Parallel all papers PLS for corn data

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1 A Partial Least Squares-Based Consensus Regression Method for the Analysis of Near-Infrared Complex Spectral Data of Plant Samples

60-20 10

1~mp6 0.159

```
## 0.1323149 0.1537739 0.1752328
```

```
##    user  system elapsed
##   0.004   0.000   8.208
```

1 A Partial Least Squares-Based Consensus Regression Method for the Analysis of Near-Infrared Complex Spectral Data of Plant Samples

60-20 10

2~mp6 0.107

```
## 0.08103781 0.09794708 0.1148564
```

```
##    user  system elapsed
##   0.002   0.001   7.697
```

1 A Partial Least Squares-Based Consensus Regression Method for the Analysis of Near-Infrared Complex Spectral Data of Plant Samples

60-20 10

3~mp6 0.150

```
## 0.125667 0.1434097 0.1611523
```

```
##    user  system elapsed
##   0.003   0.000   8.698
```

1 A Partial Least Squares-Based Consensus Regression Method for the Analysis of Near-Infrared Complex Spectral Data of Plant Samples

60-20 10

4~mp6 0.370

```
## 0.2868808 0.3511157 0.4153506
```

```
##    user  system elapsed
##   0.002   0.000   8.302
```

2 A strategy that iteratively retains informative variables for selecting optimal variable subset in multivariate calibration

64-16 10

1~m5 RMSEC = 0.0149; RMSEP = 0.0201

```
## 0.01972323 0.02083414 0.02194506
## 0.01593558 0.01855212 0.02116865
```

```
##    user  system elapsed
##   0.003   0.000   9.759
```

3 Cross-validation for the selection of spectral variables using the successive projections algorithm

60-20 SavitzkyGolay filler (in)

1~m5 0.040

```
## 0.03537567 0.04127559 0.04717551
```

```
##    user  system elapsed
##   0.003   0.001   6.434
```

3 Cross-validation for the selection of spectral variables using the successive projections algorithm

60-20 SavitzkyGolay filler (in)

2~m5 0.029

```
## 0.03536274 0.04220874 0.04905474
```

```
##    user  system elapsed
##   0.003   0.000   9.512
```

3 Cross-validation for the selection of spectral variables using the successive projections algorithm

60-20 SavitzkyGolay filler (in)

3~m5 0.119

```
## 0.08316763 0.1050105 0.1268535
```

```
##    user  system elapsed
##   0.002   0.000   5.791
```

3 Cross-validation for the selection of spectral variables using the successive projections algorithm

60-20 SavitzkyGolay filler (in)

4~m5 0.196

```
## 0.2029086 0.2454358 0.2879631
```

```
##    user  system elapsed
##   0.003   0.000   5.738
```

4 Reduced PCR/PLSR models by subspace projections

40-40 Scale 4

1~m5 0.36

```
## 0.2607245 0.3516627 0.4426009
```

```
##    user  system elapsed
##   0.002   0.000   7.716
```

4 Reduced PCR/PLSR models by subspace projections

40-40 Scale 4

2~m5 0.97

```
## 0.6307844 0.6980552 0.765326
```

```
##    user  system elapsed
##   0.003   0.000   7.734
```

4 Reduced PCR/PLSR models by subspace projections

40-40 Scale 4

3~m5 0.44

```
## 0.5263017 0.6390286 0.7517555
```

```
##    user  system elapsed
##   0.002   0.001   7.718
```

4 Reduced PCR/PLSR models by subspace projections

40-40 Scale 4

4~m5 0.49

```
## 0.6705351 0.7936221 0.9167091
```

```
##    user  system elapsed
##   0.002   0.001   7.718
```

5 Stability competitive adaptive reweighted sampling (SCARS) and its applications to multivariate calibration of NIR spectra

40-40 Scale 10

1~mp5 0.357

```
## 0.3675207 0.4148987 0.4622767
```

```
##    user  system elapsed
##   0.002   0.000   9.529
```

6 Pretreating near infrared spectra with fractional order Savitzky–Golay differentiation (FOSGD)

64-16 None 10

2~m5 RMSECV=0.0363; RMSECP=0.04

```
## 0.05392444 0.06338411 0.07284378
```

```
##    user  system elapsed
##   0.002   0.000   8.489
```

6 Pretreating near infrared spectra with fractional order Savitzky–Golay differentiation (FOSGD)

64-16 None 10

4~m5 RMSECV=0.24; RMSECP=0.219

```
## 0.2147657 0.2653311 0.3158965
```

```
##    user  system elapsed
##   0.002   0.000   8.636
```

7 A variable elimination method to improve the parsimony of MLR models using the successive projections algorithm

60-20 None (in)

1~m5 0.045(06)

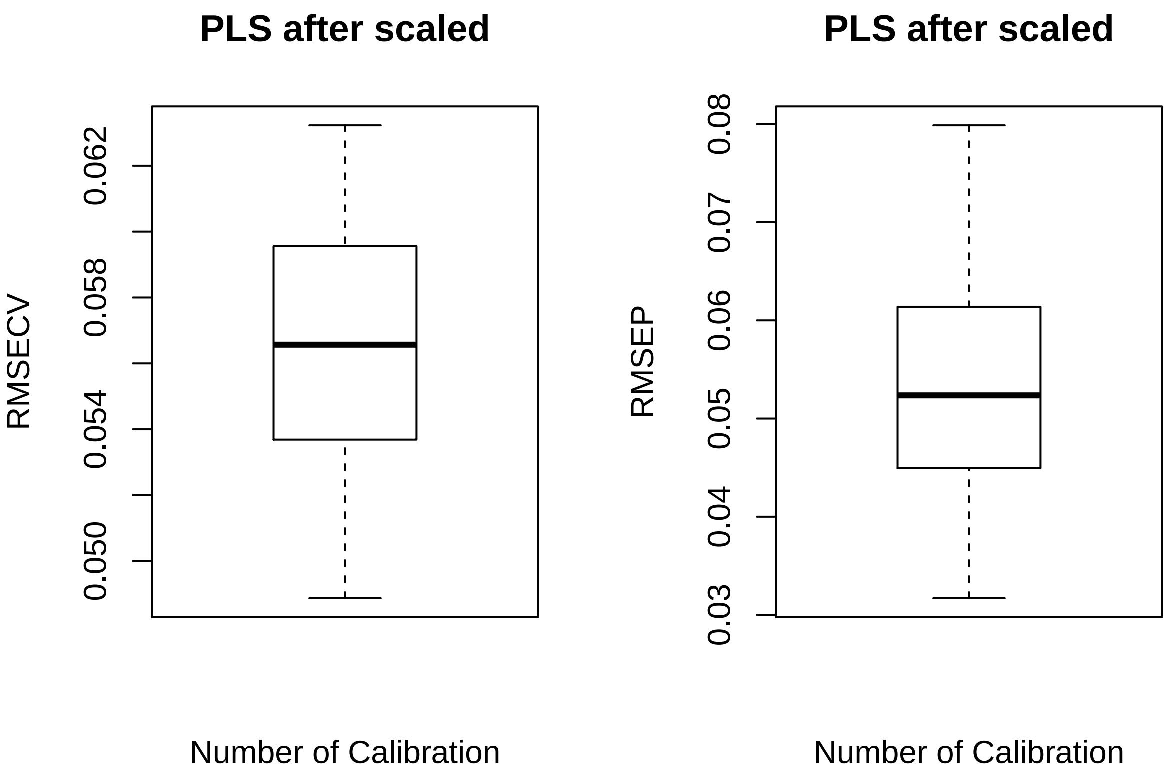
```
## 0.03352668 0.04006216 0.04659764
```

```
##    user  system elapsed
##   0.003   0.000   5.661
```

7 A variable elimination method to improve the parsimony of MLR models using the successive projections algorithm

60-20 None (in)

2~m5 0.028(10)



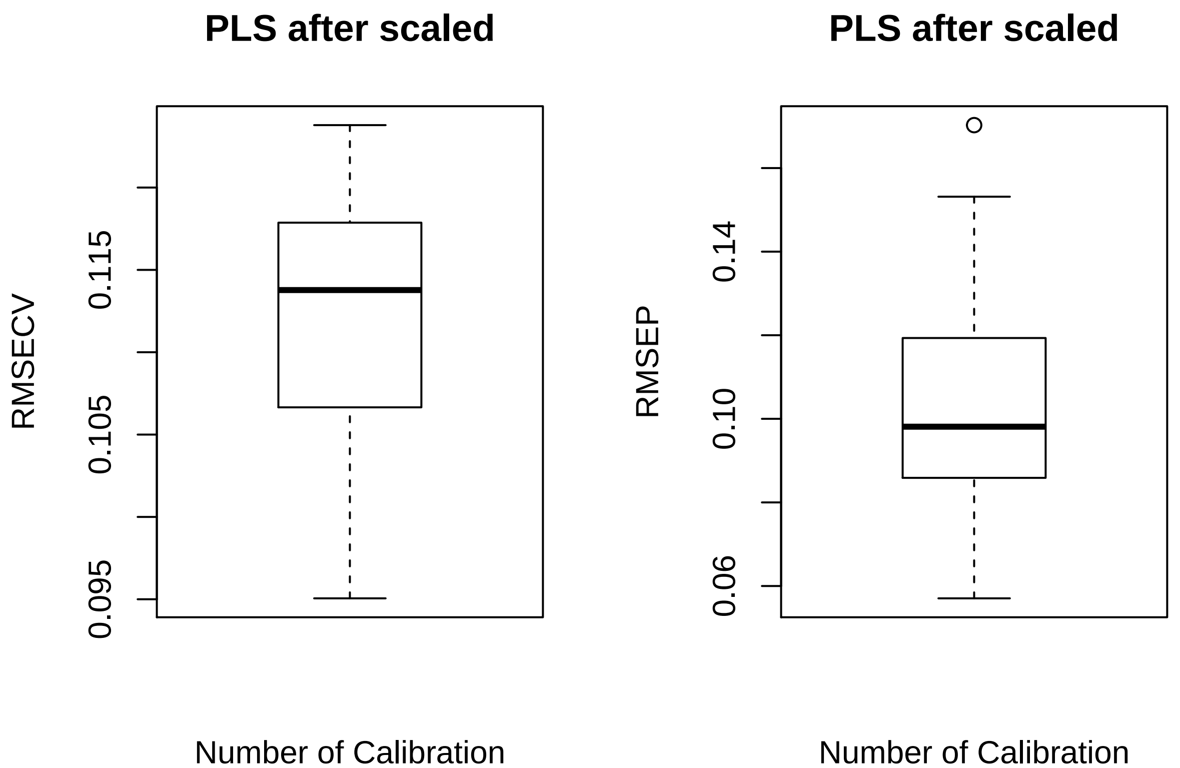

```
## 0.03352668 0.04006216 0.04659764

##    user  system elapsed
##   0.008   0.000   8.171
```

7 A variable elimination method to improve the parsimony of MLR models using the successive projections algorithm

60-20 None (in)

3~m5 0.110(07)



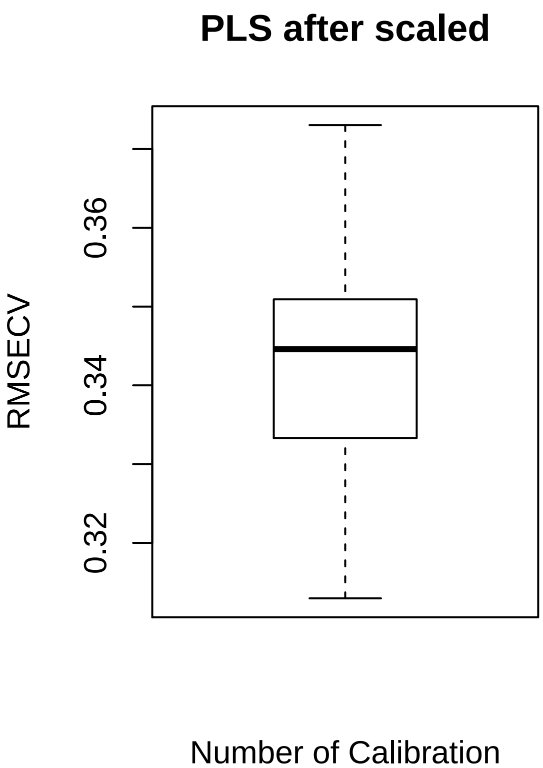

```
## 0.03352668 0.04006216 0.04659764
```

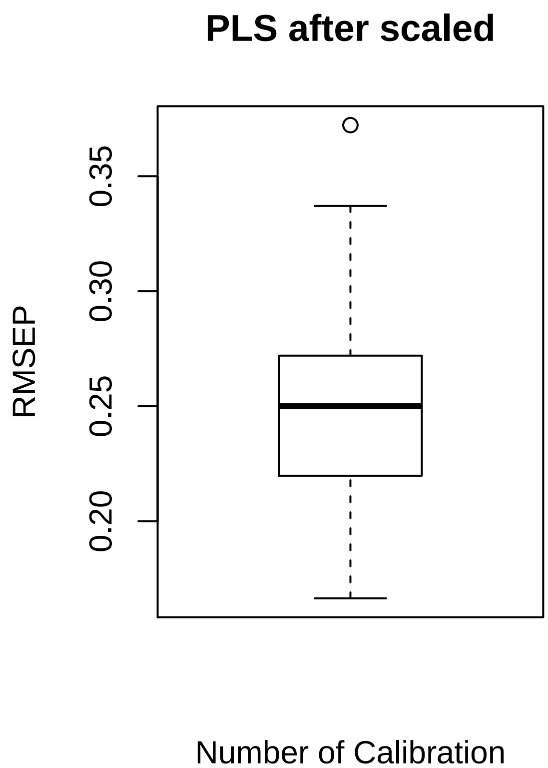
```
##    user  system elapsed
##   0.005   0.000   6.660
```

7 A variable elimination method to improve the parsimony of MLR models using the successive projections algorithm

60-20 None (in)

4~m5 0.228(05)






```
## 0.03352668 0.04006216 0.04659764
```

```
##    user  system elapsed
##   0.005   0.000   5.494
```

8 Using consensus interval partial least square in near infrared spectra analysis

52-26 Delete 75 , 77; 10

1~m5 RMSECV=0.0124; RMSEP=0.0157

```
## 0.0200874 0.02142069 0.02275398
## 0.01678213 0.01947068 0.02215922
```

```
##    user  system elapsed
##   0.003   0.000   6.391
```

8 Using consensus interval partial least square in near infrared spectra analysis

52-26 Delete 75 , 77 10

2~m5 RMSECV=0.0613; RMSEP=0.0673

```
## 0.06526904 0.06992496 0.07458089
## 0.05731671 0.06727828 0.07723985
```

```
##    user  system elapsed
##   0.002   0.001   6.217
```

8 Using consensus interval partial least square in near infrared spectra analysis

52-26 Delete 75 , 77 10

3~m5 RMSECV=0.1080; RMSEP=0.1353

```
## 0.1247879 0.1383133 0.1518387
## 0.105457 0.1255203 0.1455836
```

```
##    user  system elapsed
##   0.002   0.000   6.136
```

8 Using consensus interval partial least square in near infrared spectra analysis

52-26 Delete 75 , 77 10

4~m5 RMSECV=0.2579; RMSEP=0.2356

```
## 0.2545005 0.2833188 0.312137
## 0.2512721 0.2812153 0.3111585
```

```
##    user  system elapsed
##   0.002   0.001   6.098
```