

Use side-view HSI data to predict SLA

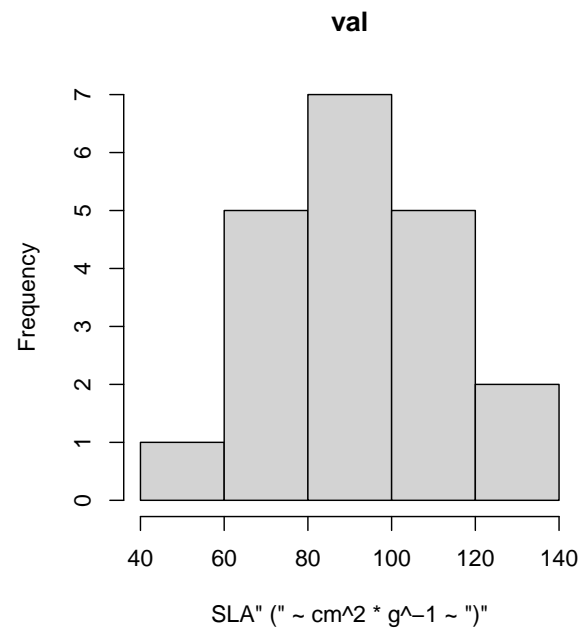
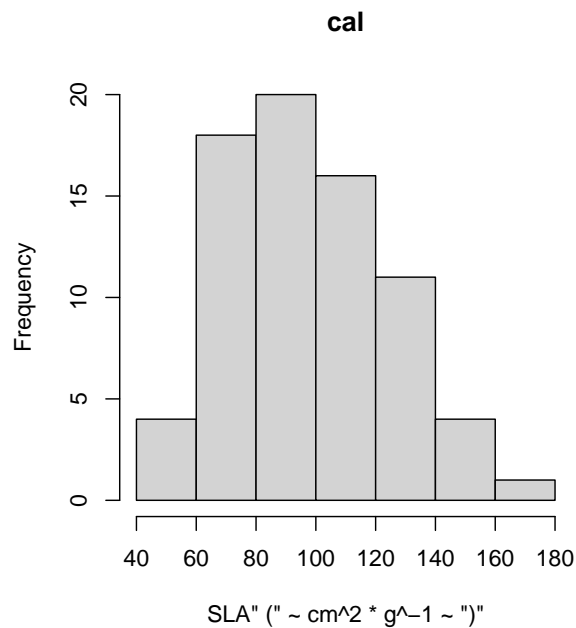
2023-08-08

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

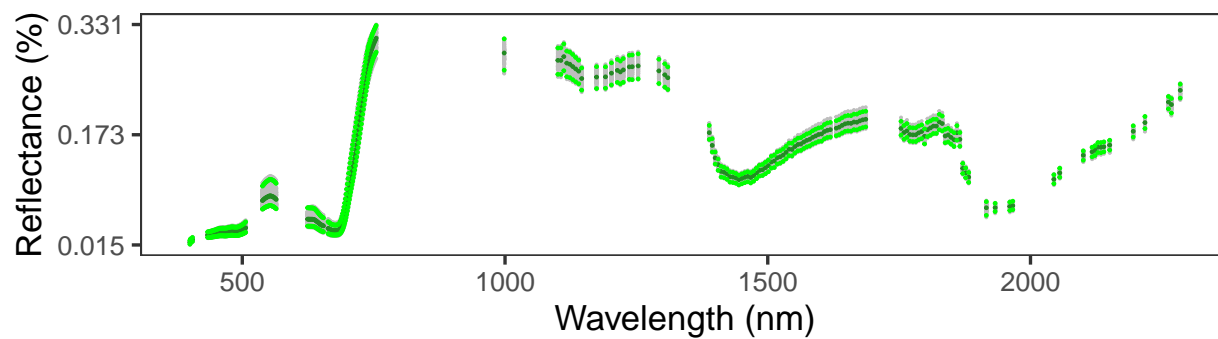
## [1] "908" "935" "903" "925" "919" "910" "904" "916" "945" "909" "946" "917"
## [13] "948" "911" "940" "918" "936" "924" "930" "944" "929" "938" "937" "947"
## [25] "927" "922" "907" "928" "913" "931" "926" "939" "923" "933" "932" "906"
## [37] "902" "968" "950" "987" "966" "951" "963" "954" "991" "964" "985" "976"
## [49] "955" "959" "962" "960" "972" "983" "996" "952" "993" "981" "990" "979"
## [61] "970" "956" "977" "975" "967" "989" "994" "980" "988" "961" "978" "995"
## [73] "984" "986"

## [1] "905" "912" "914" "915" "920" "921" "934" "941" "942" "943" "953" "957"
## [13] "958" "965" "969" "971" "973" "974" "982" "992"

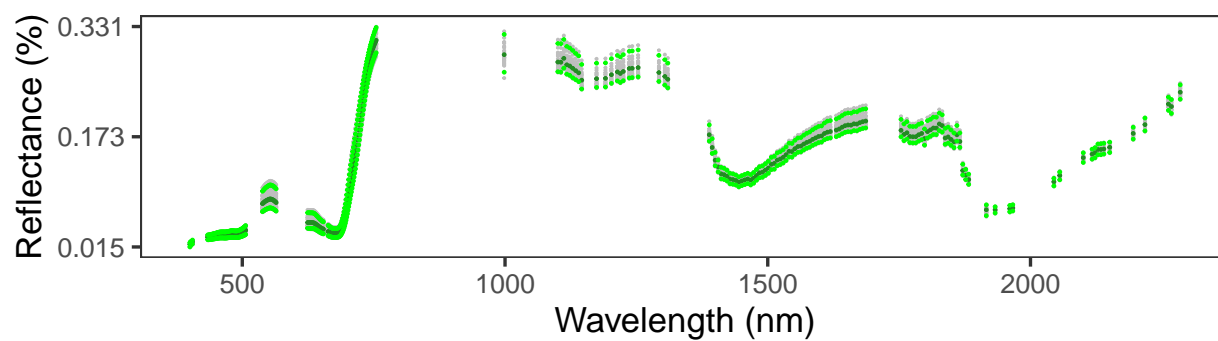
##           value           wv
## 625 0.01517349 1832.0600
## 596 0.01503318 1669.6200
## 207 0.01490536  654.5606
## 114 0.01488476  538.4765
## 497 0.01480199 1111.9700
## 183 0.01479064  624.3925
```

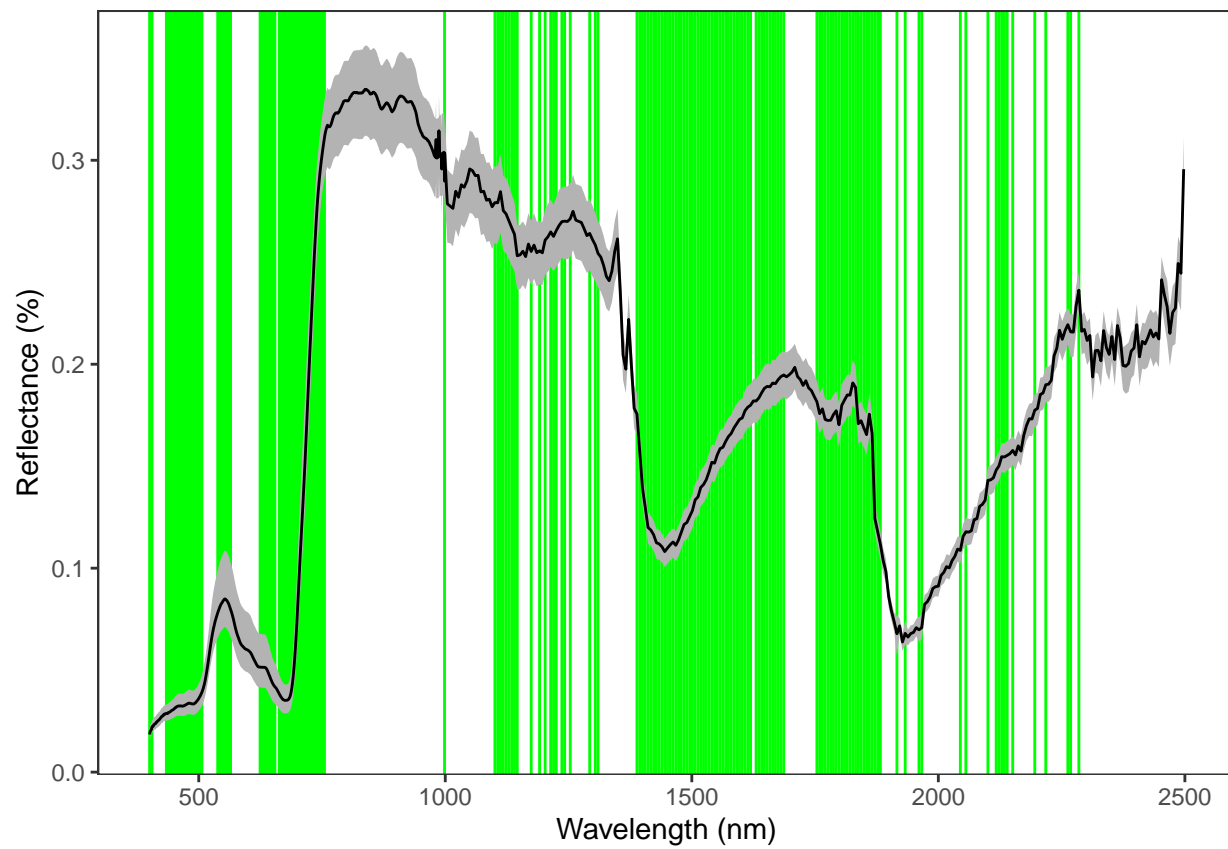


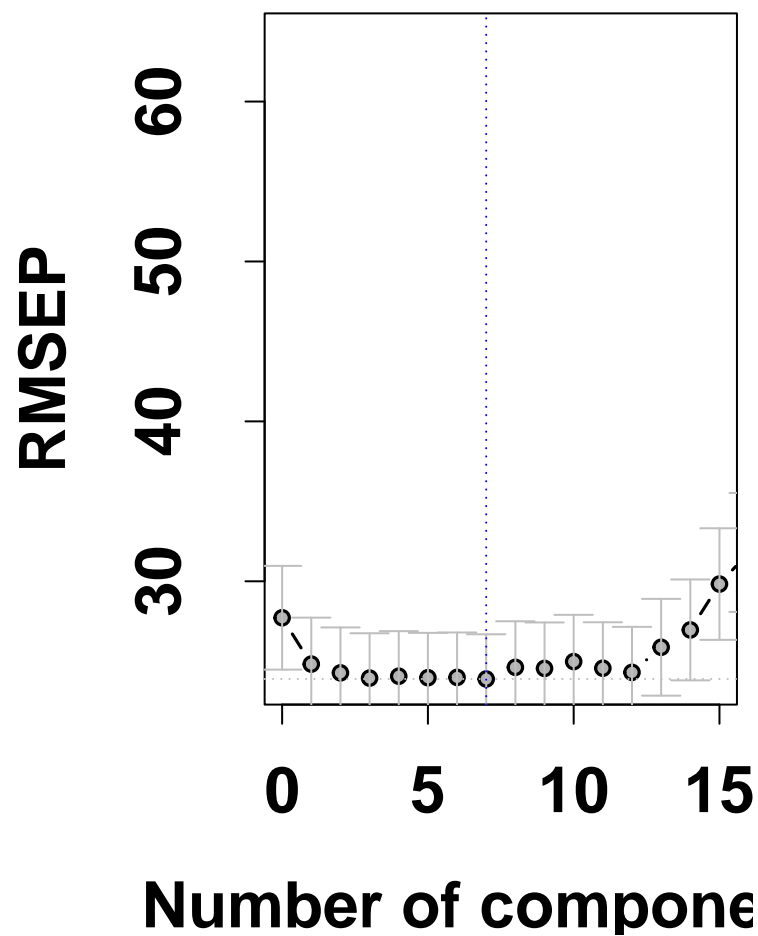
SLA calibration dataset



SLA validation dataset

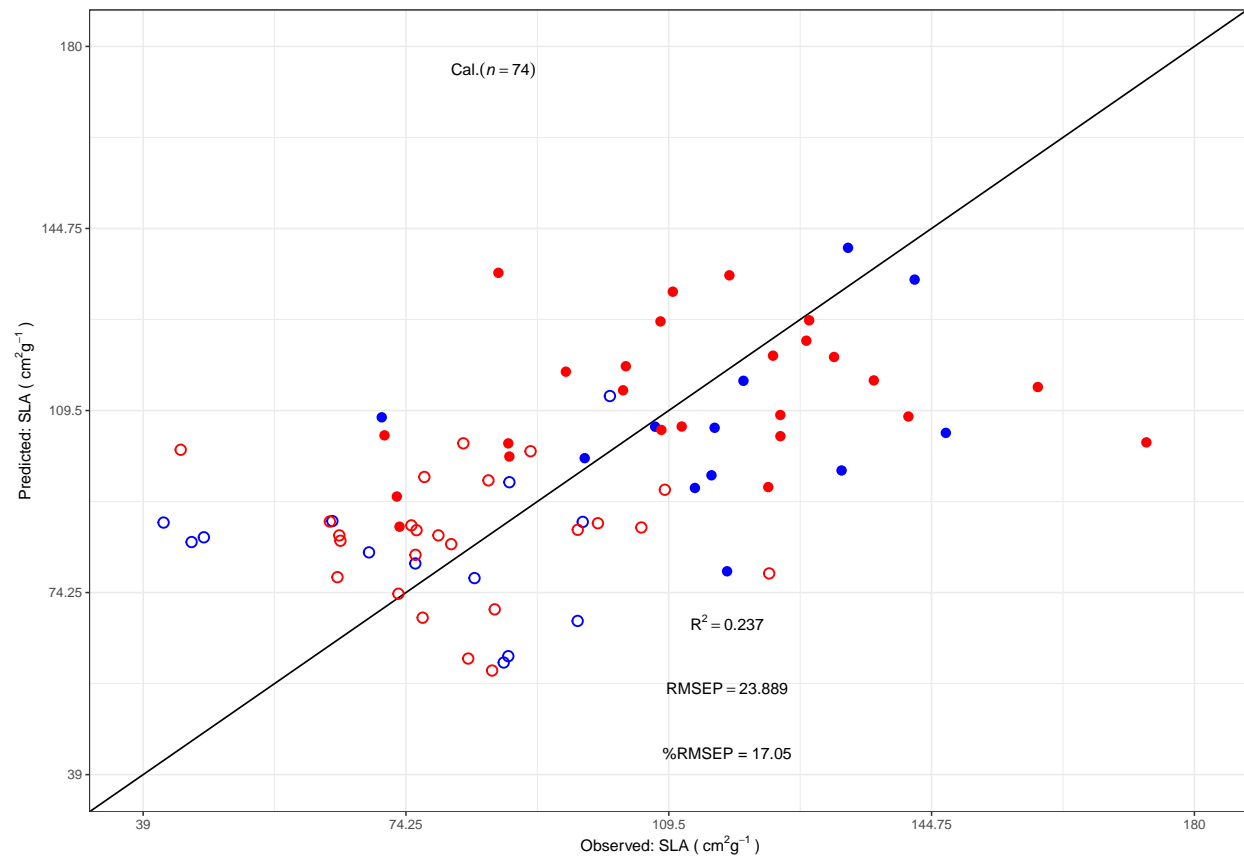


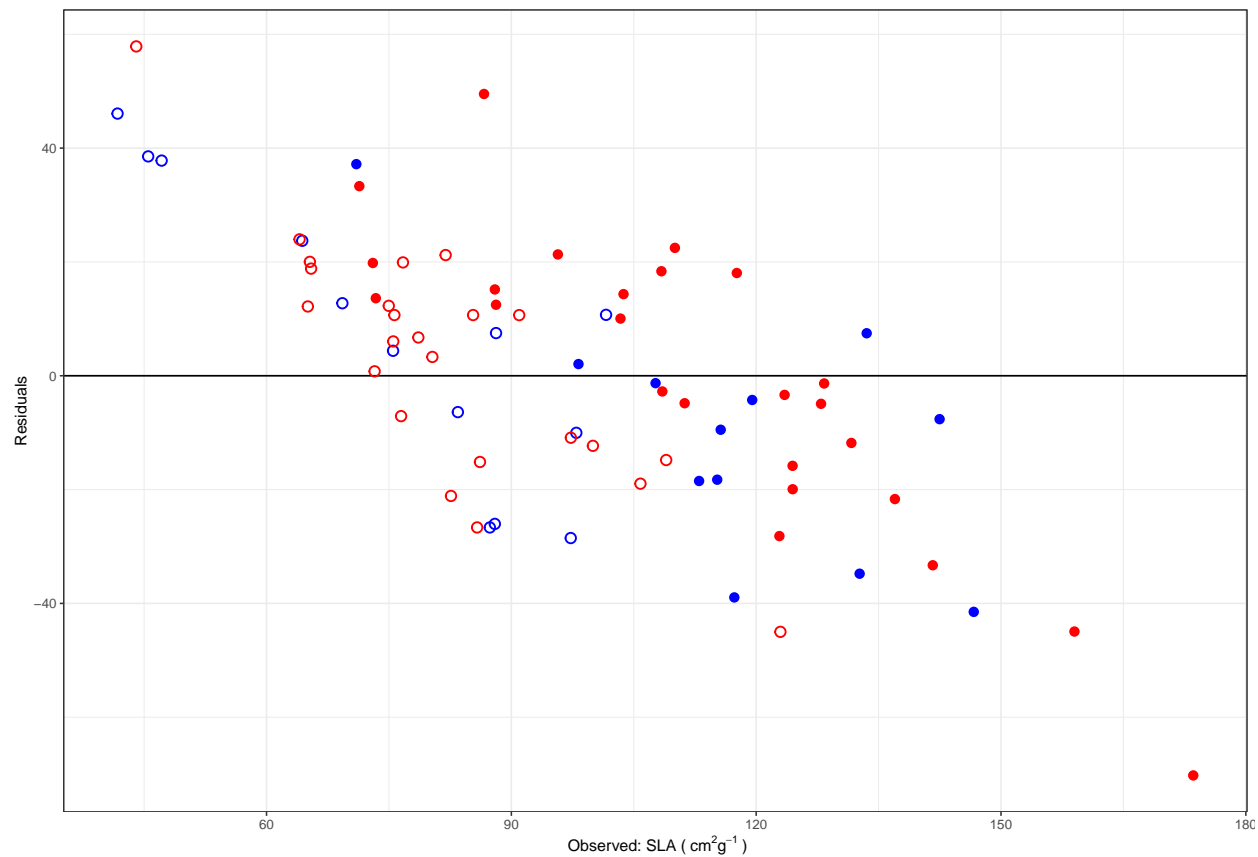


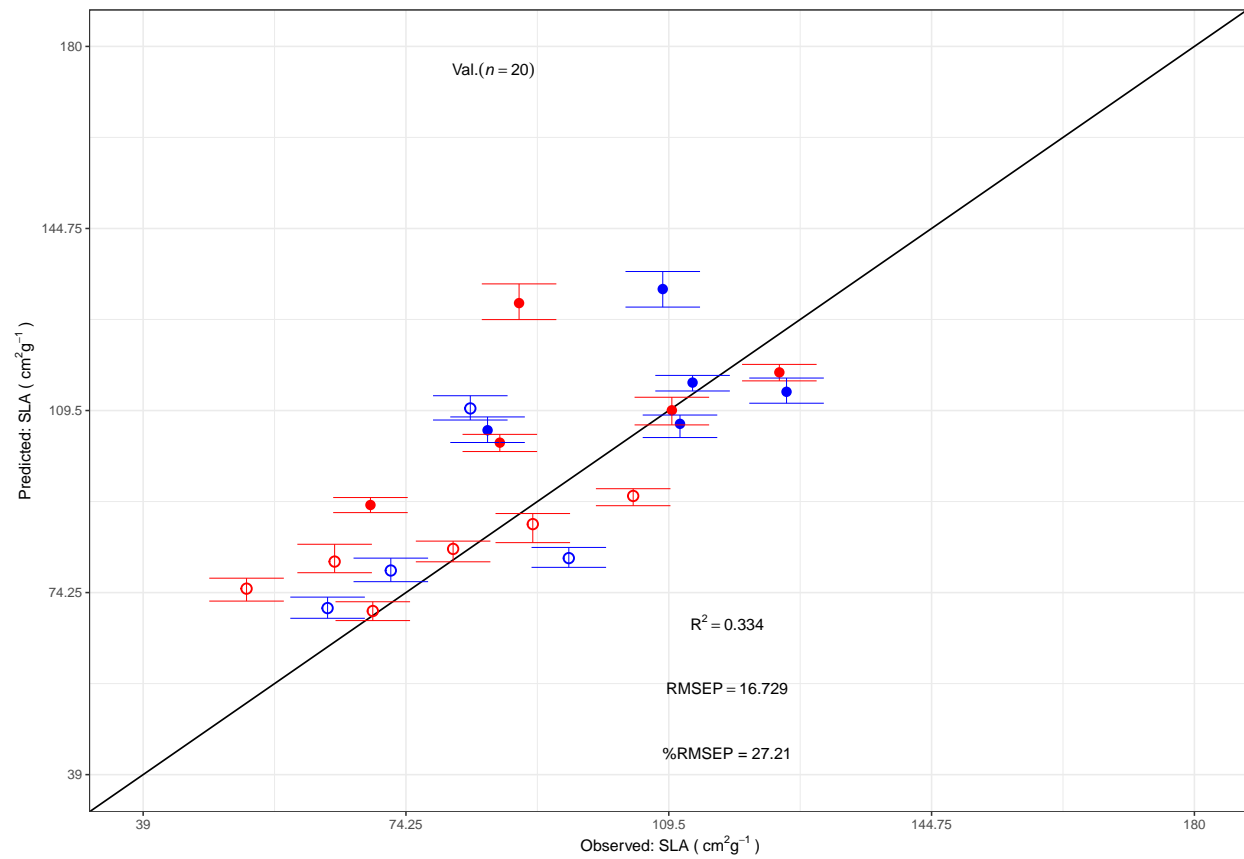


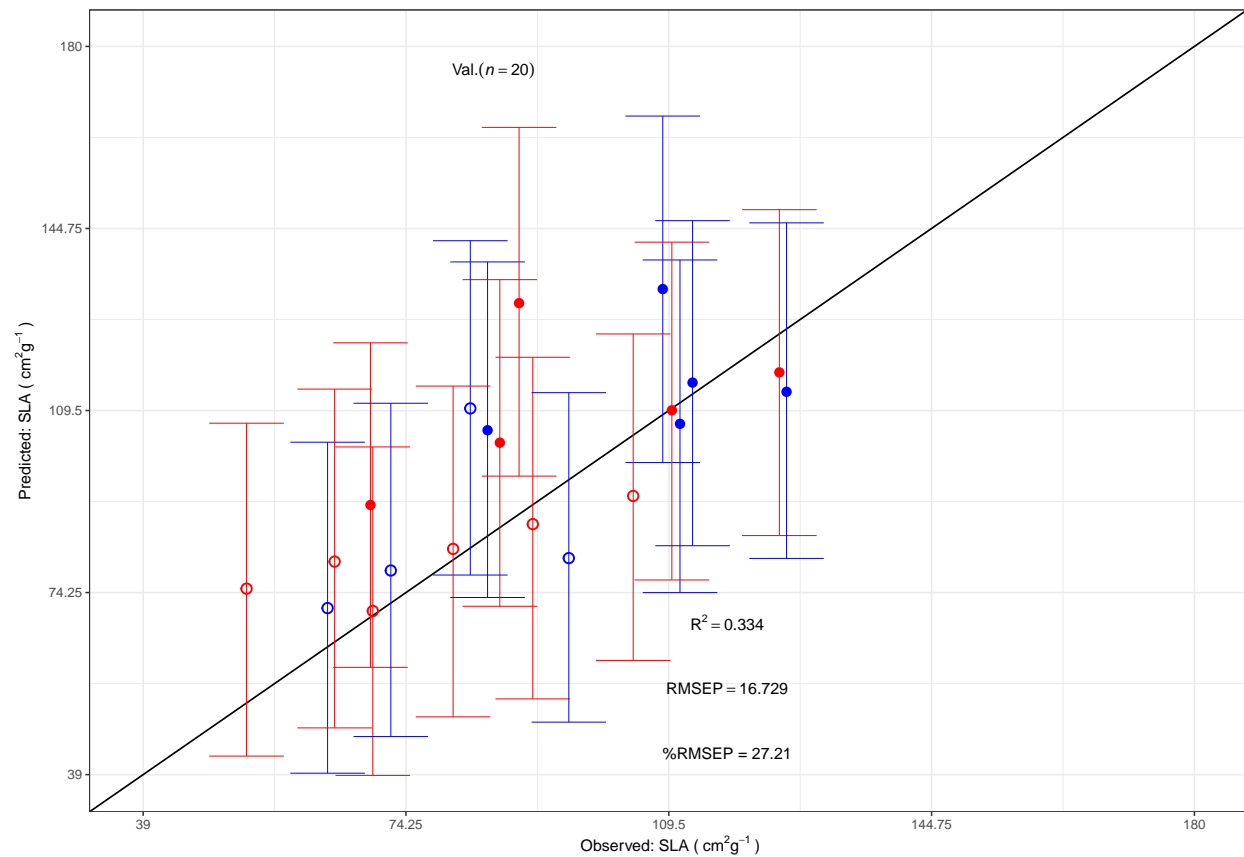
```
## data_set R2 RMSEP NRMSEP
## 1 cal 0.237 23.889 18.123
## 2 val 0.334 16.729 23.098
```

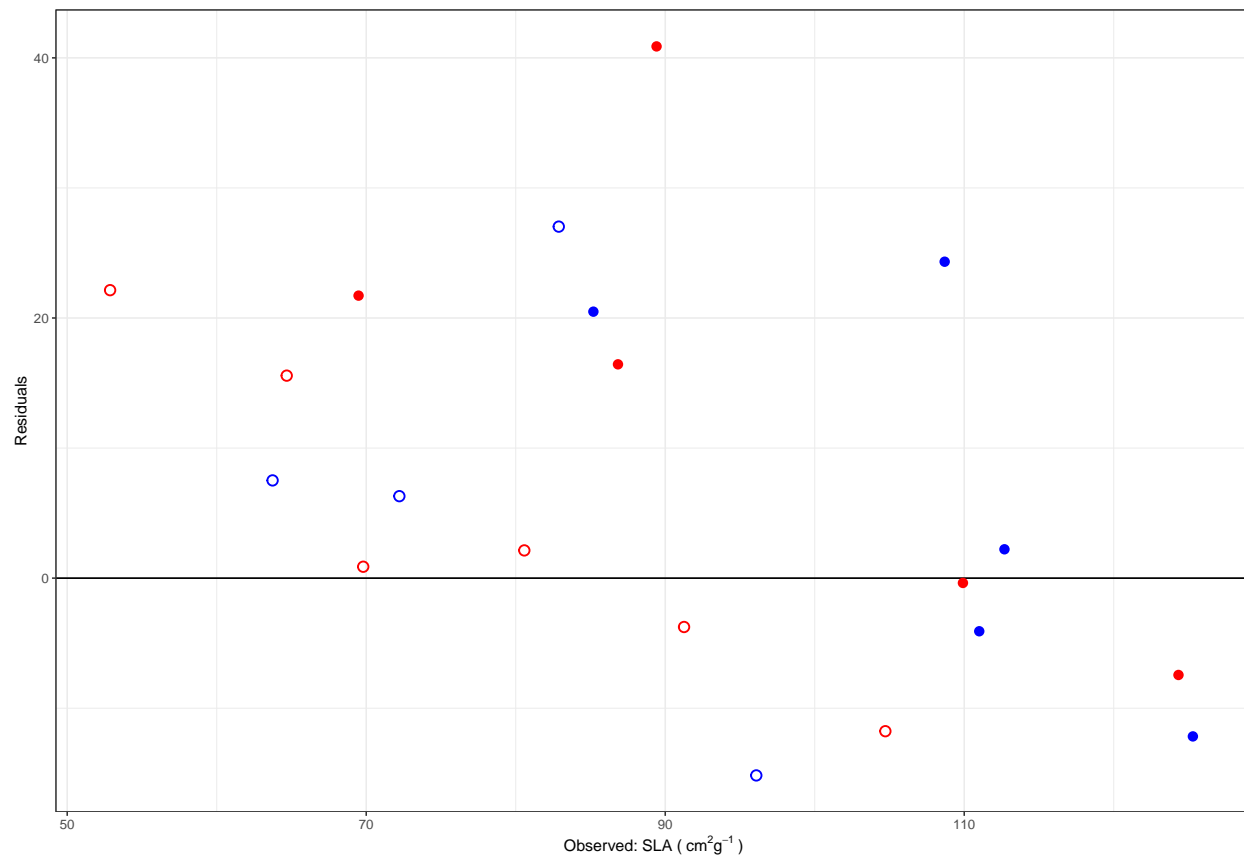
```
## Observed Predicted Residuals Treatment Subpop uci lci upi
## 1 124.33077 116.8854 -7.445335 N1 IND 118.4329 115.2429 148.3897
## 2 125.29474 113.1268 -12.167969 N1 TRJ 115.7858 110.9126 145.8374
## 3 85.19524 105.6828 20.487517 N1 TRJ 108.2598 103.3088 138.2731
## 4 108.69200 133.0200 24.327999 N1 TRJ 136.4129 129.5272 166.5150
## 5 111.00444 106.9211 -4.083295 N1 TRJ 108.6249 104.2687 138.6506
## 6 86.84000 103.2788 16.438751 N1 IND 104.8813 101.5578 134.8425
## lpi
## 1 85.28615
## 2 80.86099
## 3 73.29551
## 4 99.42502
## 5 74.24299
## 6 71.59651
```











```
##      Iteration Intercept X1399.99 X1405.62 X701.35718 X1529.33
## Seg 1          1 -207.0719 65.58439 53.13030 12.966873 97.86532
## Seg 2          2 -239.2001 68.93467 57.52796  8.425787 106.36479
## Seg 3          3 -195.1609 52.76032 48.15298 19.934560 99.17639
## Seg 4          4 -174.2478 86.93351 72.24619 13.126567 97.81586
## Seg 5          5 -202.0936 75.12163 63.76079 11.695921 97.73039
## Seg 6          6 -164.2362 33.40089 30.50183 31.885685 96.68516
```

```
##      coefs
## 1399.99  74.610569
## 1405.62  63.576712
## 701.35718 11.473694
## 1529.33  97.823383
## 1540.56   8.225932
## 700.08782 12.600325
```