "922" "956" "968" "990" "954" "974" "986" "995" "959"
## [25] "973" "967" "953" "978" "977" "985" "964" "984" "993" "952"

## [1] "920" "921" "925" "945" "951" "971" "972" "983" "992"

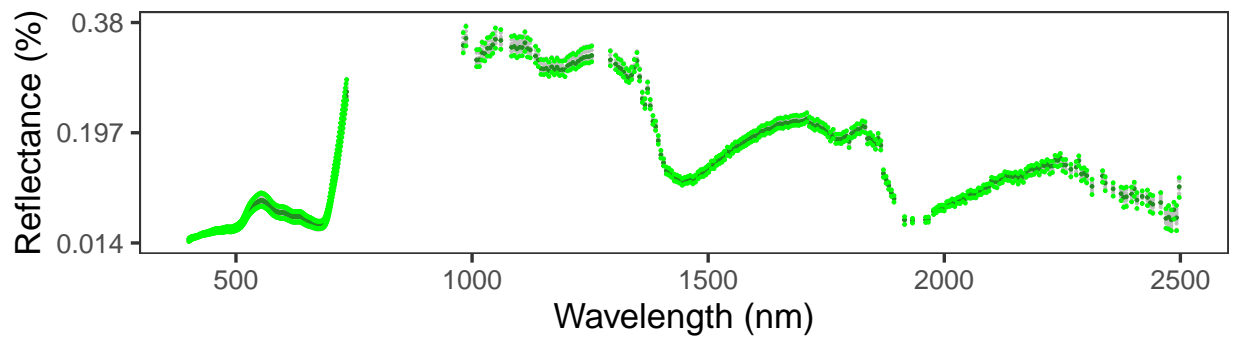
##          value          wv
## 475 -0.05414630  987.1000
## 270 -0.05486496  734.4499
## 474 -0.05488974  981.4100
## 494 -0.05490181 1094.9700
## 8   -0.05500032  408.8526
## 730 -0.05634197 2419.2000
```

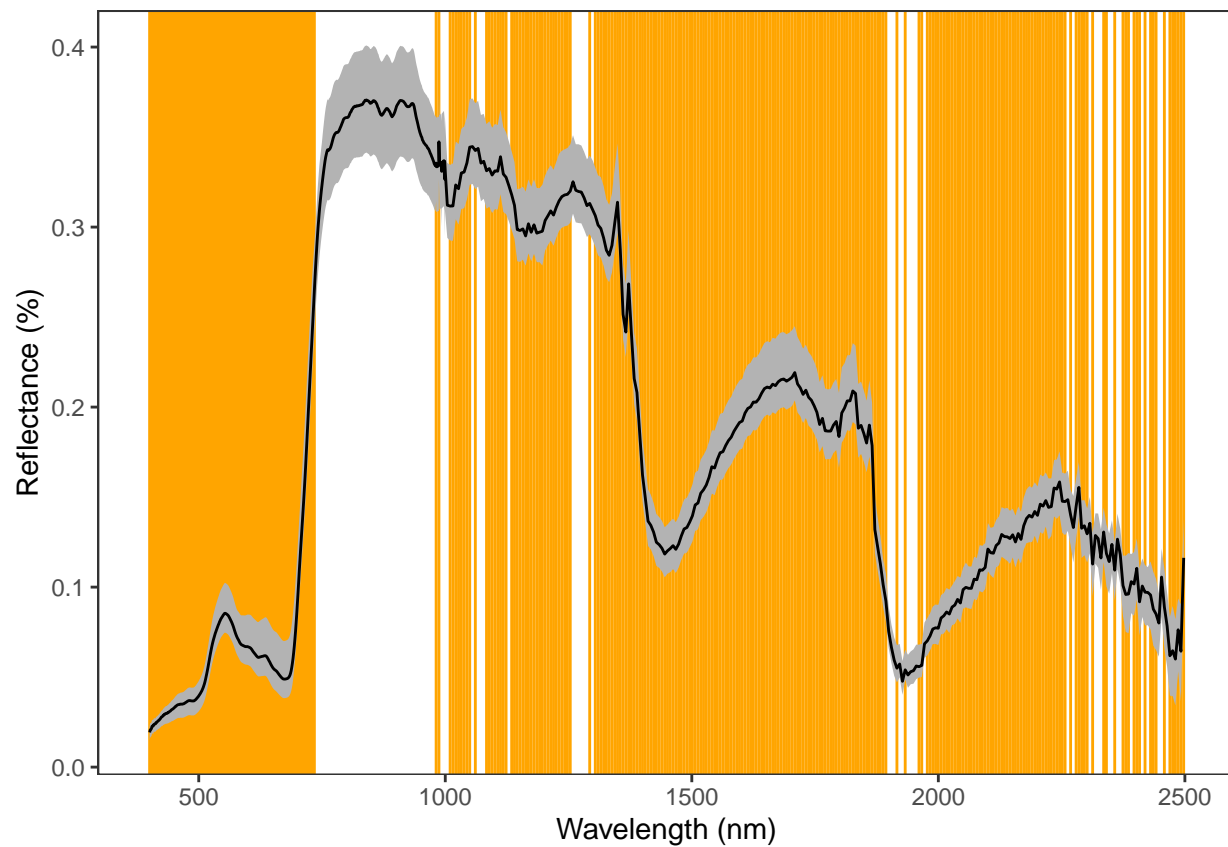


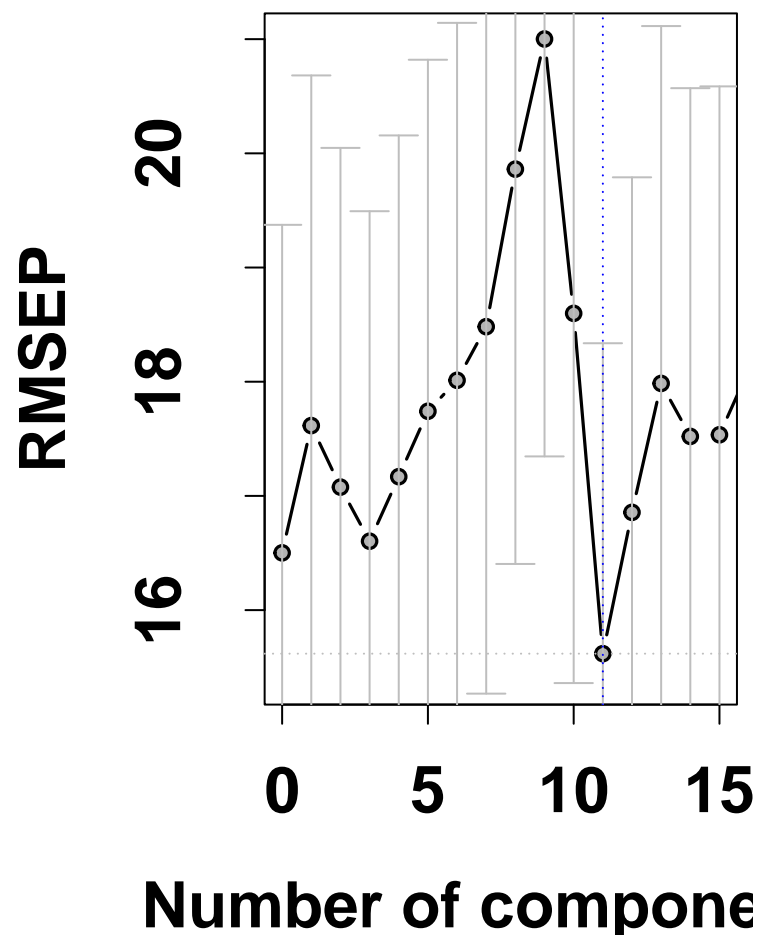
Vcmax calibration dataset



Vcmax validation dataset

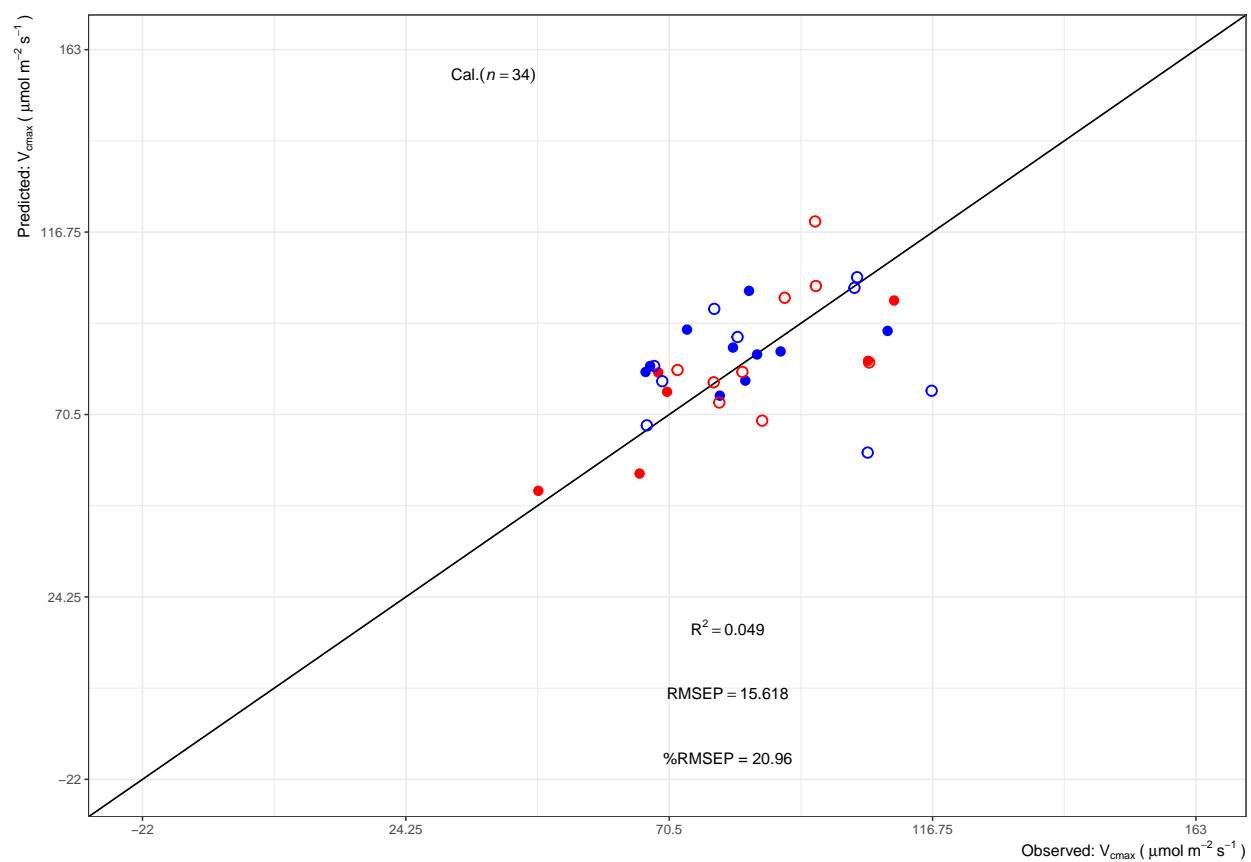


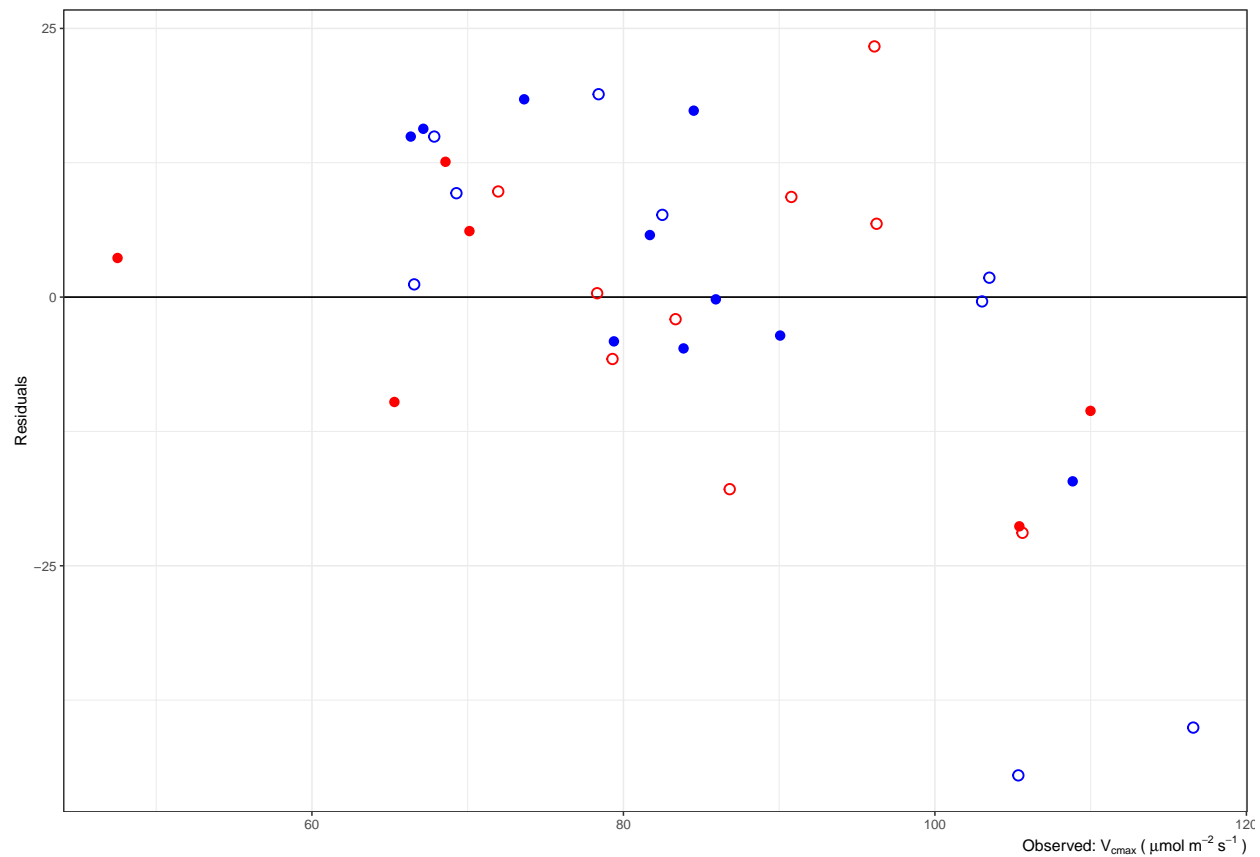


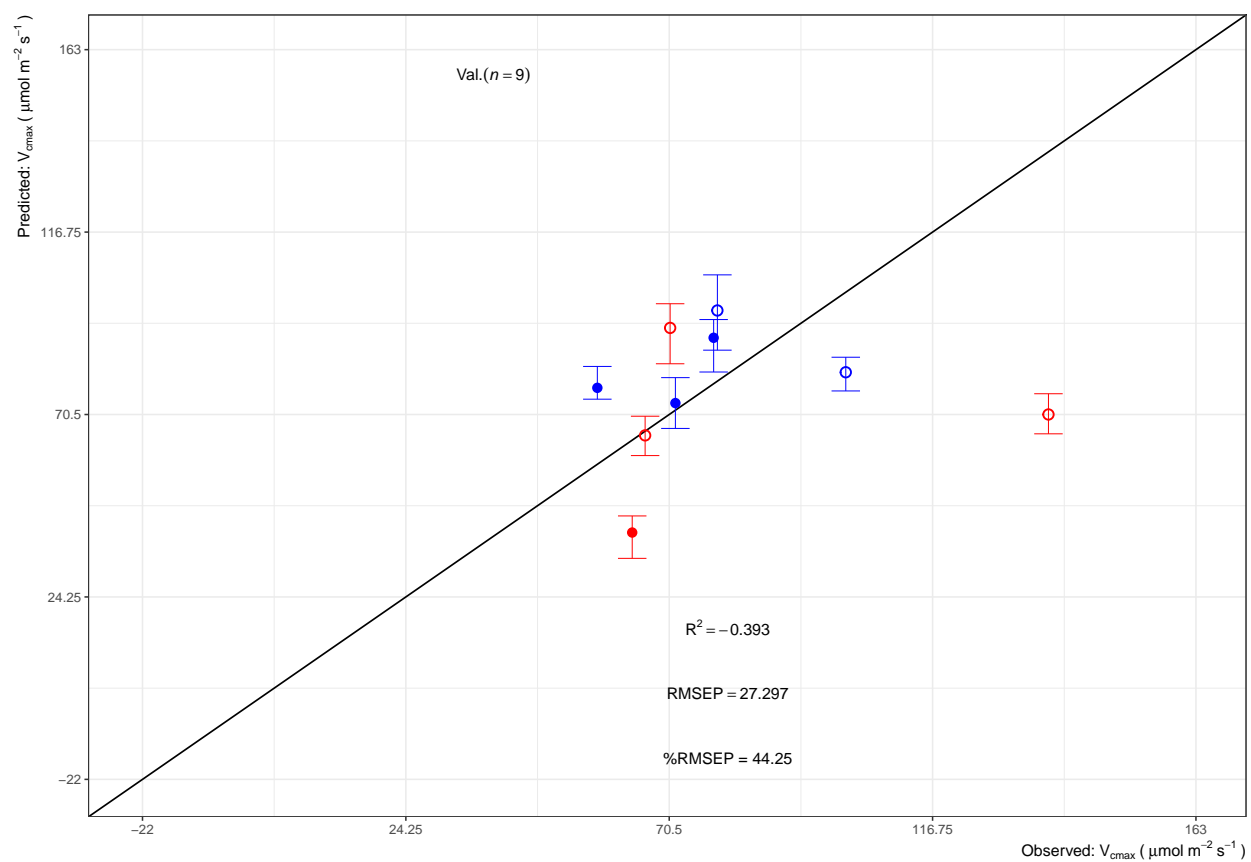


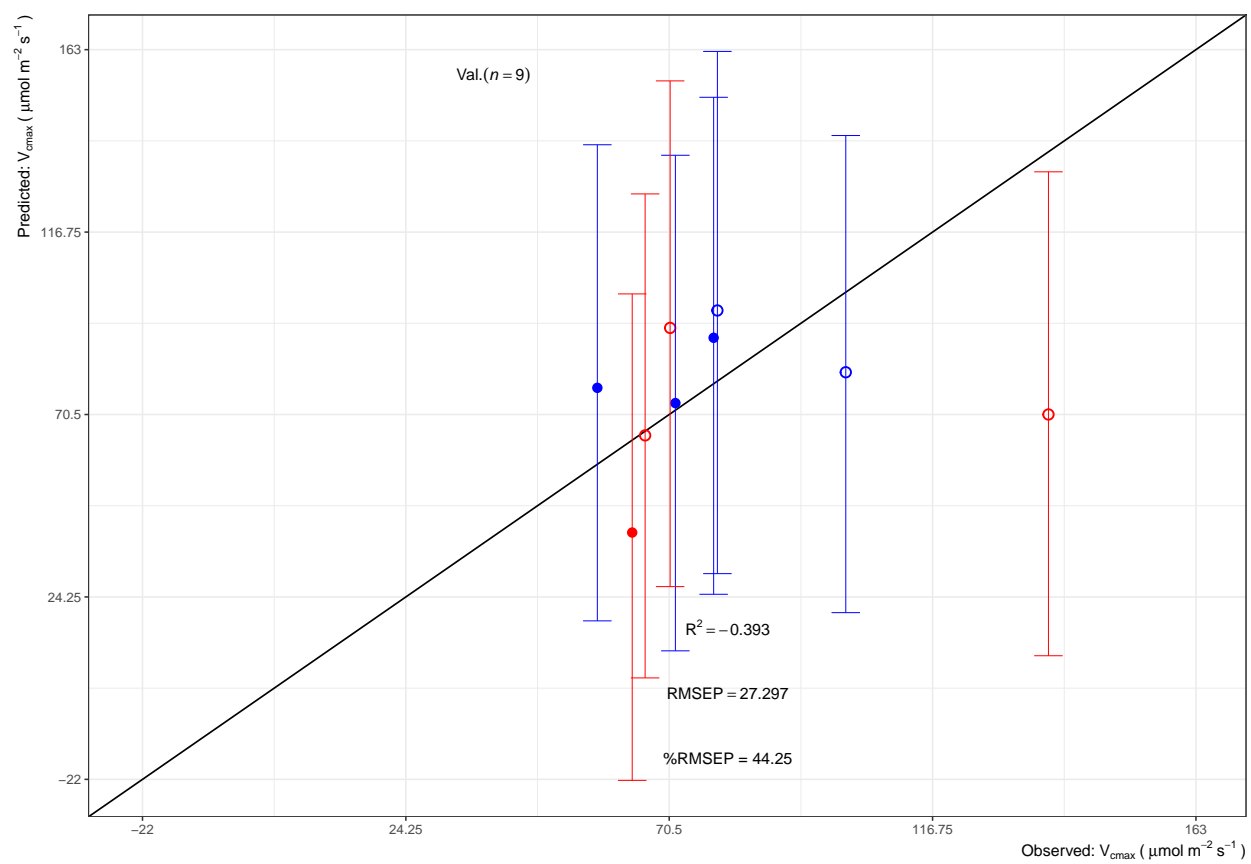
```
## data_set      R2  RMSEP NRMSEP
## 1      cal  0.049 15.618 22.613
## 2      val -0.393 27.297 34.456
```

```
## Observed Predicted Residuals Treatment Subpop      uci      lci      upi
## 1 57.87484 77.26341 19.388571      N1      TRJ  82.68914 74.38434 138.8886
## 2 63.99828 40.58031 -23.417974      N1      IND  44.79041 34.02958 101.0742
## 3 71.58214 73.39458  1.812441      N1      TRJ  79.84638 66.96933 136.2268
## 4 78.29995 89.95026 11.650316      N1      TRJ  94.57109 81.27602 150.9205
## 5 70.65988 92.45519 21.795308      N2      IND  98.58366 83.36345 155.0797
## 6 78.95585 96.87736 17.921511      N2      TRJ 105.90319 86.81096 162.5537
##      lpi
## 1 18.18492
## 2 -22.25424
## 3 10.58890
## 4 24.92665
## 5 26.86738
## 6 30.16048
```

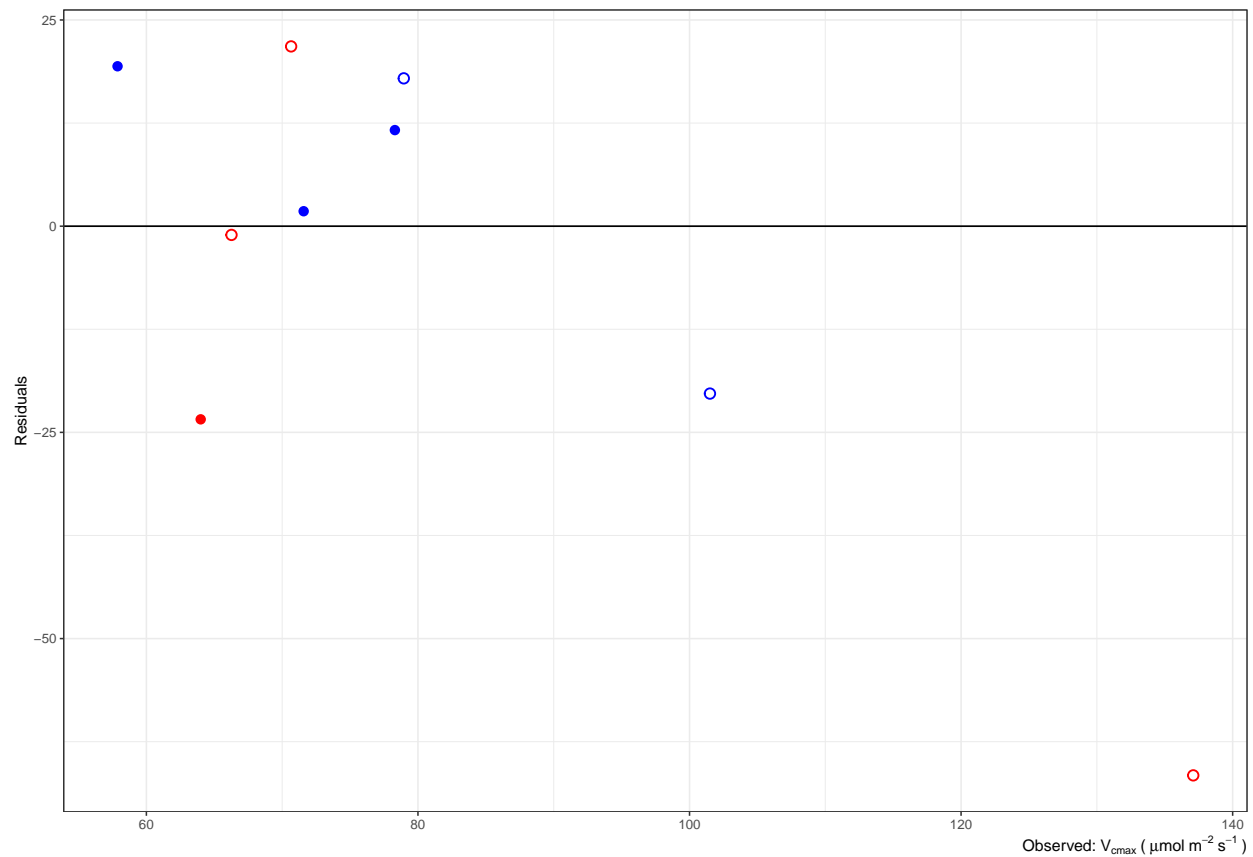












```
##      Iteration Intercept  X662.1255 X660.86404 X501.50012 X450.11829
## Seg 1          1 -302.1212  -97.96553  -103.6950   111.34492   68.84207
## Seg 2          2 -202.4731 -117.47918  -123.8088   105.37353   84.01011
## Seg 3          3 -287.9722  -89.71344  -100.1167   110.85330   59.16156
## Seg 4          4 -280.7927  -97.61123  -104.7783   101.68006   64.04179
## Seg 5          5 -284.8849  -94.37987  -100.1860   105.90334   79.69407
## Seg 6          6 -254.2108 -103.63883  -114.2175    85.86584   69.89201
```

```
##      coefs
## 662.1255  -100.15199
## 660.86404 -108.06213
## 501.50012  110.80071
## 450.11829   68.49952
## 502.72897  137.66889
## 659.60283 -118.41966
```