EROD Calibration charts

Alex

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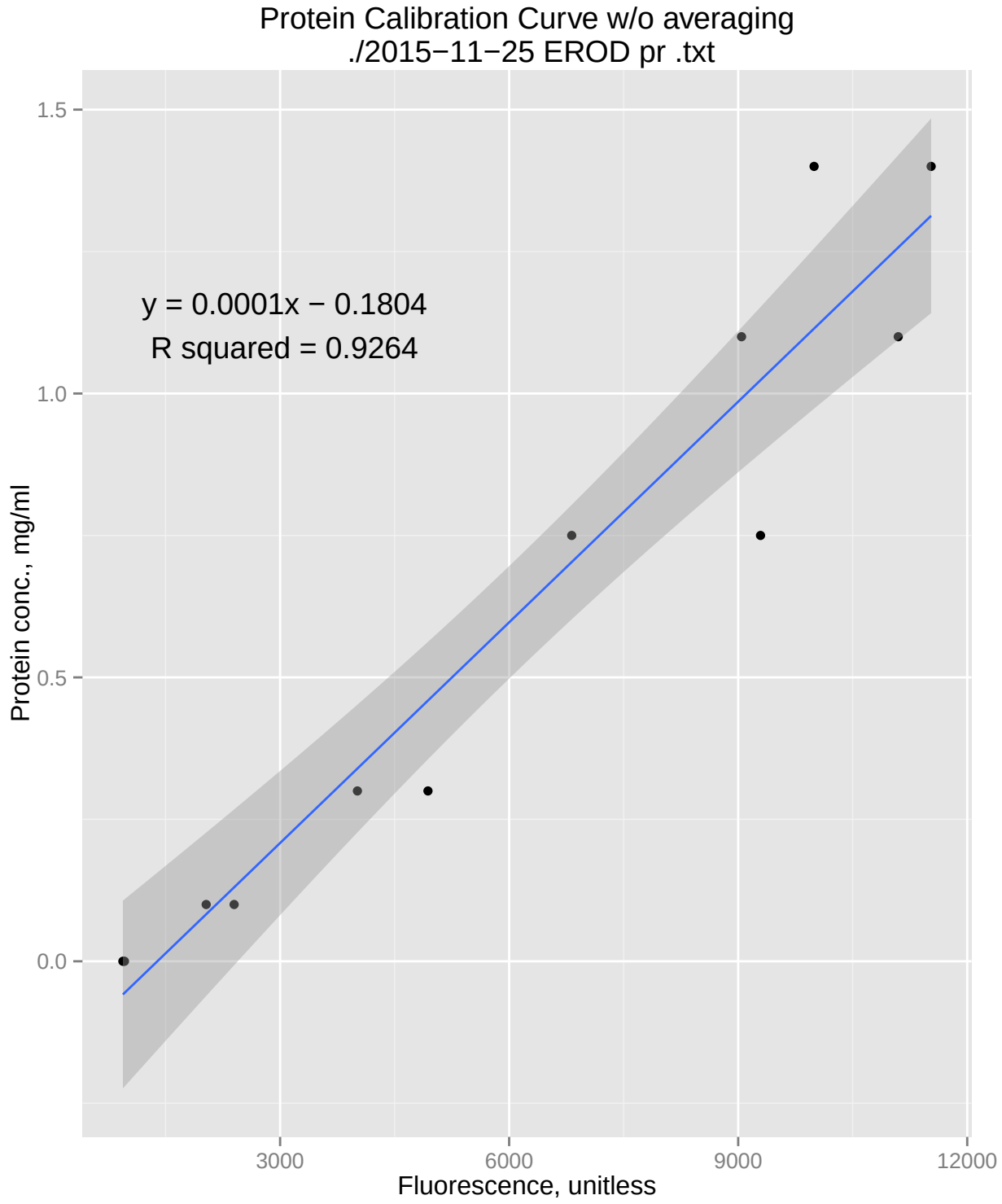
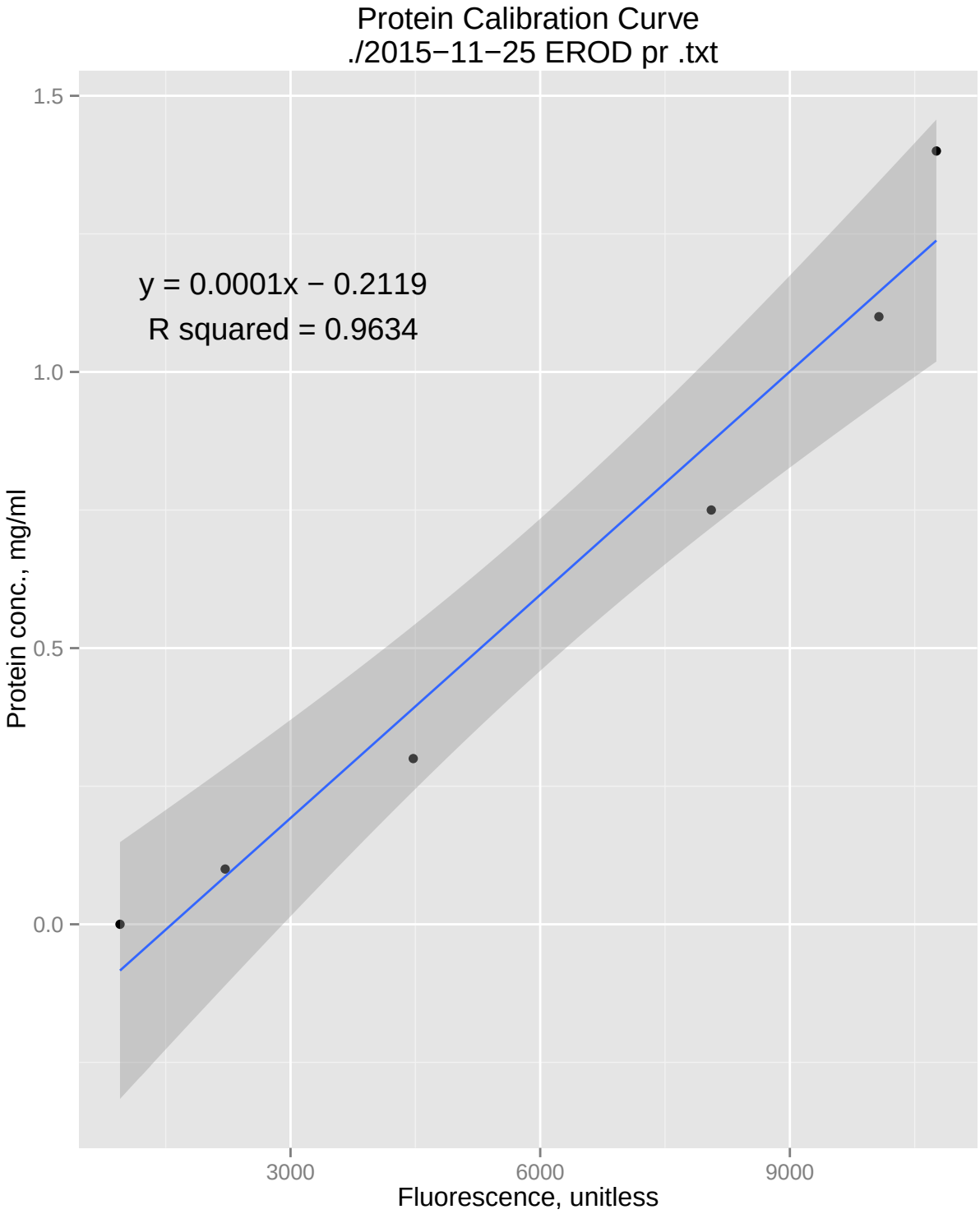
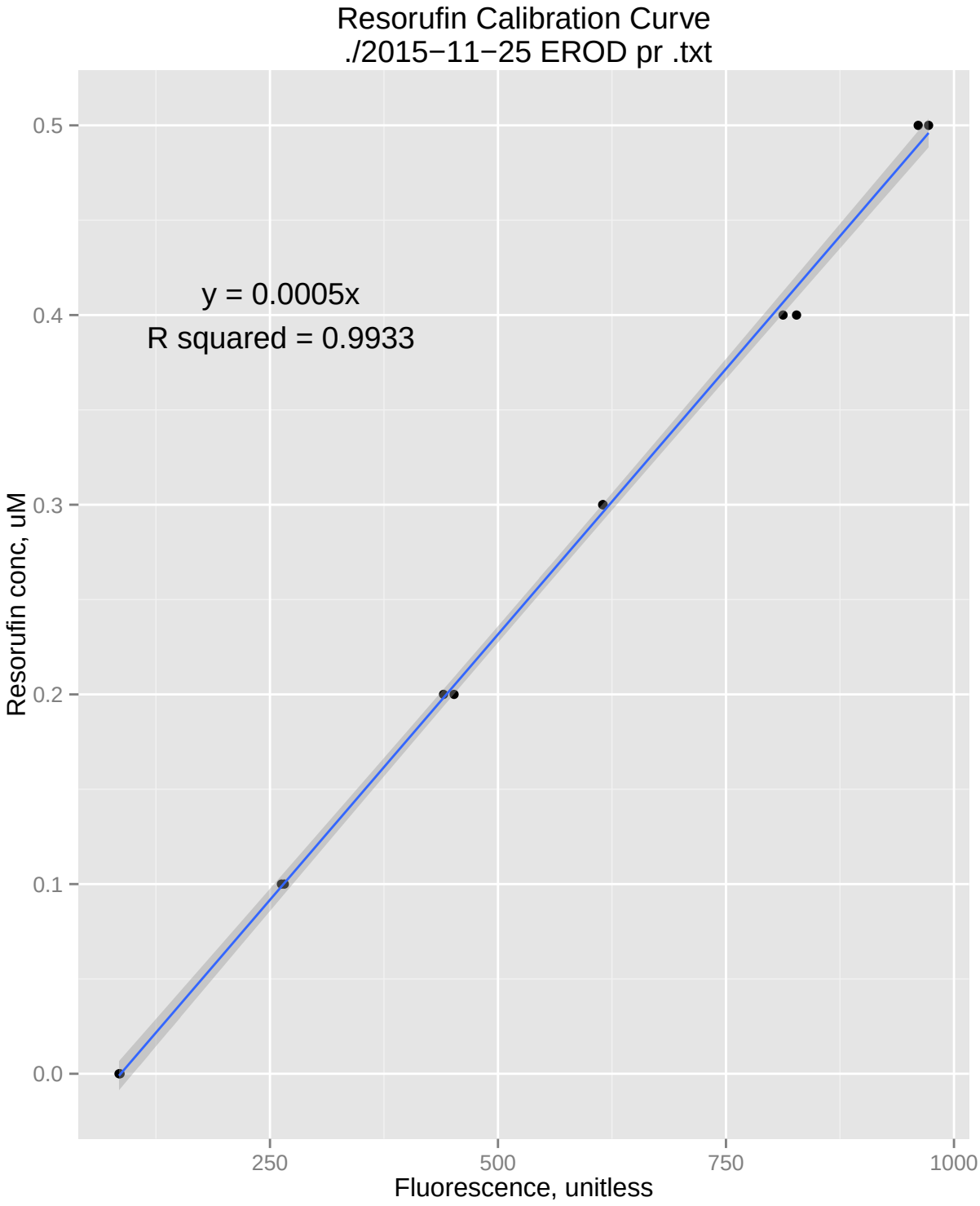
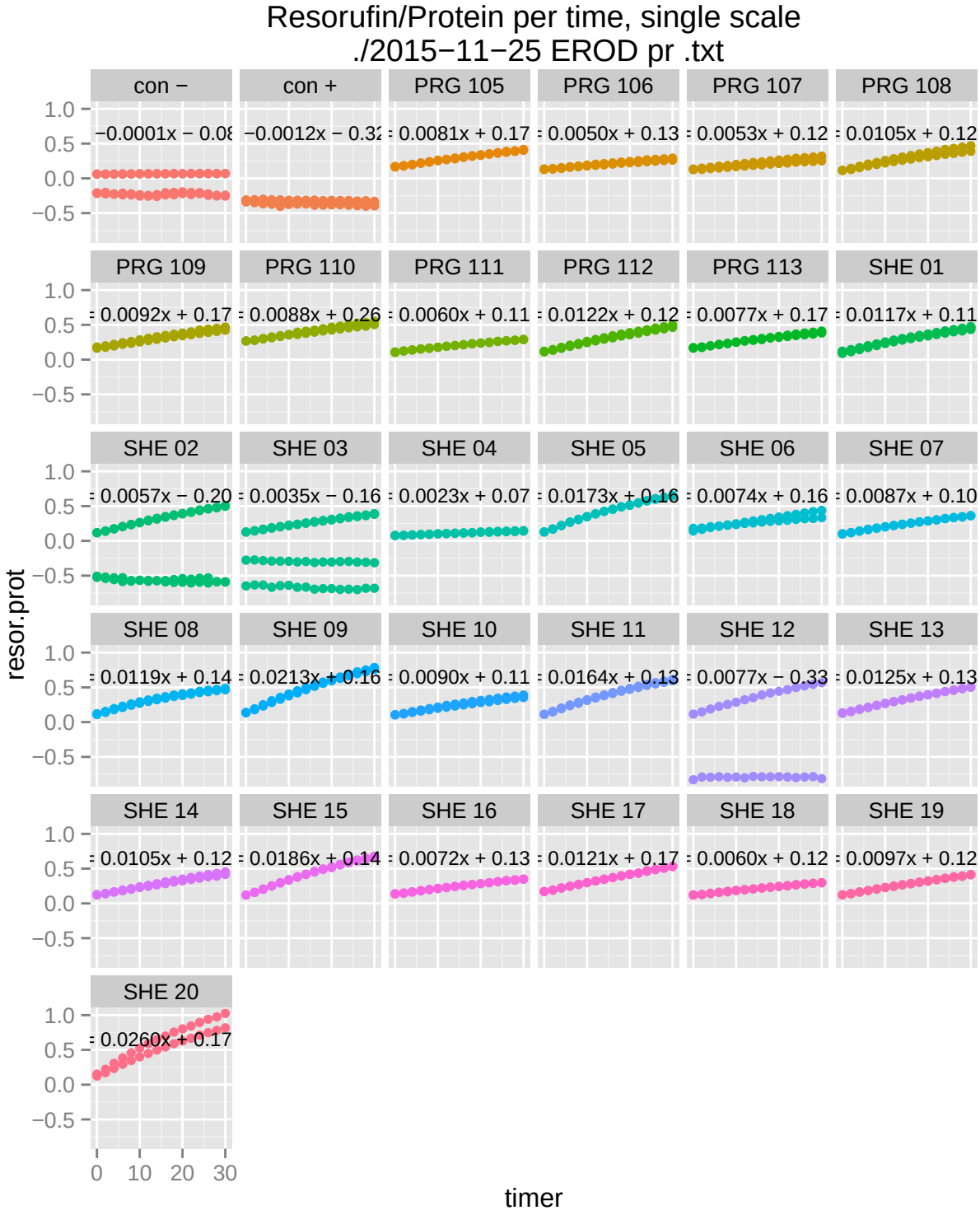
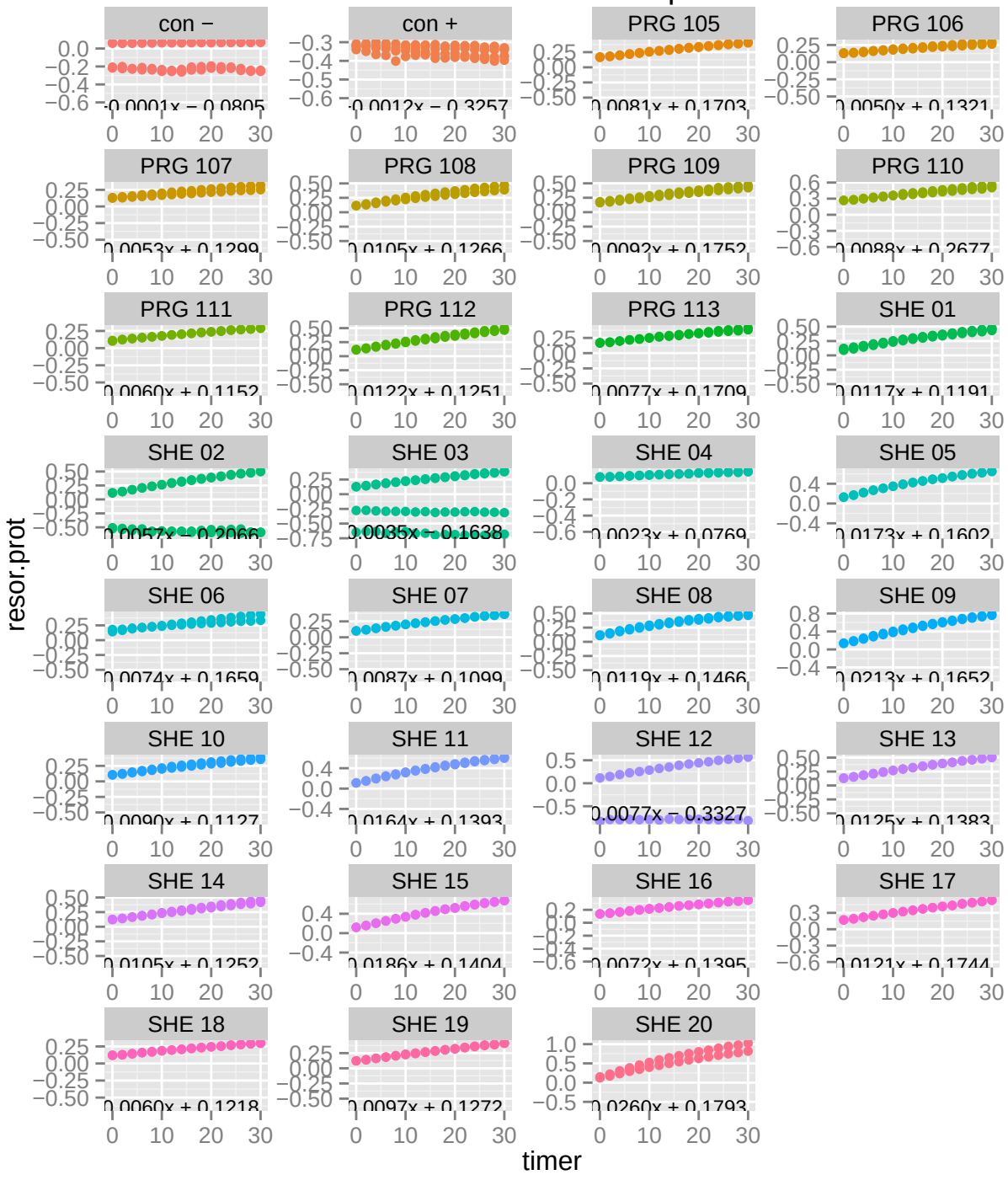
This script prints calibration charts for all text files in its directory.

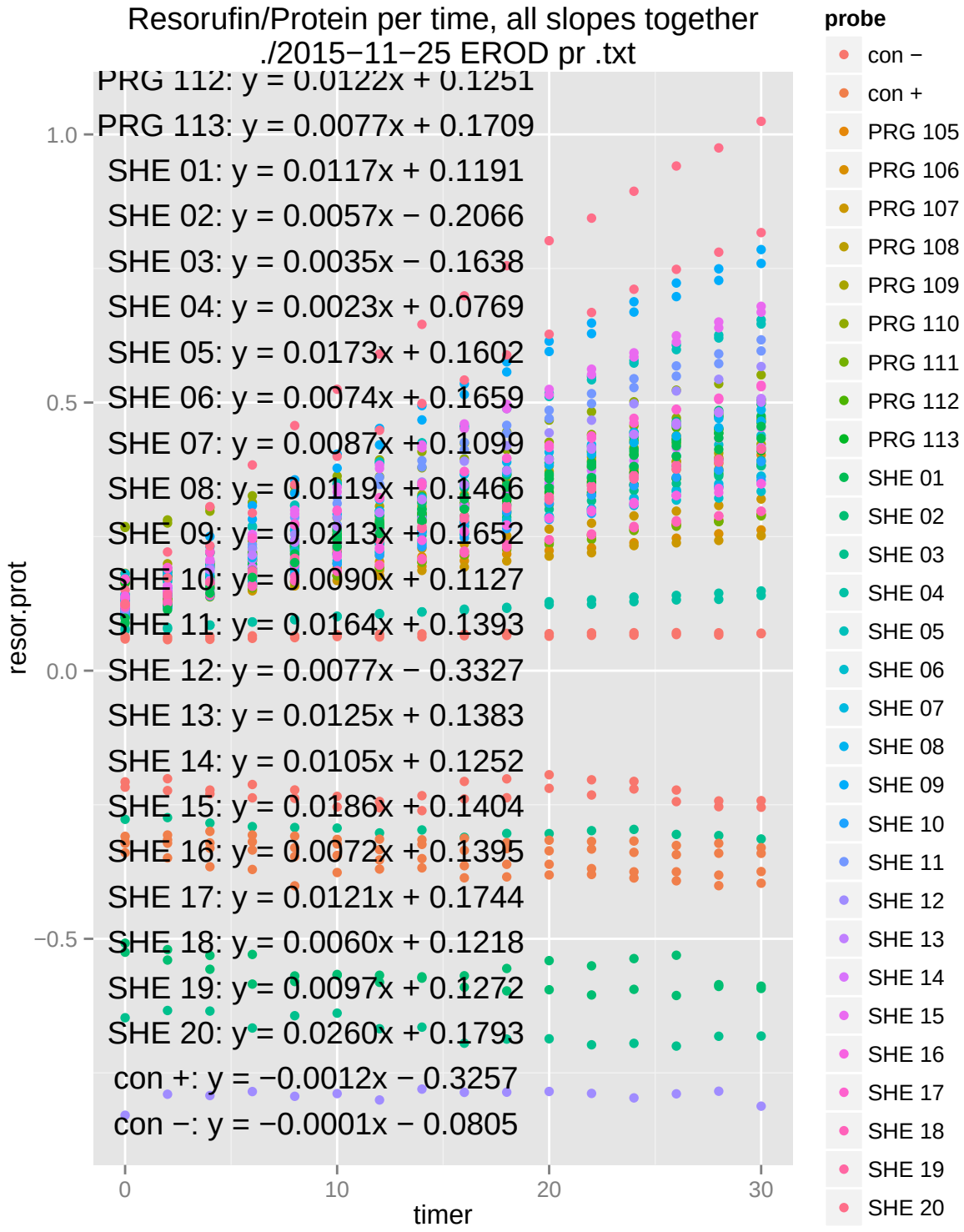

Protein Calibration Curve w/o averaging
./2015−11−25 EROD pr .txt
y = 0.0001x − 0.1804
R squared = 0.9264
Protein conc., mg/ml
1.5
1.0
0.5
0.0
3000
6000
9000
12000
Fluorescence, unitless

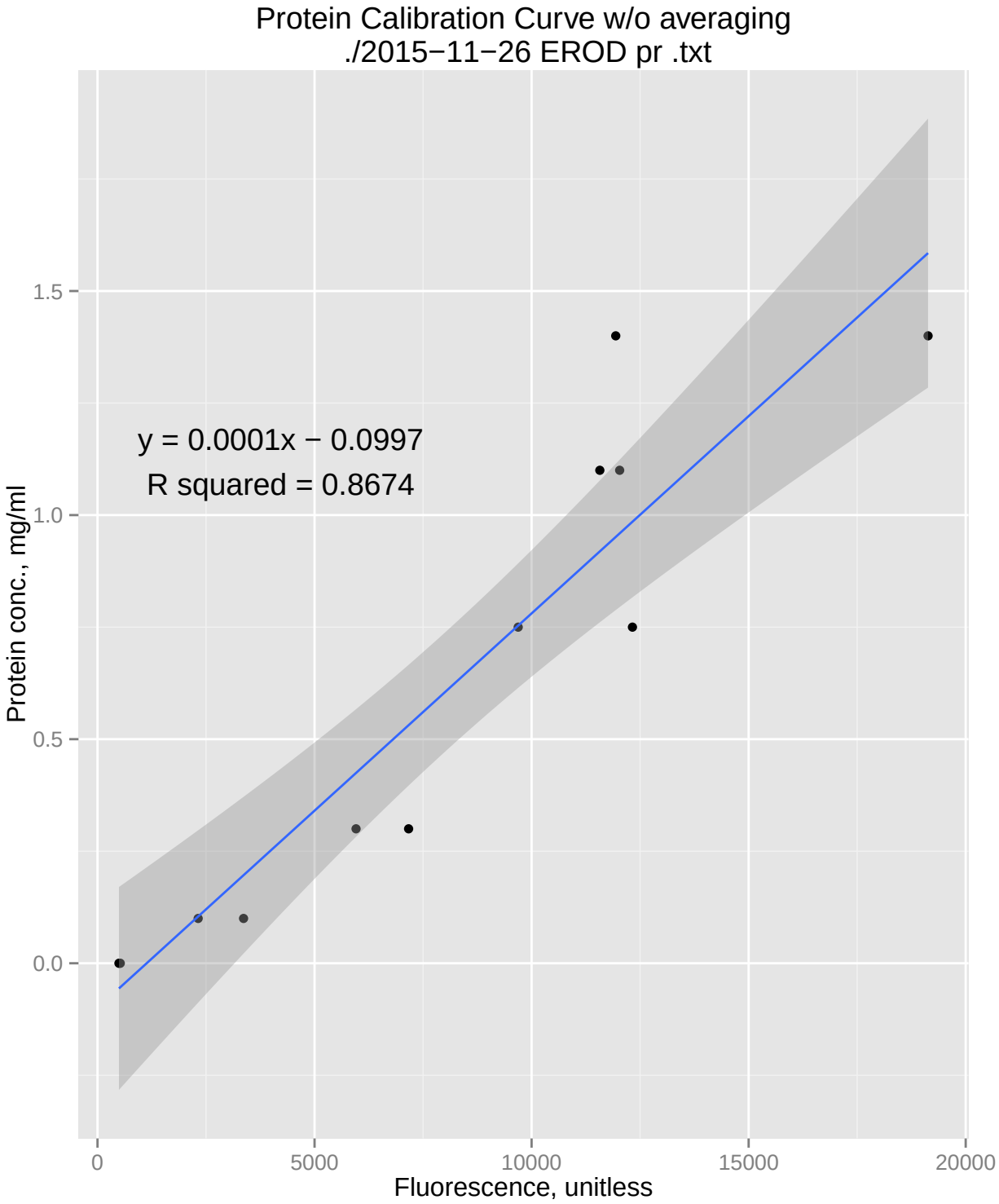

Protein Calibration Curve
./2015−11−25 EROD pr .txt
y = 0.0001x − 0.2119
R squared = 0.9634
Protein conc., mg/ml
Fluorescence, unitless
1.5
1.0
0.5
0.0
3000
6000
9000

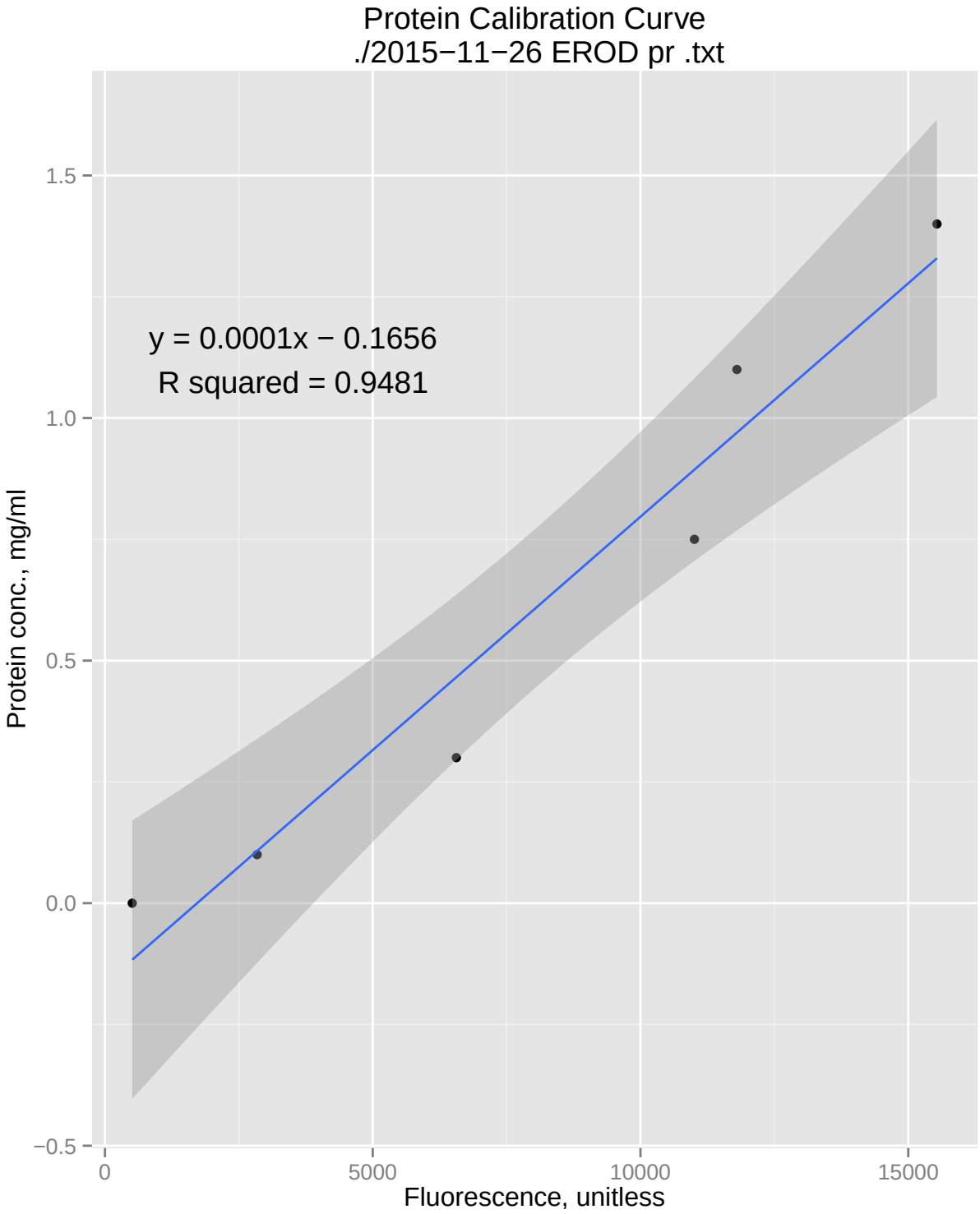

Resorufin Calibration Curve
./2015−11−25 EROD pr .txt
y = 0.0005x
R squared = 0.9933
Resorufin conc, uM
0.0
0.1
0.2
0.3
0.4
0.5
250
500
750
1000
Fluorescence, unitless

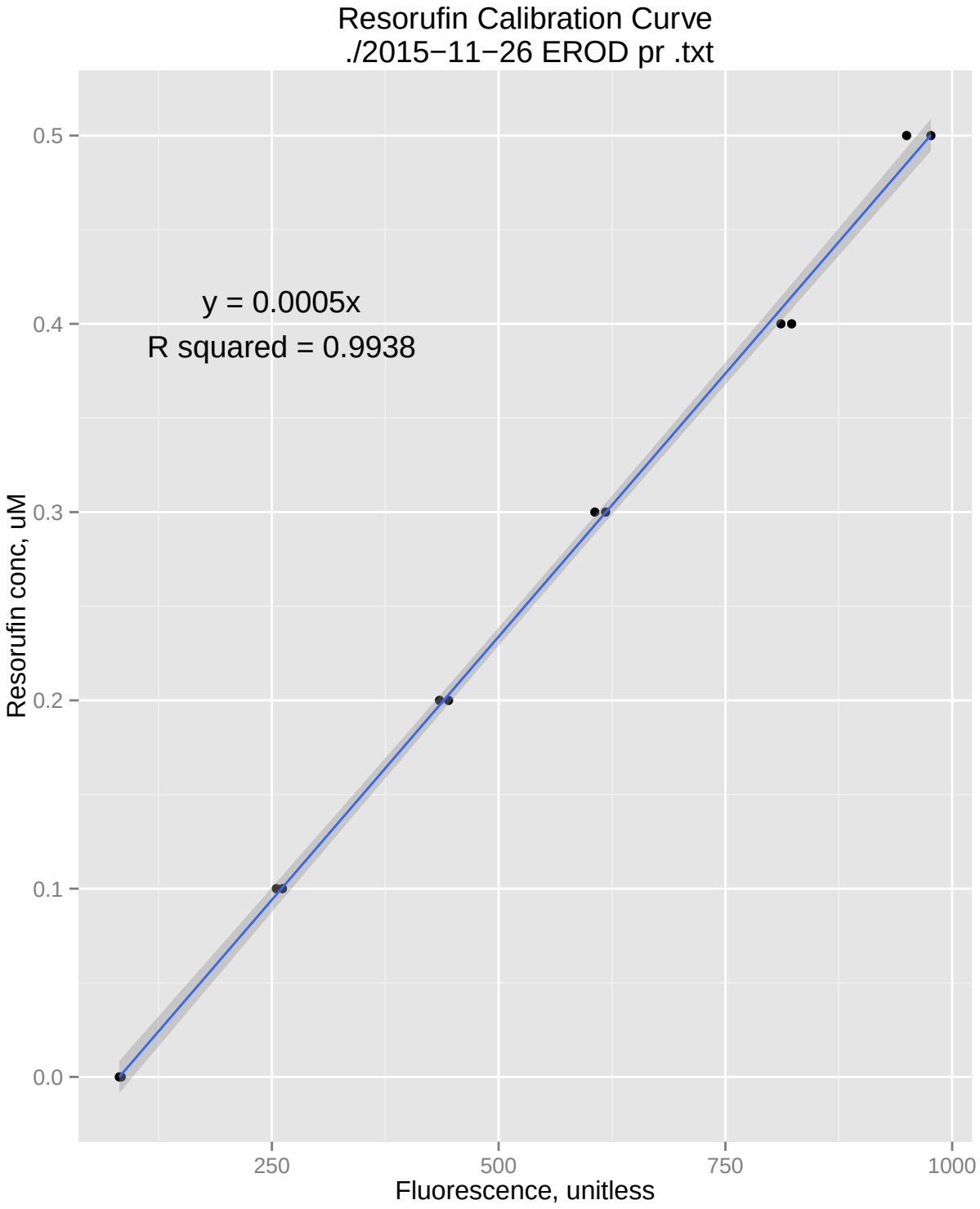

Resorufin/Protein per time, single scale
./2015−11−25 EROD pr .txt
con −
−0.0001x − 0.08
con +
−0.0012x − 0.32
PRG 105
0.0081x + 0.17
PRG 106
0.0050x + 0.13
PRG 107
0.0053x + 0.12
PRG 108
0.0105x + 0.12
PRG 109
0.0092x + 0.17
PRG 110
0.0088x + 0.26
PRG 111
0.0060x + 0.11
PRG 112
0.0122x + 0.12
PRG 113
0.0077x + 0.17
SHE 01
0.0117x + 0.11
SHE 02
0.0057x − 0.20
SHE 03
0.0035x − 0.16
SHE 04
0.0023x + 0.07
SHE 05
0.0173x + 0.16
SHE 06
0.0074x + 0.16
SHE 07
0.0087x + 0.10
SHE 08
0.0119x + 0.14
SHE 09
0.0213x + 0.16
SHE 10
0.0090x + 0.11
SHE 11
0.0164x + 0.13
SHE 12
0.0077x − 0.33
SHE 13
0.0125x + 0.13
SHE 14
0.0105x + 0.12
SHE 15
0.0186x + 0.14
SHE 16
0.0072x + 0.13
SHE 17
0.0121x + 0.17
SHE 18
0.0060x + 0.12
SHE 19
0.0097x + 0.12
SHE 20
0.0260x + 0.17
1.0
0.5
0.0
−0.5
0
10
20
30
resor.prot
timer

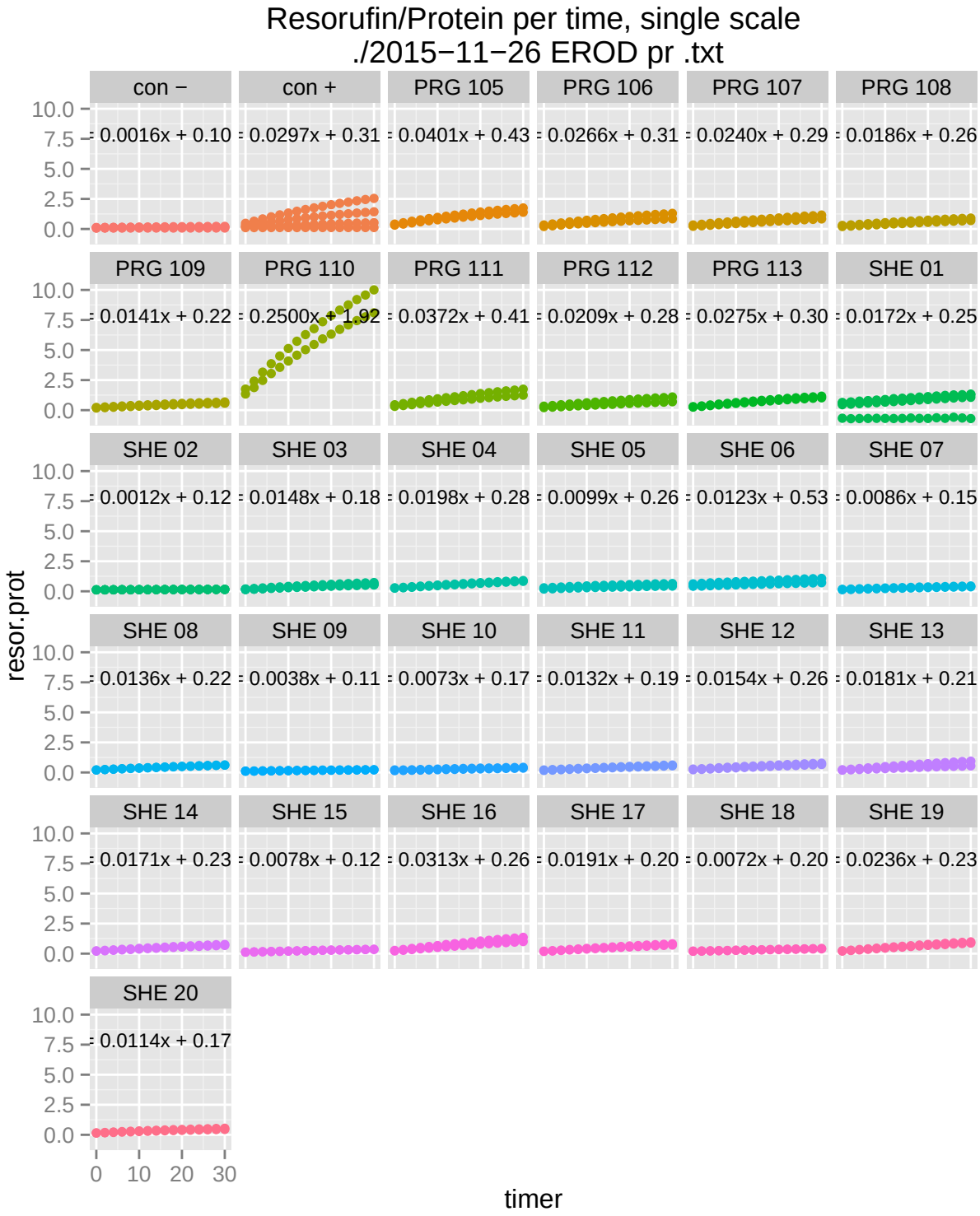

Resorufin/Protein per time, separate scales
./2015−11−25 EROD pr .txt
con −
-0.0001x − 0.0805
con +
-0.0012x − 0.3257
PRG 105
0.0081x + 0.1703
PRG 106
0.0050x + 0.1321
PRG 107
0.0053x + 0.1299
PRG 108
0.0105x + 0.1266
PRG 109
0.0092x + 0.1752
PRG 110
0.0088x + 0.2677
PRG 111
0.0060x + 0.1152
PRG 112
0.0122x + 0.1251
PRG 113
0.0077x + 0.1709
SHE 01
0.0117x + 0.1191
SHE 02
SHE 03
0.0035x − 0.1638
SHE 04
0.0023x + 0.0769
SHE 05
0.0173x + 0.1602
SHE 06
0.0074x + 0.1659
SHE 07
0.0087x + 0.1099
SHE 08
0.0119x + 0.1466
SHE 09
0.0213x + 0.1652
SHE 10
0.0090x + 0.1127
SHE 11
0.0164x + 0.1393
SHE 12
0.0077x − 0.3327
SHE 13
0.0125x + 0.1383
SHE 14
0.0105x + 0.1252
SHE 15
0.0186x + 0.1404
SHE 16
0.0072x + 0.1395
SHE 17
0.0121x + 0.1744
SHE 18
0.0060x + 0.1218
SHE 19
0.0097x + 0.1272
SHE 20
0.0260x + 0.1793
resor.prot
timer

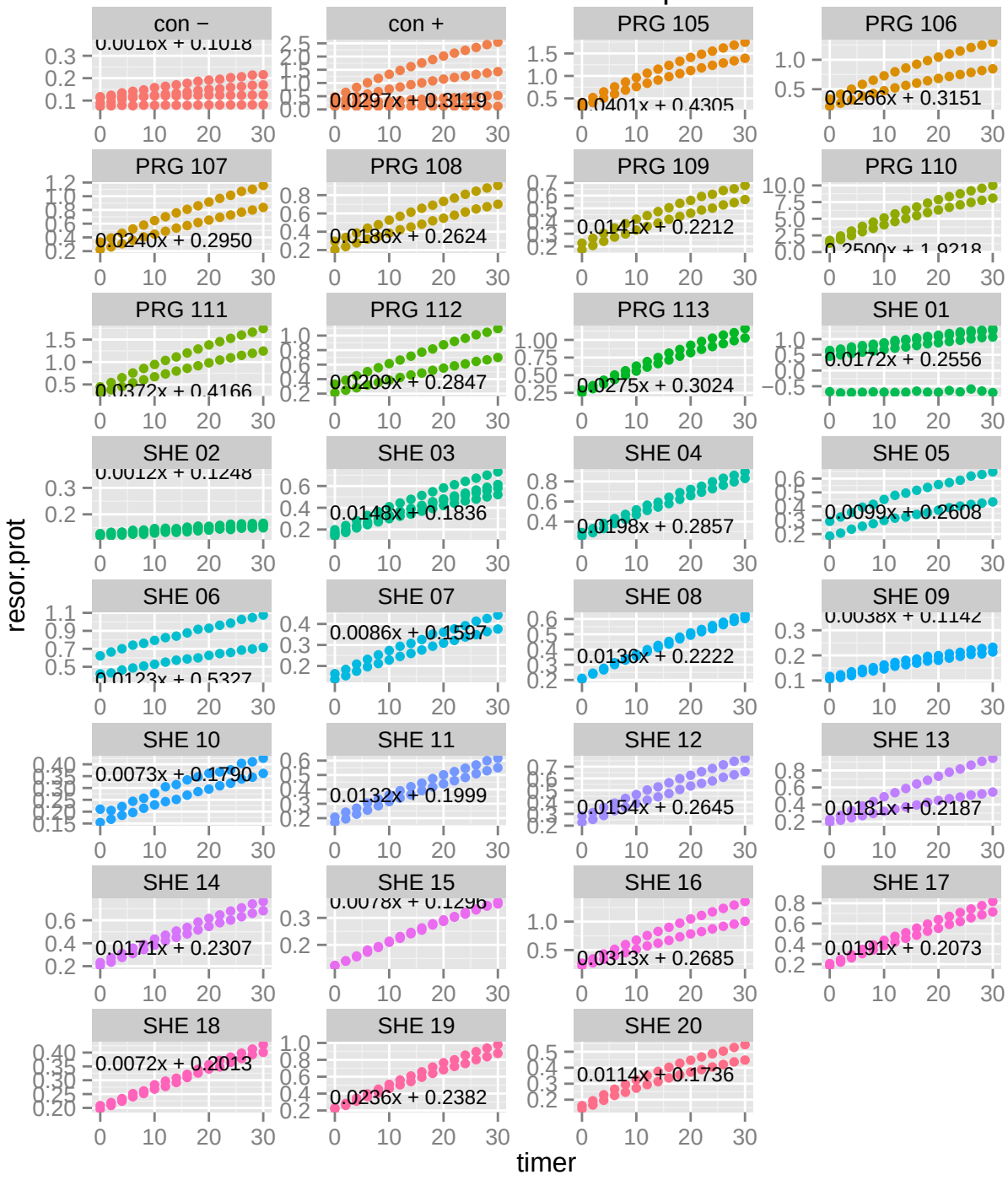

Resorufin/Protein per time, all slopes together
./2015−11−25 EROD pr .txt
PRG 112: y = 0.0122x + 0.1251
PRG 113: y = 0.0077x + 0.1709
SHE 01: y = 0.0117x + 0.1191
SHE 02: y = 0.0057x − 0.2066
SHE 03: y = 0.0035x − 0.1638
SHE 04: y = 0.0023x + 0.0769
SHE 05: y = 0.0173x + 0.1602
SHE 06: y = 0.0074x + 0.1659
SHE 07: y = 0.0087x + 0.1099
SHE 08: y = 0.0119x + 0.1466
SHE 09: y = 0.0213x + 0.1652
SHE 10: y = 0.0090x + 0.1127
SHE 11: y = 0.0164x + 0.1393
SHE 12: y = 0.0077x − 0.3327
SHE 13: y = 0.0125x + 0.1383
SHE 14: y = 0.0105x + 0.1252
SHE 15: y = 0.0186x + 0.1404
SHE 16: y = 0.0072x + 0.1395
SHE 17: y = 0.0121x + 0.1744
SHE 18: y = 0.0060x + 0.1218
SHE 19: y = 0.0097x + 0.1272
SHE 20: y = 0.0260x + 0.1793
con +: y = −0.0012x − 0.3257
con −: y = −0.0001x − 0.0805
1.0
0.5
0.0
−0.5
resor.prot
0
10
20
30
timer
probe
con −
con +
PRG 105
PRG 106
PRG 107
PRG 108
PRG 109
PRG 110
PRG 111
PRG 112
PRG 113
SHE 01
SHE 02
SHE 03
SHE 04
SHE 05
SHE 06
SHE 07
SHE 08
SHE 09
SHE 10
SHE 11
SHE 12
SHE 13
SHE 14
SHE 15
SHE 16
SHE 17
SHE 18
SHE 19
SHE 20

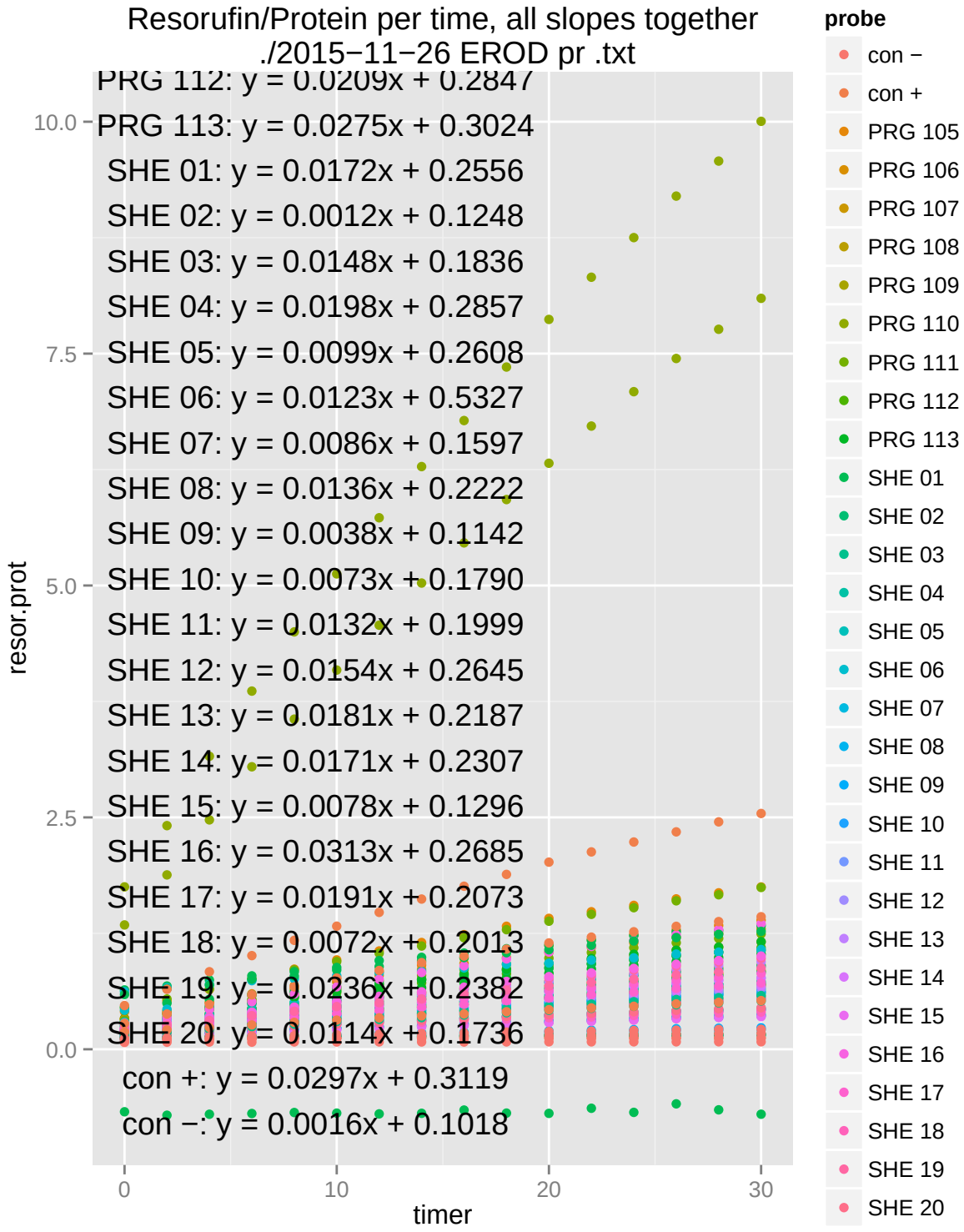

Protein Calibration Curve w/o averaging
./2015−11−26 EROD pr .txt
y = 0.0001x − 0.0997
R squared = 0.8674
Protein conc., mg/ml
Fluorescence, unitless
0.0
0.5
1.0
1.5
0
5000
10000
15000
20000


Protein Calibration Curve
./2015−11−26 EROD pr .txt
y = 0.0001x − 0.1656
R squared = 0.9481
Protein conc., mg/ml
Fluorescence, unitless
1.5
1.0
0.5
0.0
−0.5
0
5000
10000
15000


Resorufin Calibration Curve
./2015−11−26 EROD pr .txt
y = 0.0005x
R squared = 0.9938
Resorufin conc, uM
0.0
0.1
0.2
0.3
0.4
0.5
250
500
750
1000
Fluorescence, unitless


Resorufin/Protein per time, single scale
./2015−11−26 EROD pr .txt
con −
y = 0.0016x + 0.10
con +
y = 0.0297x + 0.31
PRG 105
y = 0.0401x + 0.43
PRG 106
y = 0.0266x + 0.31
PRG 107
y = 0.0240x + 0.29
PRG 108
y = 0.0186x + 0.26
PRG 109
y = 0.0141x + 0.22
PRG 110
y = 0.2500x + 1.92
PRG 111
y = 0.0372x + 0.41
PRG 112
y = 0.0209x + 0.28
PRG 113
y = 0.0275x + 0.30
SHE 01
y = 0.0172x + 0.25
SHE 02
y = 0.0012x + 0.12
SHE 03
y = 0.0148x + 0.18
SHE 04
y = 0.0198x + 0.28
SHE 05
y = 0.0099x + 0.26
SHE 06
y = 0.0123x + 0.53
SHE 07
y = 0.0086x + 0.15
SHE 08
y = 0.0136x + 0.22
SHE 09
y = 0.0038x + 0.11
SHE 10
y = 0.0073x + 0.17
SHE 11
y = 0.0132x + 0.19
SHE 12
y = 0.0154x + 0.26
SHE 13
y = 0.0181x + 0.21
SHE 14
y = 0.0171x + 0.23
SHE 15
y = 0.0078x + 0.12
SHE 16
y = 0.0313x + 0.26
SHE 17
y = 0.0191x + 0.20
SHE 18
y = 0.0072x + 0.20
SHE 19
y = 0.0236x + 0.23
SHE 20
y = 0.0114x + 0.17
resor.prot
10.0
7.5
5.0
2.5
0.0
0
10
20
30
timer


Resorufin/Protein per time, separate scales
./2015−11−26 EROD pr .txt
con −
0.0016x + 0.1018
con +
0.0297x + 0.3119
PRG 105
0.0401x + 0.4305
PRG 106
0.0266x + 0.3151
PRG 107
0.0240x + 0.2950
PRG 108
0.0186x + 0.2624
PRG 109
0.0141x + 0.2212
PRG 110
PRG 111
0.0372x + 0.4166
PRG 112
0.0209x + 0.2847
PRG 113
0.0275x + 0.3024
SHE 01
0.0172x + 0.2556
SHE 02
0.0012x + 0.1248
SHE 03
0.0148x + 0.1836
SHE 04
0.0198x + 0.2857
SHE 05
0.0099x + 0.2608
SHE 06
0.0123x + 0.5327
SHE 07
0.0086x + 0.1597
SHE 08
0.0136x + 0.2222
SHE 09
0.0038x + 0.1142
SHE 10
0.0073x + 0.1790
SHE 11
0.0132x + 0.1999
SHE 12
0.0154x + 0.2645
SHE 13
0.0181x + 0.2187
SHE 14
0.0171x + 0.2307
SHE 15
0.0078x + 0.1296
SHE 16
0.0313x + 0.2685
SHE 17
0.0191x + 0.2073
SHE 18
0.0072x + 0.2013
SHE 19
0.0236x + 0.2382
SHE 20
0.0114x + 0.1736
resor.prot
timer


Resorufin/Protein per time, all slopes together
./2015−11−26 EROD pr .txt
PRG 112: y = 0.0209x + 0.2847
PRG 113: y = 0.0275x + 0.3024
SHE 01: y = 0.0172x + 0.2556
SHE 02: y = 0.0012x + 0.1248
SHE 03: y = 0.0148x + 0.1836
SHE 04: y = 0.0198x + 0.2857
SHE 05: y = 0.0099x + 0.2608
SHE 06: y = 0.0123x + 0.5327
SHE 07: y = 0.0086x + 0.1597
SHE 08: y = 0.0136x + 0.2222
SHE 09: y = 0.0038x + 0.1142
SHE 10: y = 0.0073x + 0.1790
SHE 11: y = 0.0132x + 0.1999
SHE 12: y = 0.0154x + 0.2645
SHE 13: y = 0.0181x + 0.2187
SHE 14: y = 0.0171x + 0.2307
SHE 15: y = 0.0078x + 0.1296
SHE 16: y = 0.0313x + 0.2685
SHE 17: y = 0.0191x + 0.2073
SHE 18: y = 0.0072x + 0.2013
SHE 19: y = 0.0236x + 0.2382
SHE 20: y = 0.0114x + 0.1736
con +: y = 0.0297x + 0.3119
con −: y = 0.0016x + 0.1018
10.0
7.5
5.0
2.5
0.0
resor.prot
0
10
20
30
timer
probe
con −
con +
PRG 105
PRG 106
PRG 107
PRG 108
PRG 109
PRG 110
PRG 111
PRG 112
PRG 113
SHE 01
SHE 02
SHE 03
SHE 04
SHE 05
SHE 06
SHE 07
SHE 08
SHE 09
SHE 10
SHE 11
SHE 12
SHE 13
SHE 14
SHE 15
SHE 16
SHE 17
SHE 18
SHE 19
SHE 20