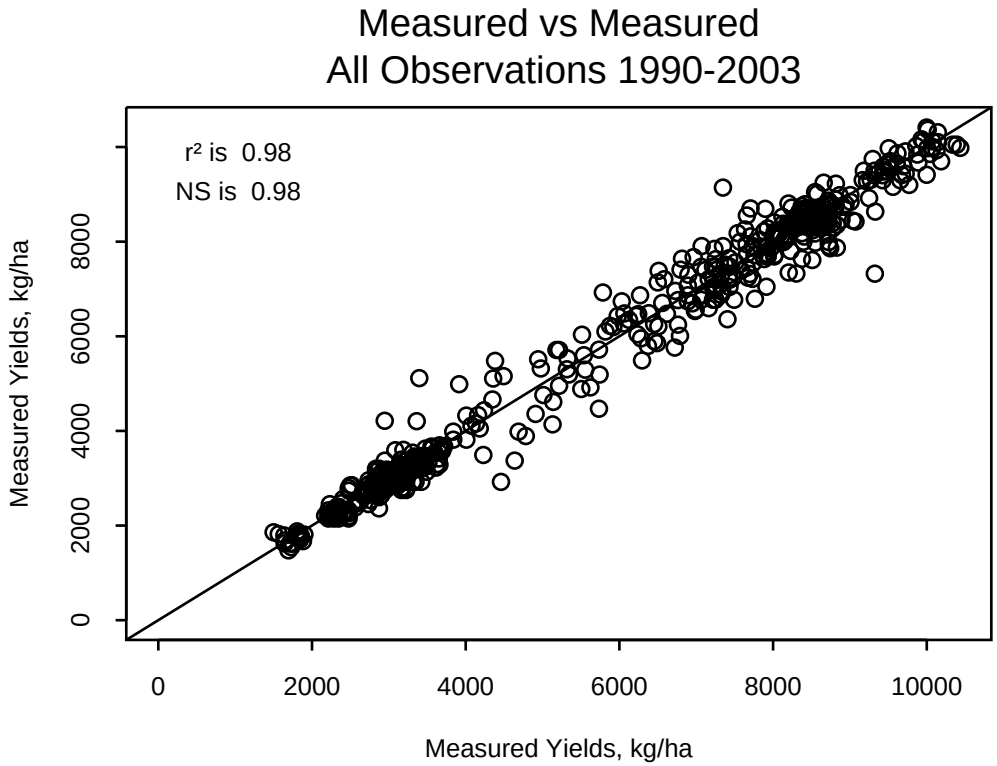
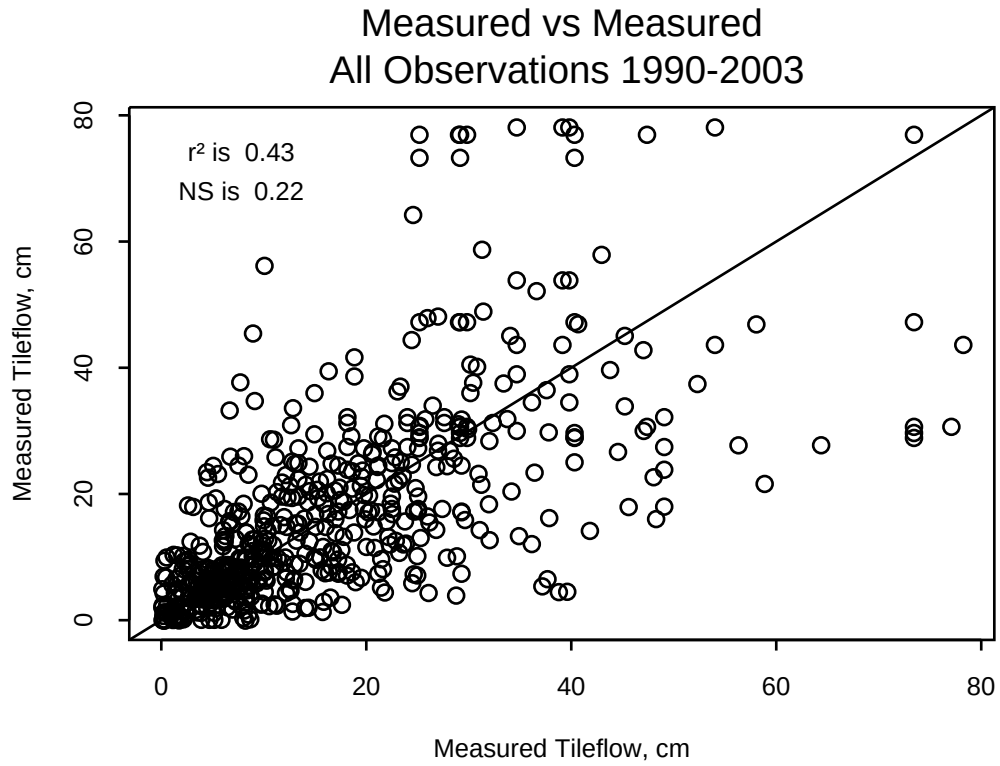
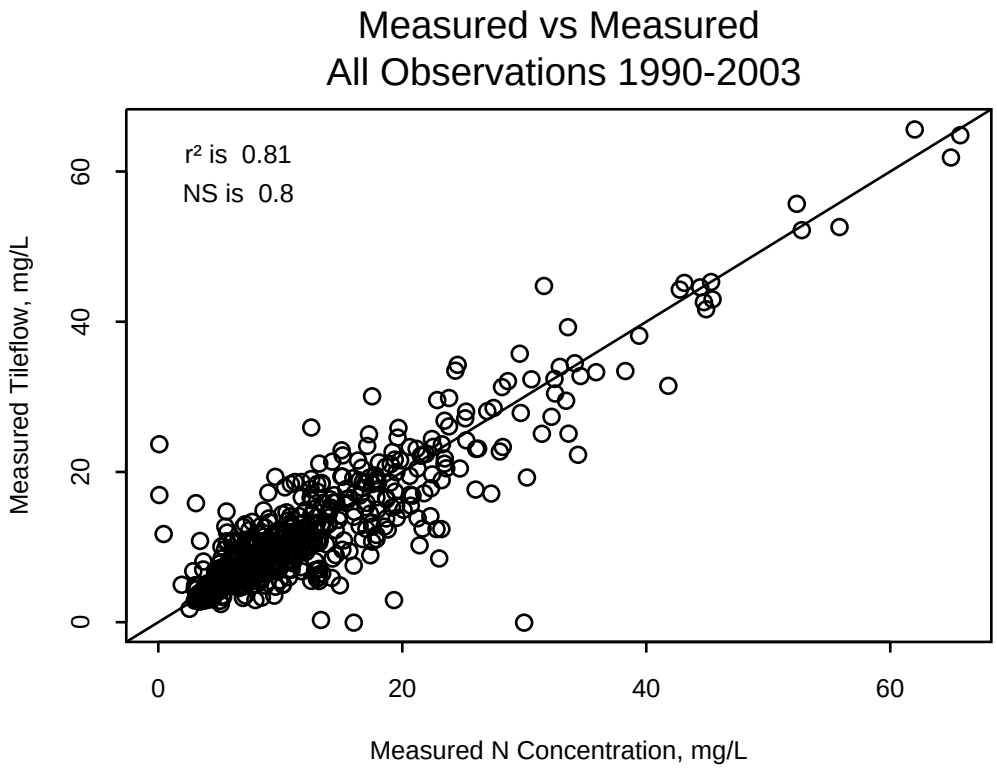
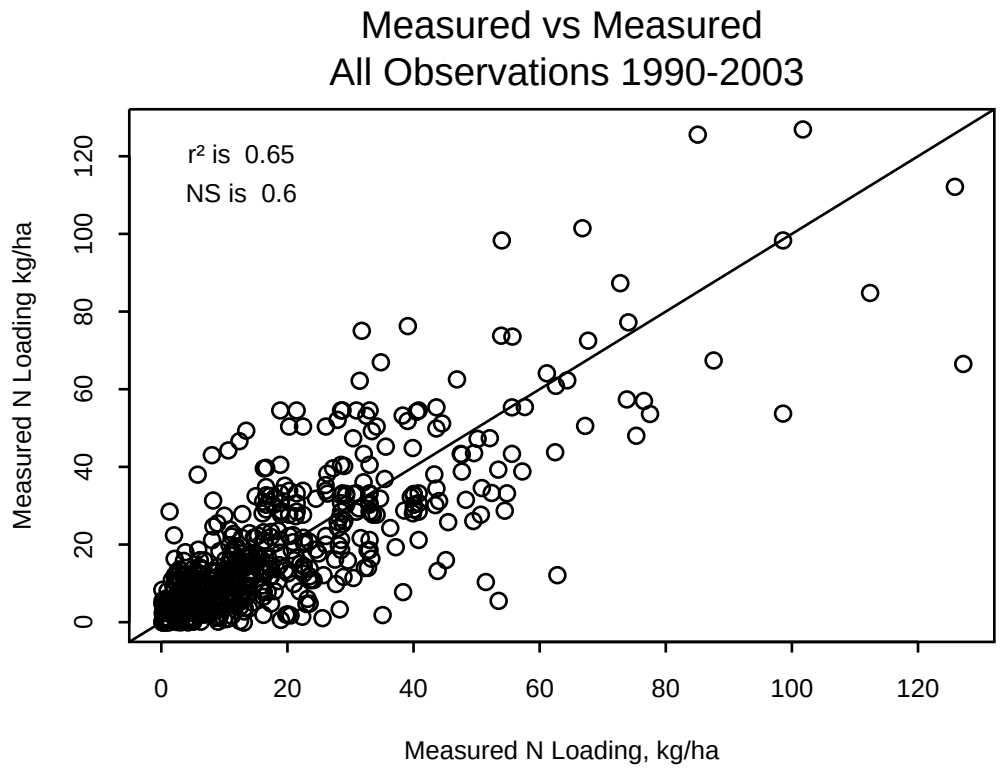
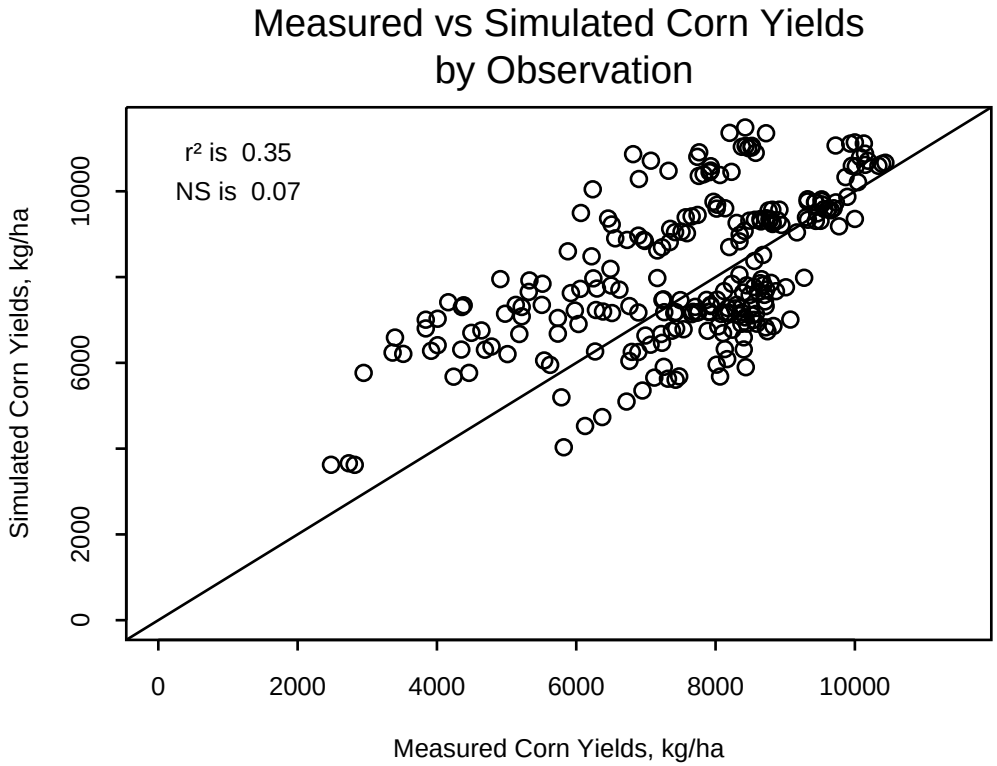
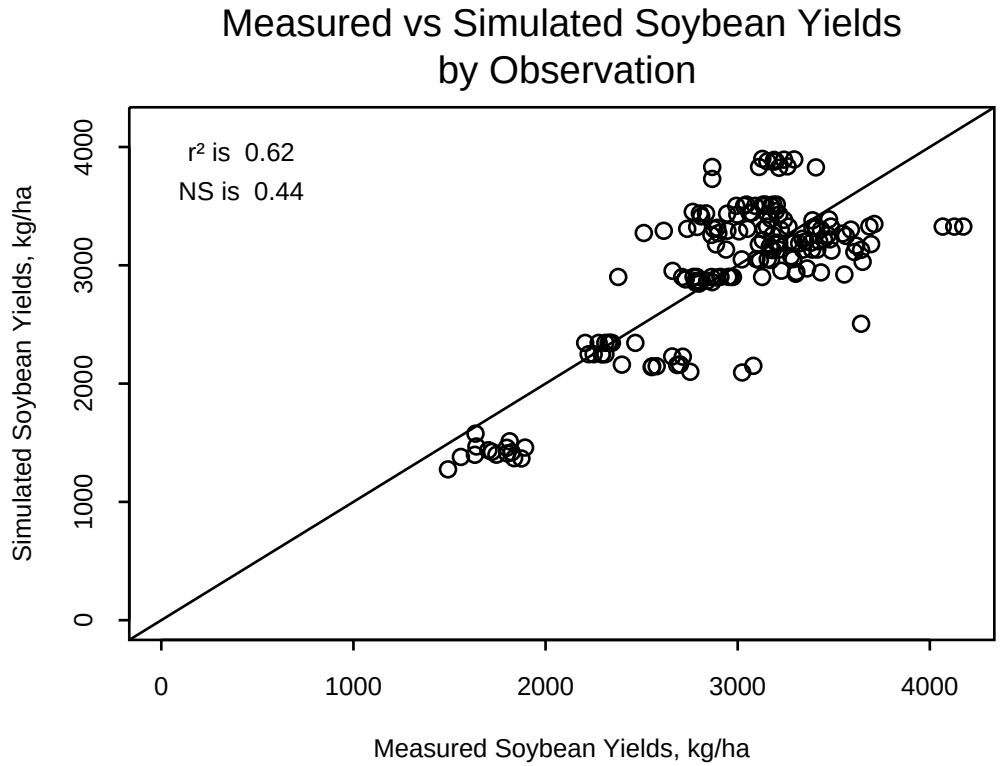

Measured vs Measured
All Observations 1990-2003
r² is 0.98
NS is 0.98
Measured Yields, kg/ha
Measured Yields, kg/ha
0
2000
4000
6000
8000
10000

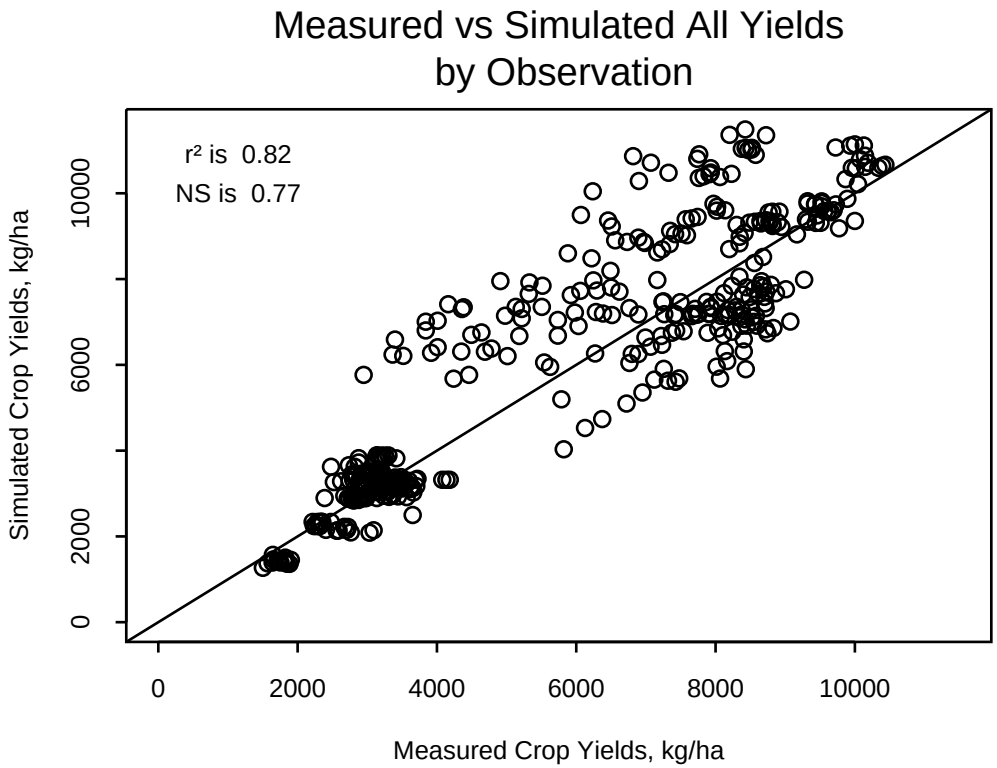

Measured vs Measured
All Observations 1990-2003
r² is 0.43
NS is 0.22
Measured Tileflow, cm
Measured Tileflow, cm
0
20
40
60
80

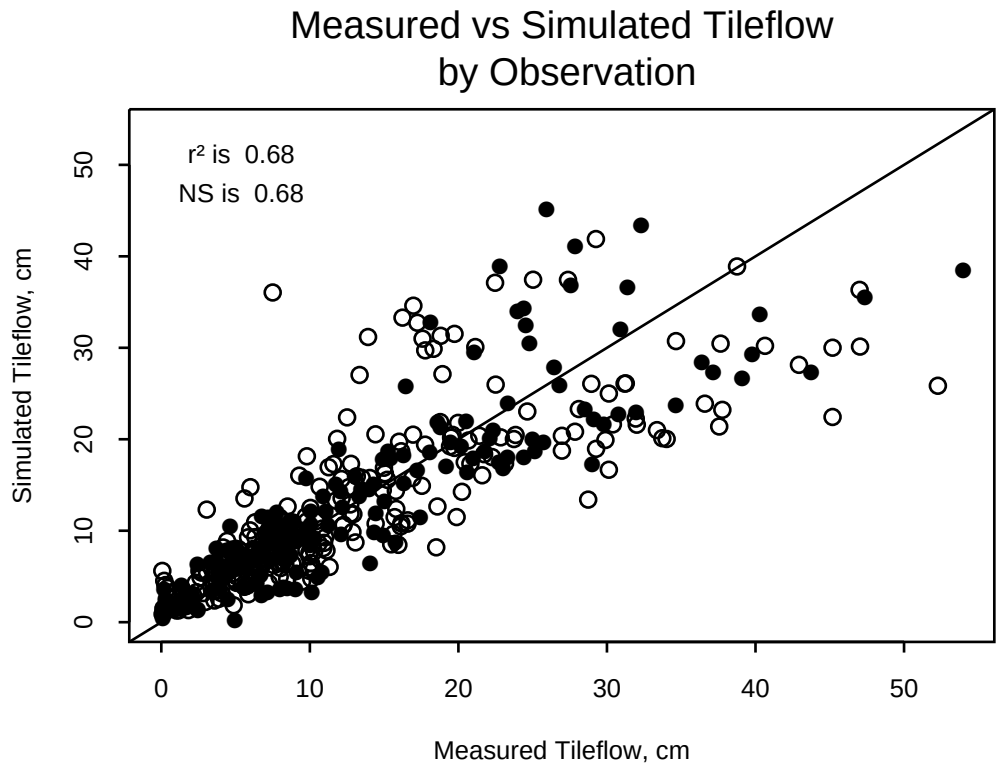

Measured vs Measured
All Observations 1990-2003
r² is 0.81
NS is 0.8
Measured Tileflow, mg/L
Measured N Concentration, mg/L
0
20
40
60

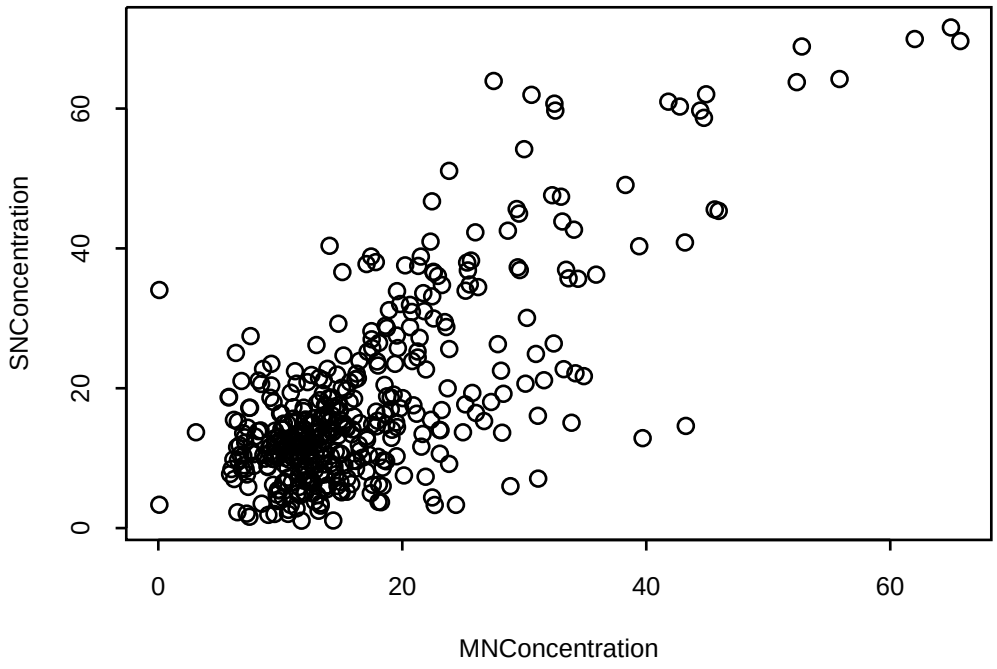

Measured vs Measured
All Observations 1990-2003
r² is 0.65
NS is 0.6
Measured N Loading kg/ha
Measured N Loading, kg/ha
0
20
40
60
80
100
120

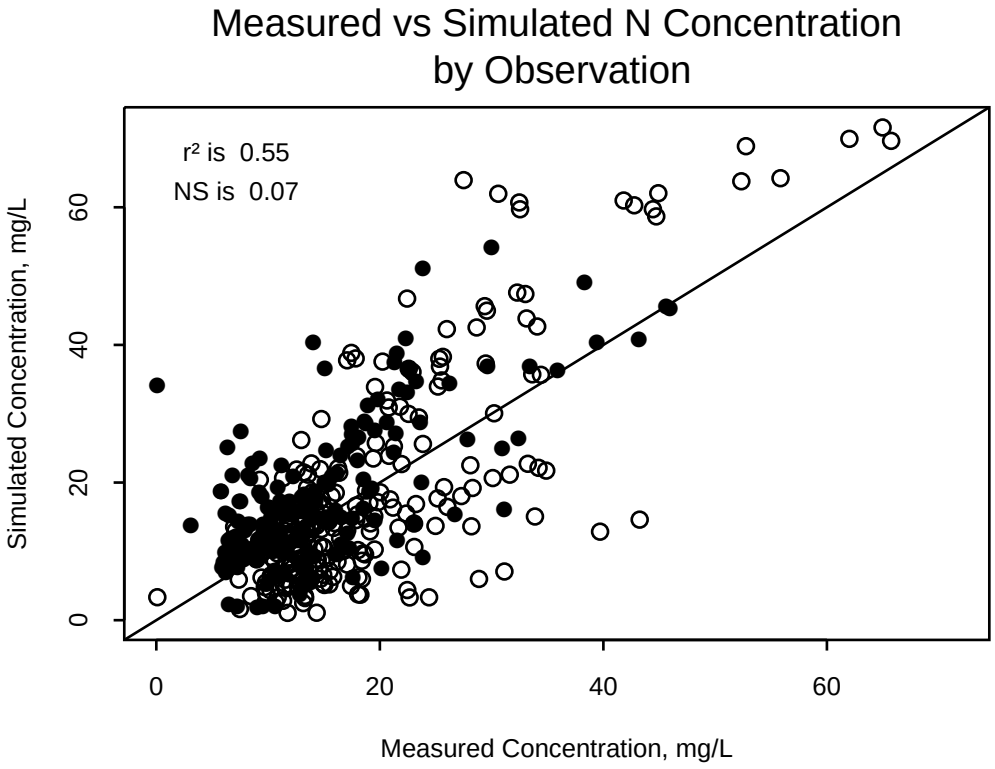

Measured vs Simulated Corn Yields
by Observation
r² is 0.35
NS is 0.07
Simulated Corn Yields, kg/ha
Measured Corn Yields, kg/ha
0
2000
4000
6000
8000
10000

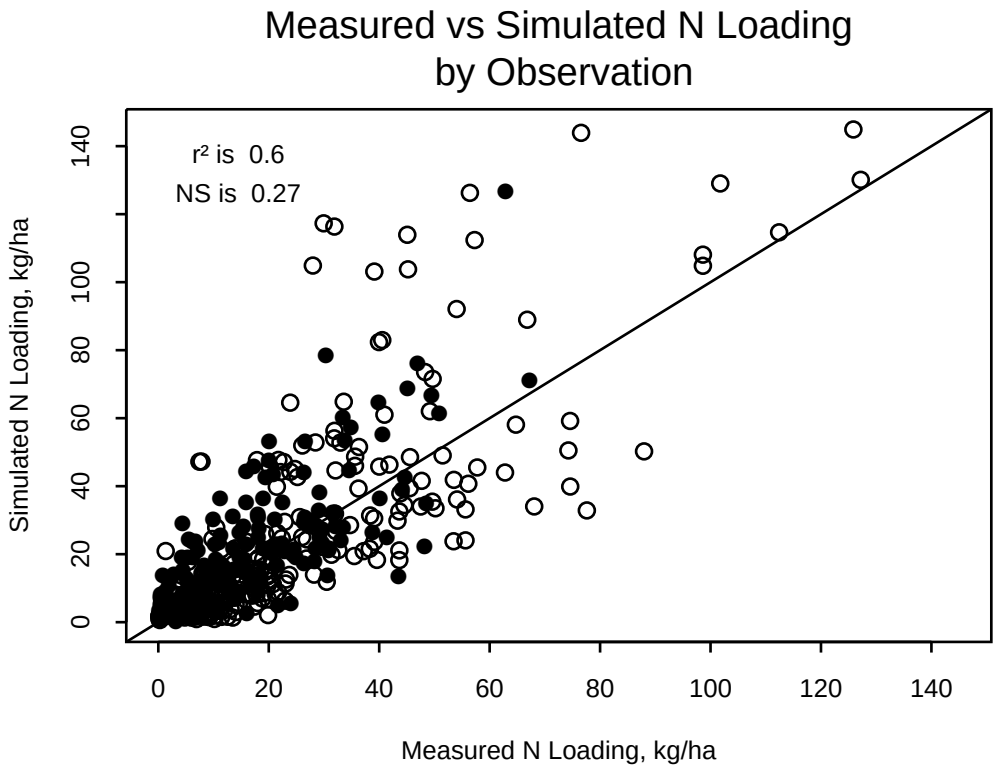

Measured vs Simulated Soybean Yields
by Observation
r² is 0.62
NS is 0.44
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
0
1000
2000
3000
4000

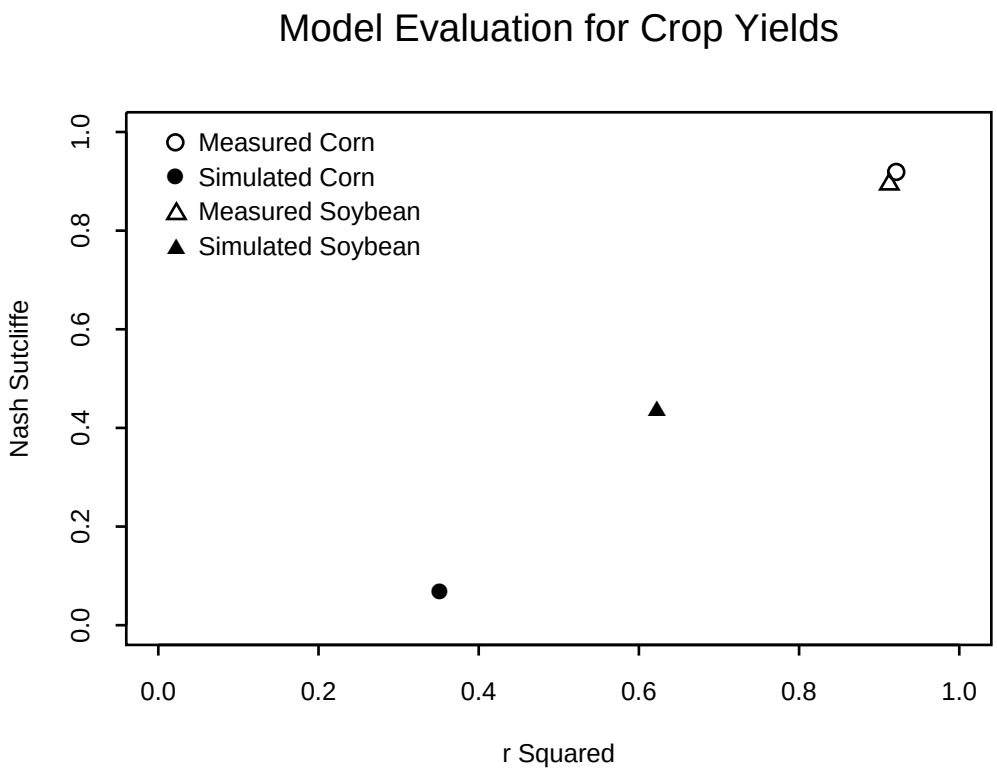

Measured vs Simulated All Yields
by Observation
r² is 0.82
NS is 0.77
Simulated Crop Yields, kg/ha
Measured Crop Yields, kg/ha
0
2000
4000
6000
8000
10000

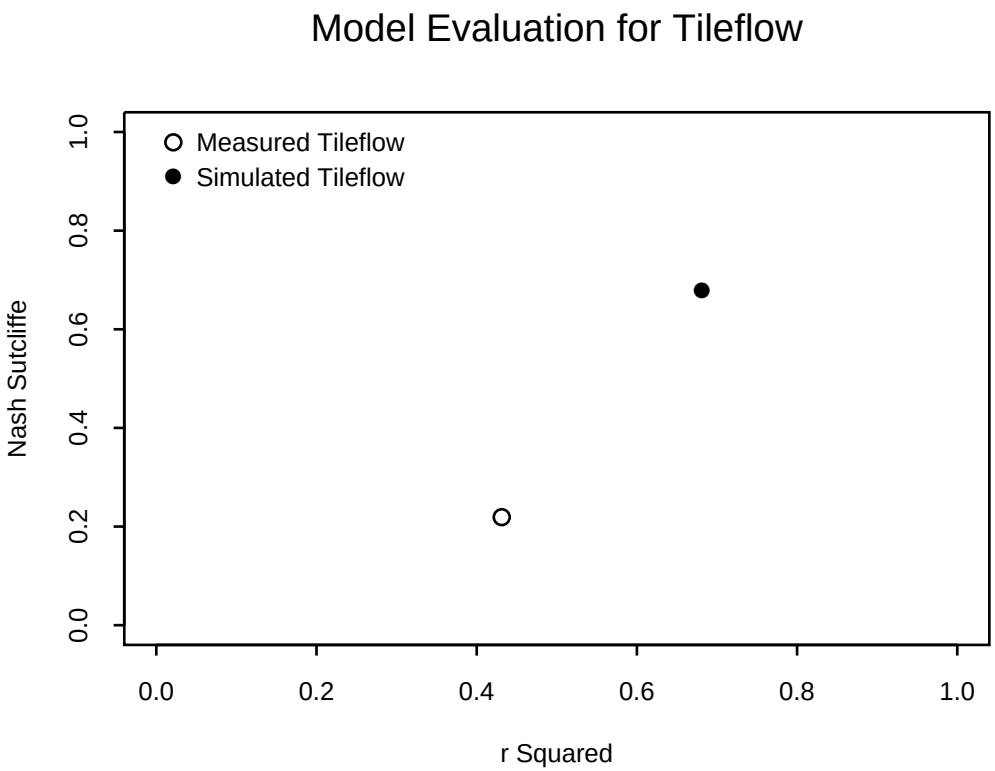

Measured vs Simulated Tileflow
by Observation
r² is 0.68
NS is 0.68
Simulated Tileflow, cm
Measured Tileflow, cm
0
10
20
30
40
50

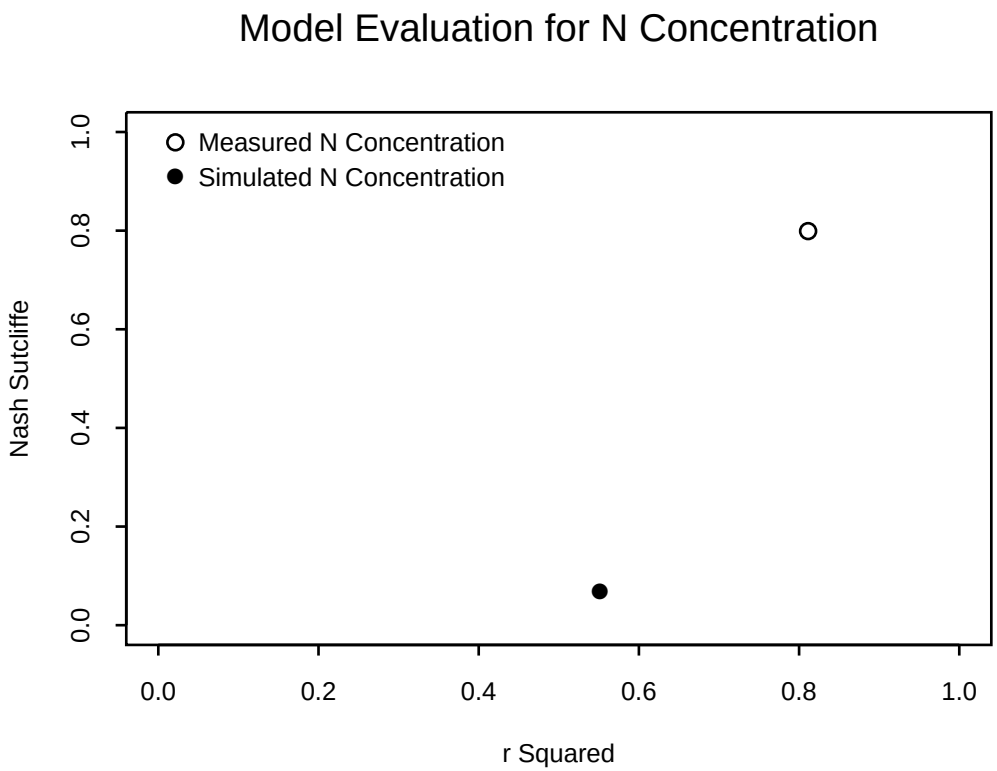

SNConcentration
MNConcentration
0
20
40
60

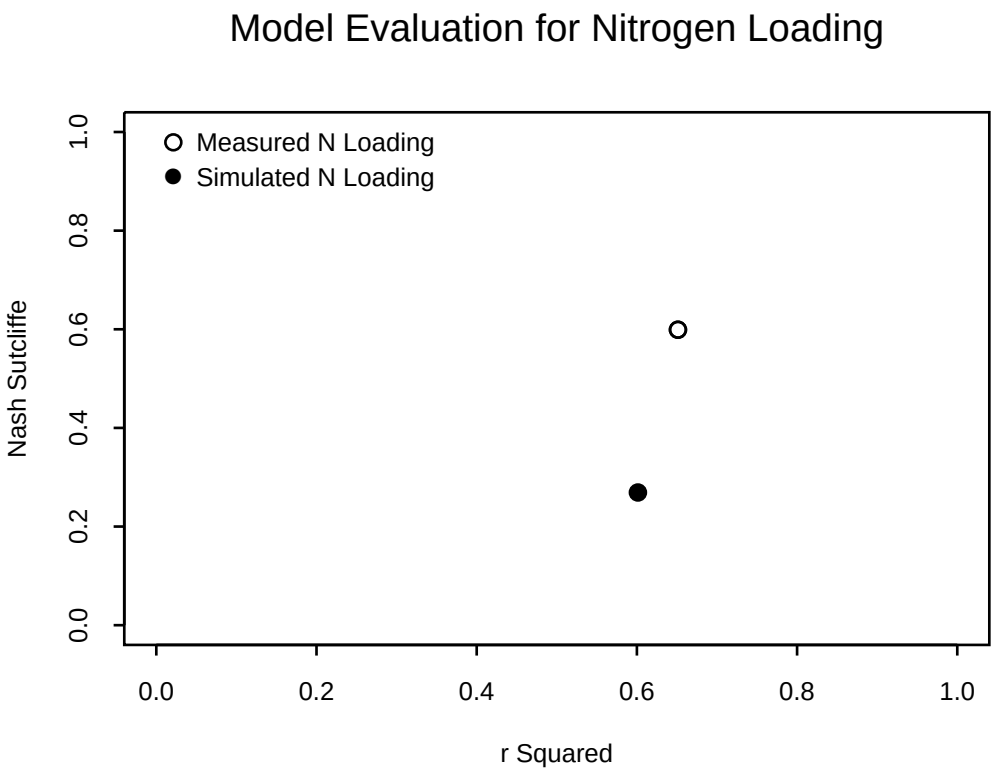

Measured vs Simulated N Concentration
by Observation
r² is 0.55
NS is 0.07
Simulated Concentration, mg/L
Measured Concentration, mg/L
0
20
40
60

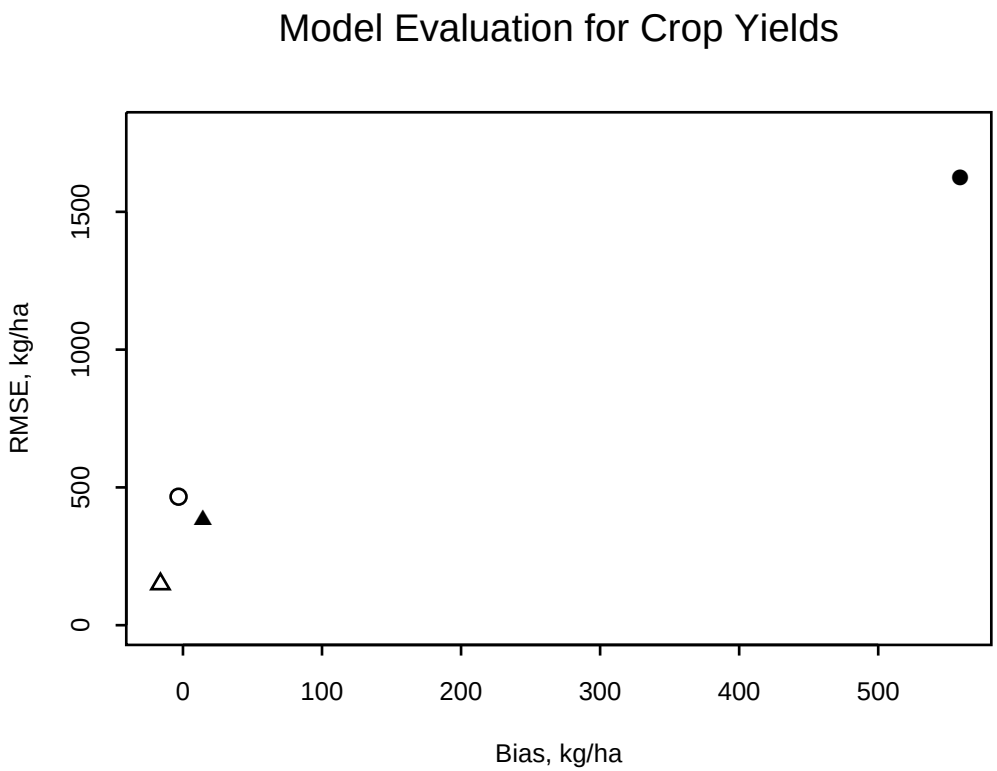

Measured vs Simulated N Loading
by Observation
r² is 0.6
NS is 0.27
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
0
20
40
60
80
100
120
140

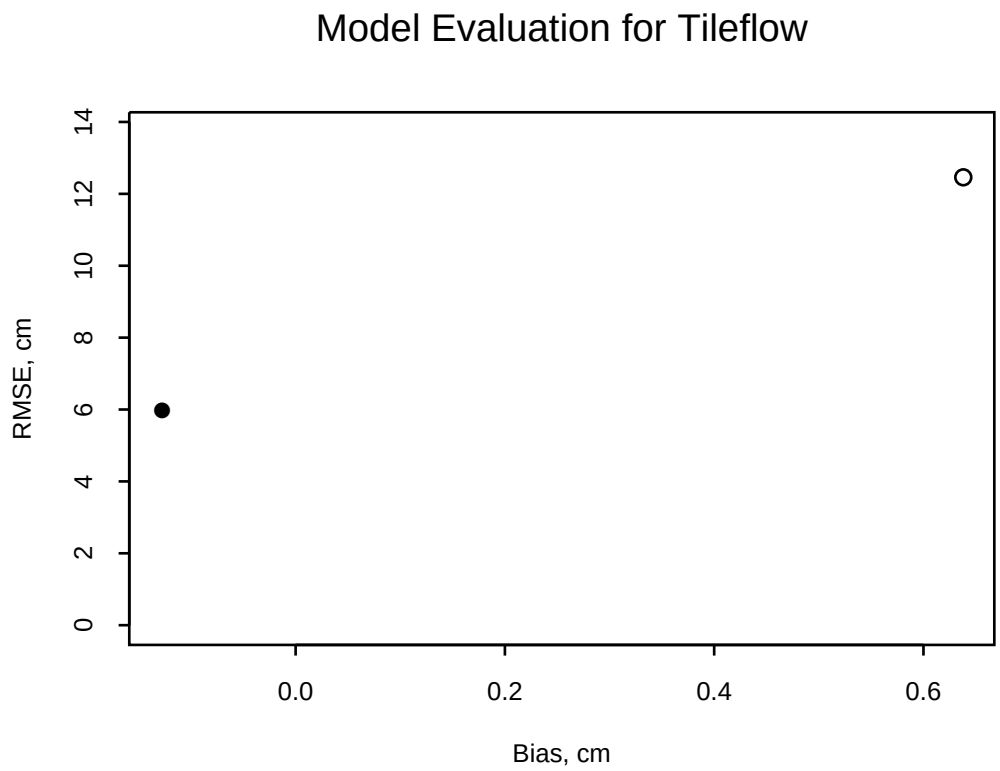

Model Evaluation for Crop Yields
Measured Corn
Simulated Corn
Measured Soybean
Simulated Soybean
Nash Sutcliffe
r Squared
0.0
0.2
0.4
0.6
0.8
1.0

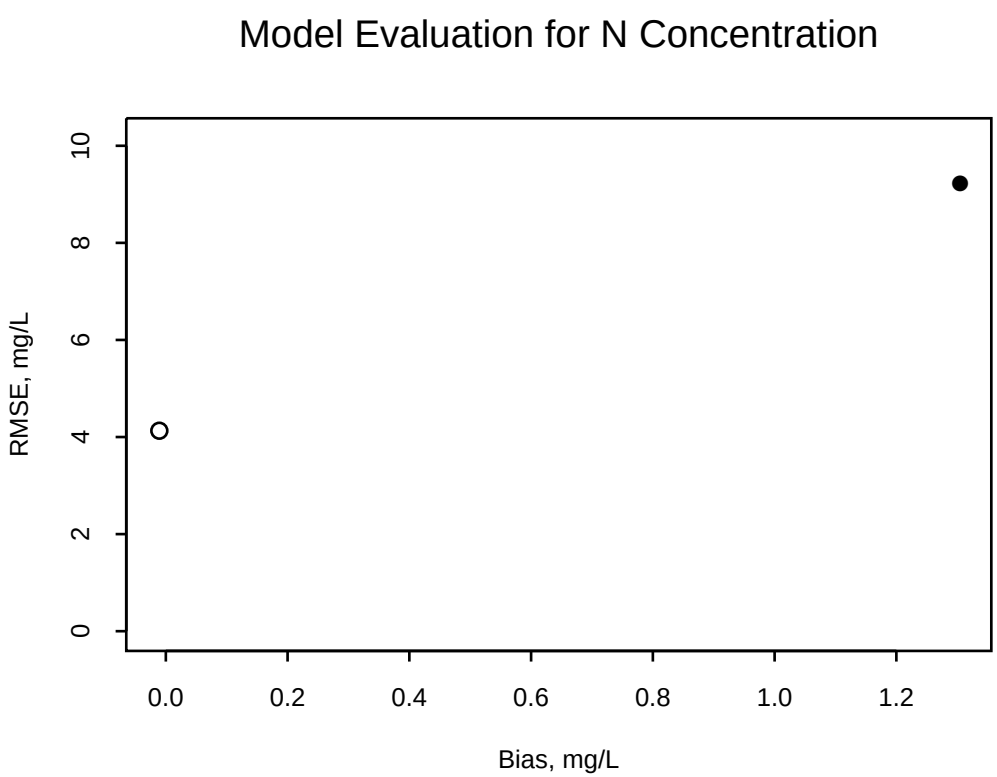

Model Evaluation for Tileflow
Measured Tileflow
Simulated Tileflow
Nash Sutcliffe
r Squared
0.0
0.2
0.4
0.6
0.8
1.0

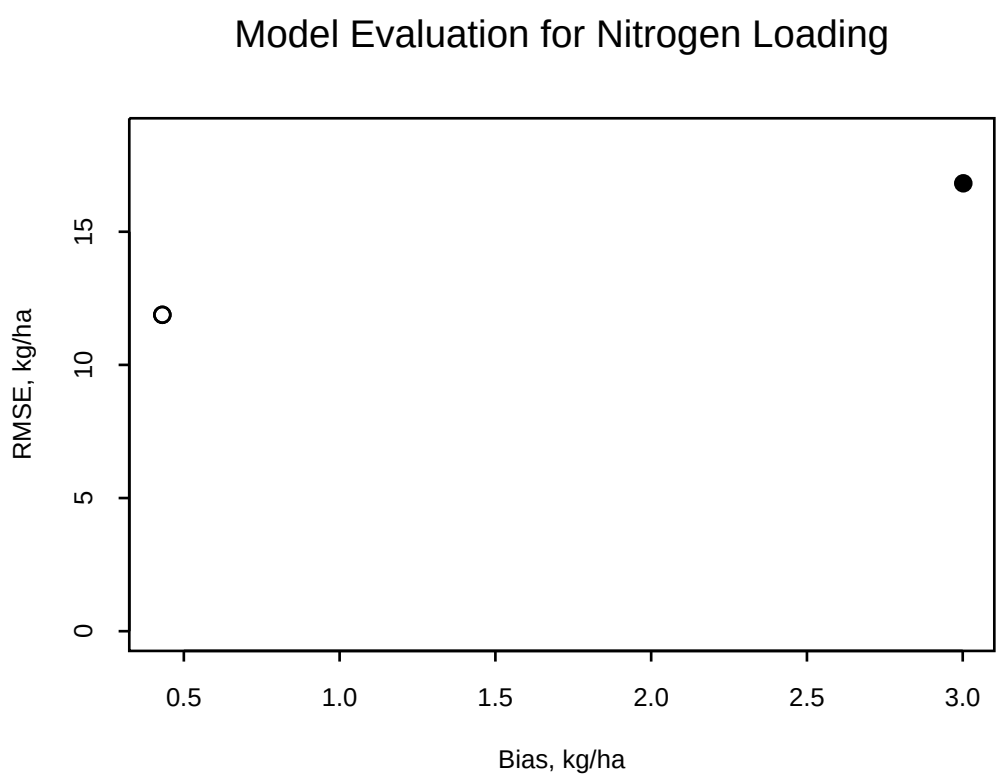

Model Evaluation for N Concentration
Measured N Concentration
Simulated N Concentration
Nash Sutcliffe
r Squared
0.0
0.2
0.4
0.6
0.8
1.0


Model Evaluation for Nitrogen Loading
Measured N Loading
Simulated N Loading
Nash Sutcliffe
r Squared
0.0
0.2
0.4
0.6
0.8
1.0

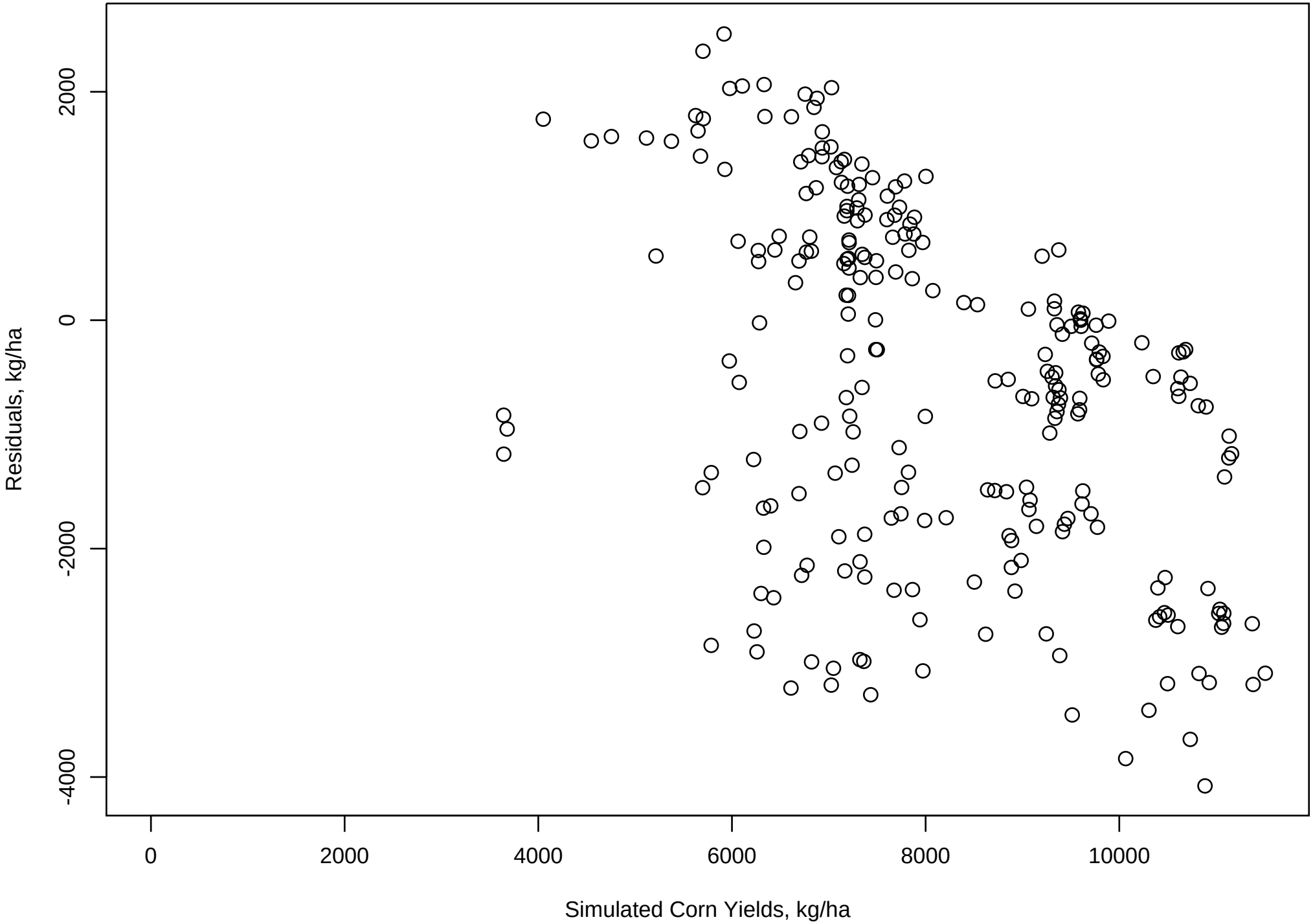

Model Evaluation for Crop Yields
RMSE, kg/ha
0
500
1000
1500
0
100
200
300
400
500
Bias, kg/ha

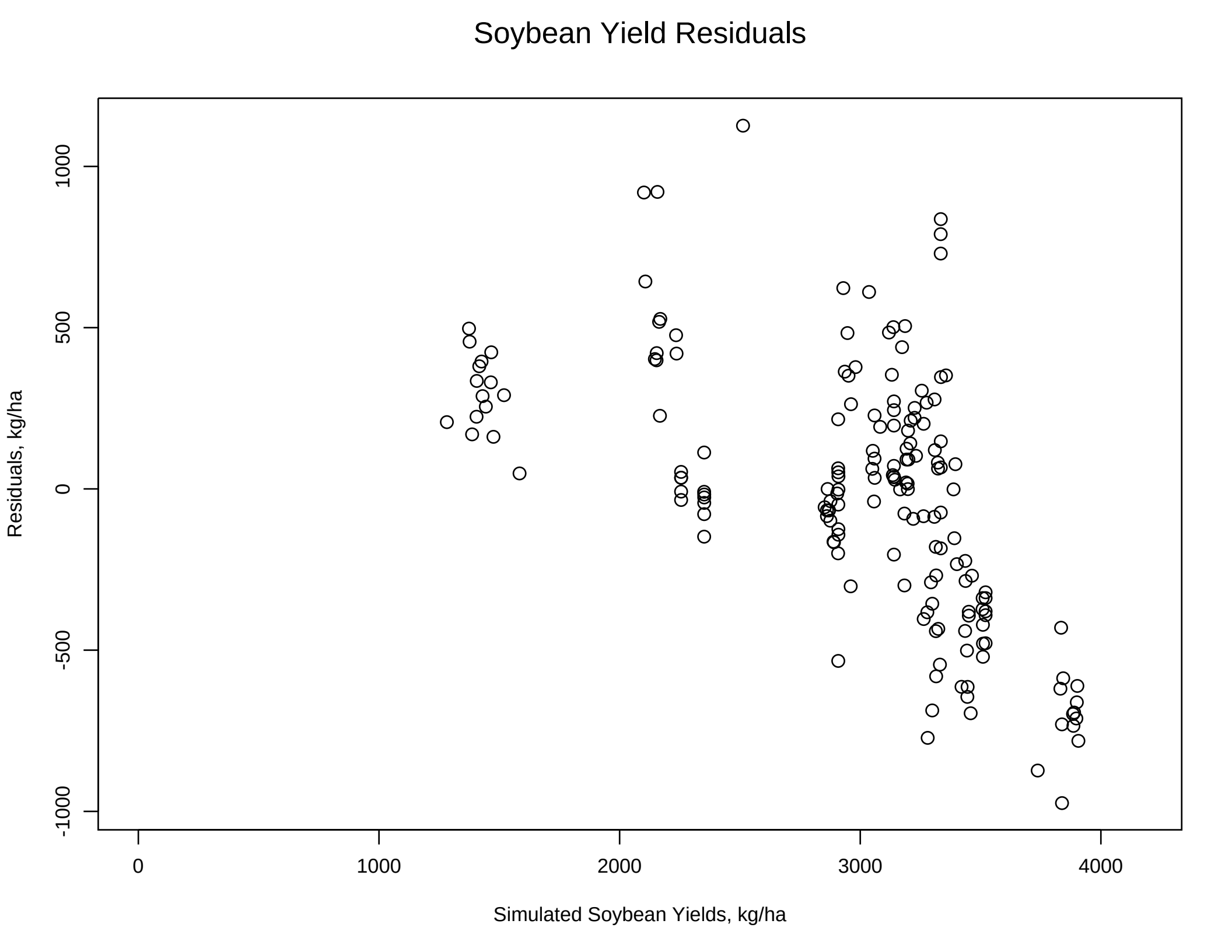

Model Evaluation for Tileflow
RMSE, cm
0
2
4
6
8
10
12
14
0.0
0.2
0.4
0.6
Bias, cm


Model Evaluation for N Concentration
RMSE, mg/L
0
2
4
6
8
10
0.0
0.2
0.4
0.6
0.8
1.0
1.2
Bias, mg/L

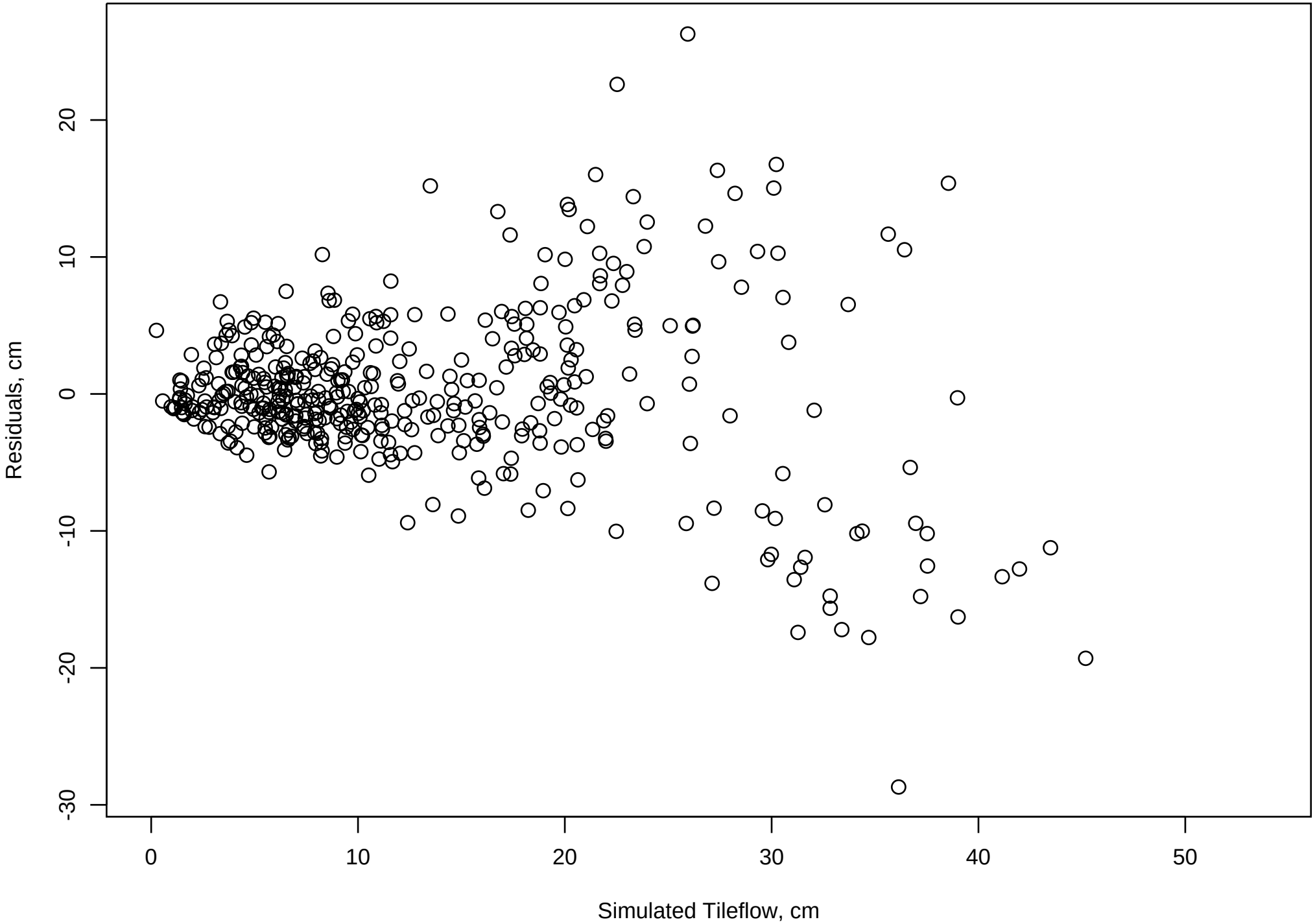

Model Evaluation for Nitrogen Loading
RMSE, kg/ha
0
5
10
15
0.5
1.0
1.5
2.0
2.5
3.0
Bias, kg/ha

# Corn Yield Residuals

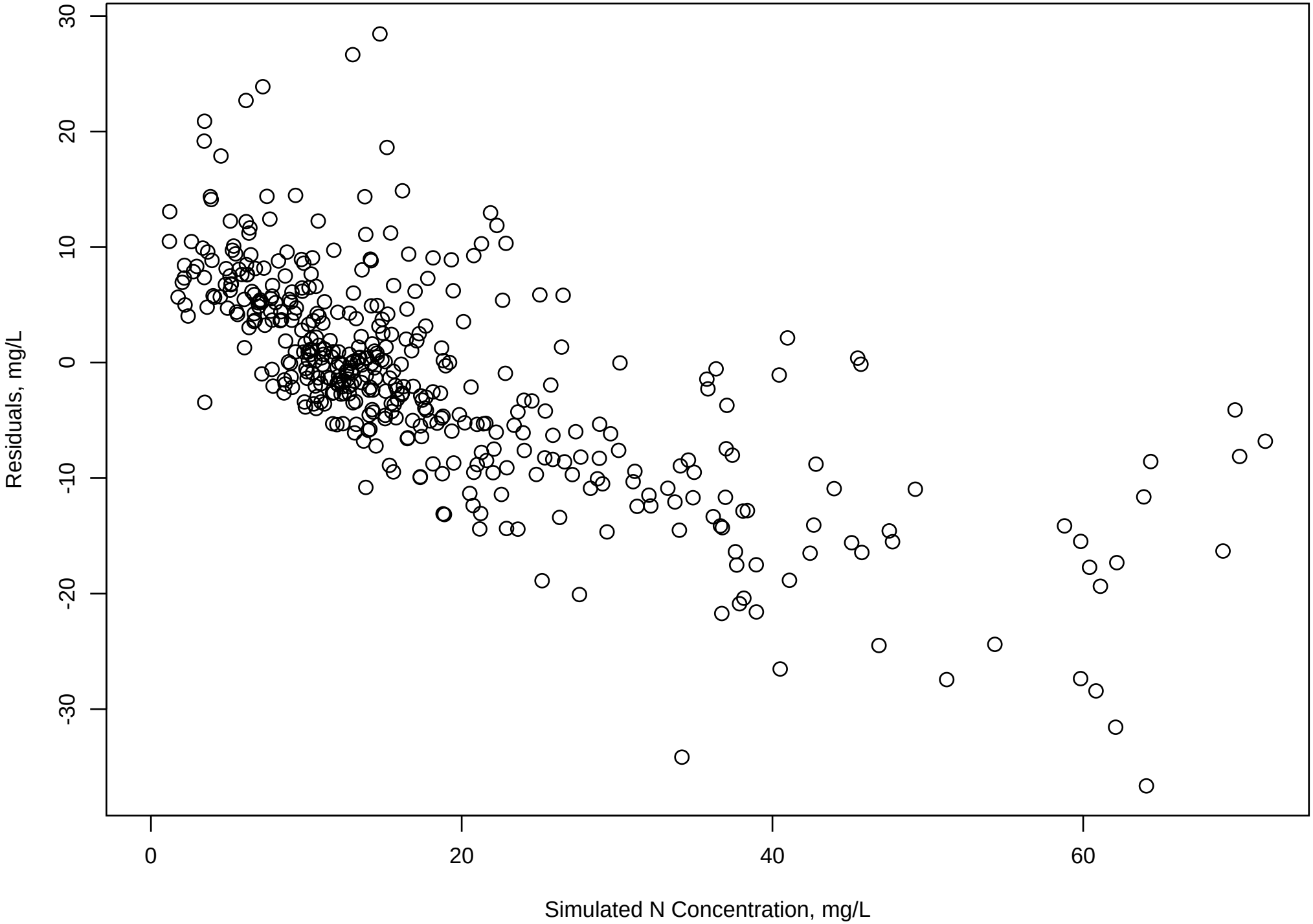



Soybean Yield Residuals
Residuals, kg/ha
1000
500
0
-500
-1000
0
1000
2000
3000
4000
Simulated Soybean Yields, kg/ha

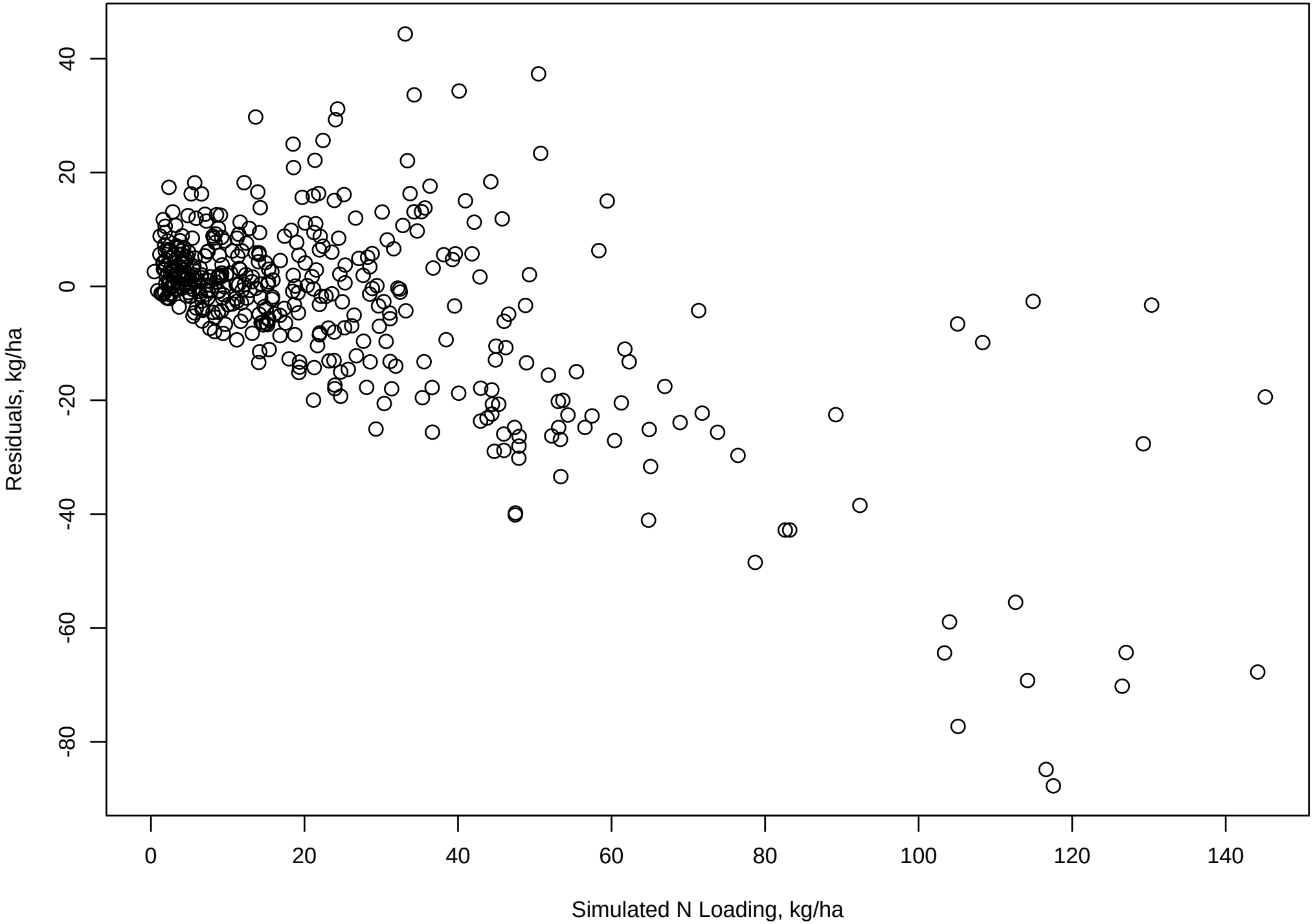
# Tileflow Residuals

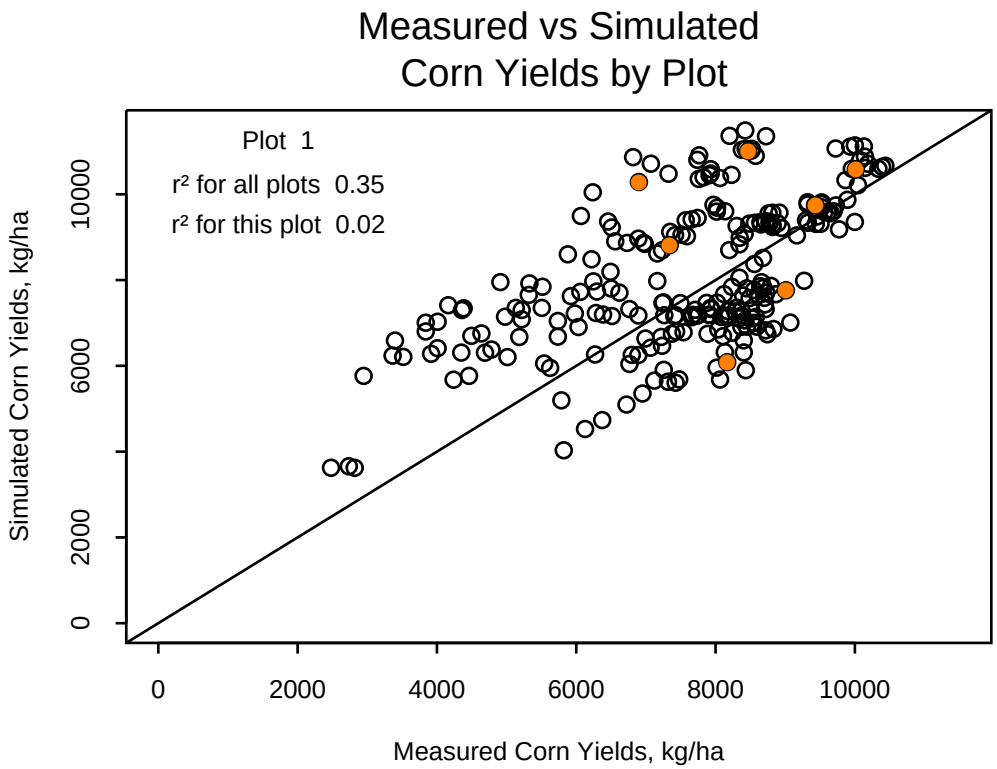


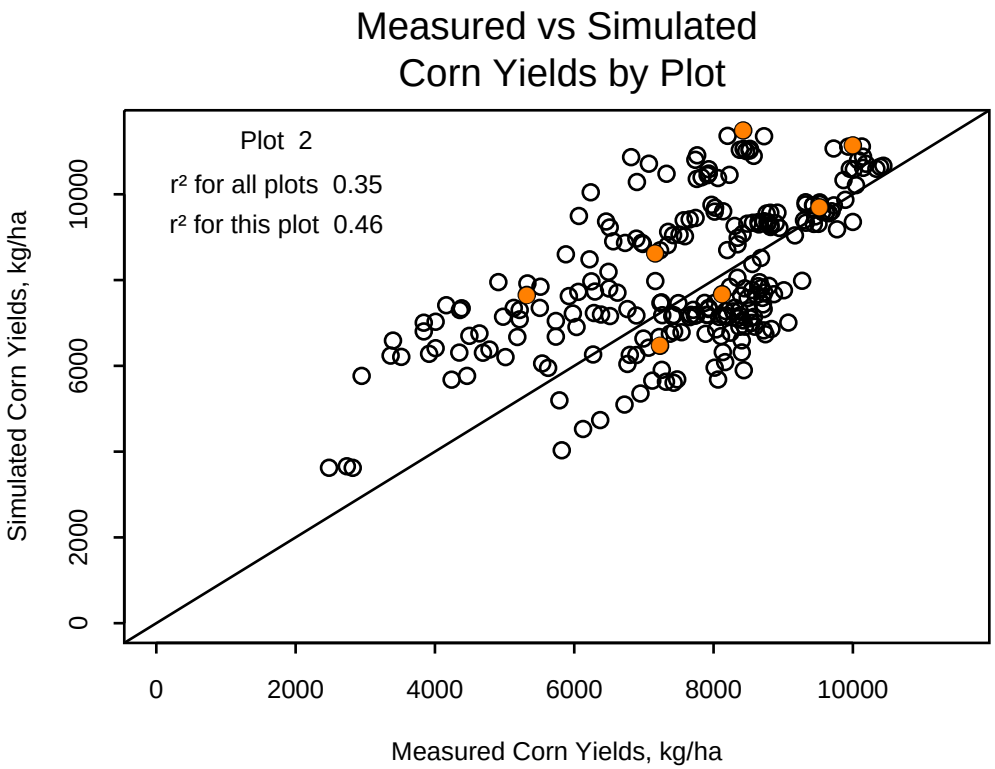
# N Concentration Residuals

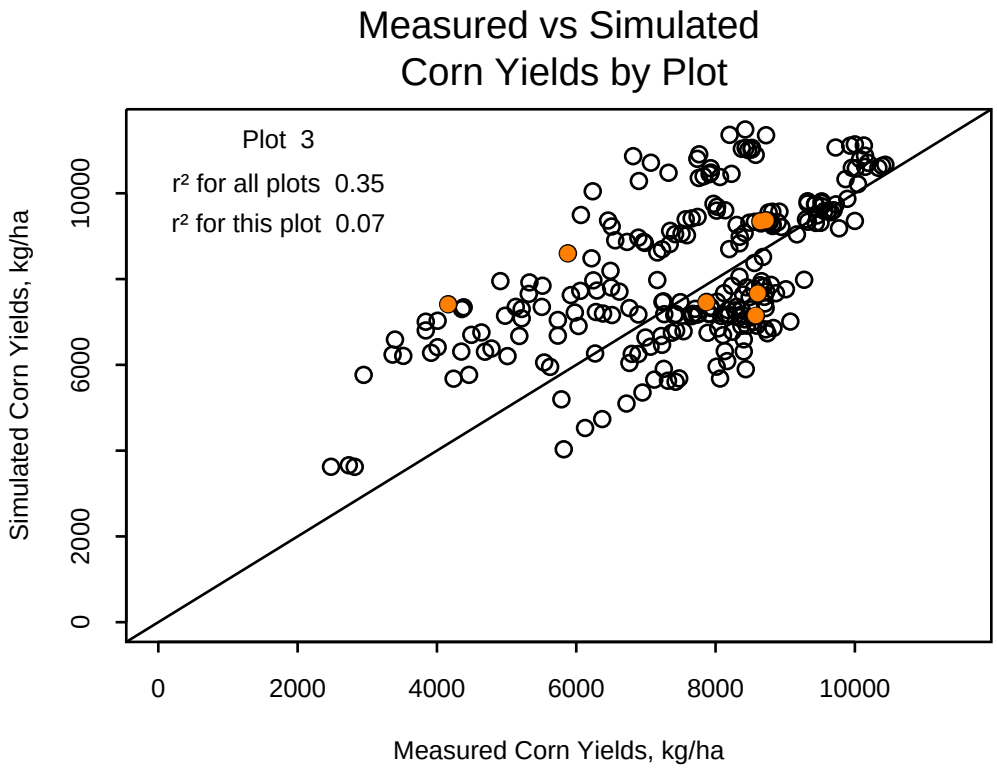


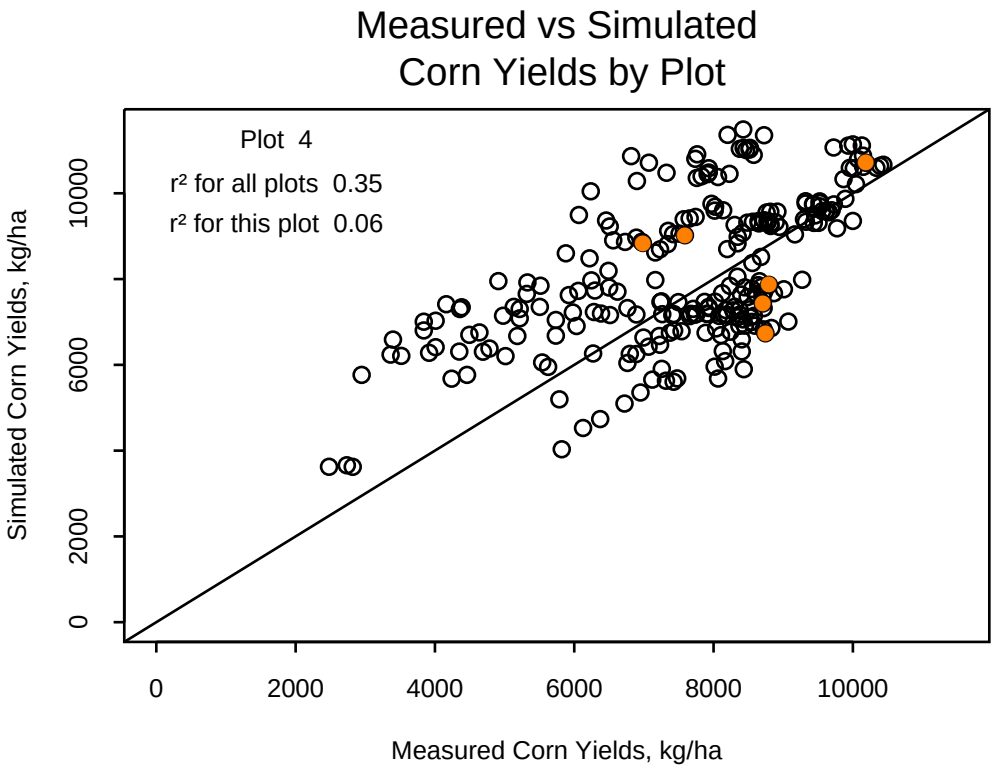
# N Loading Residuals

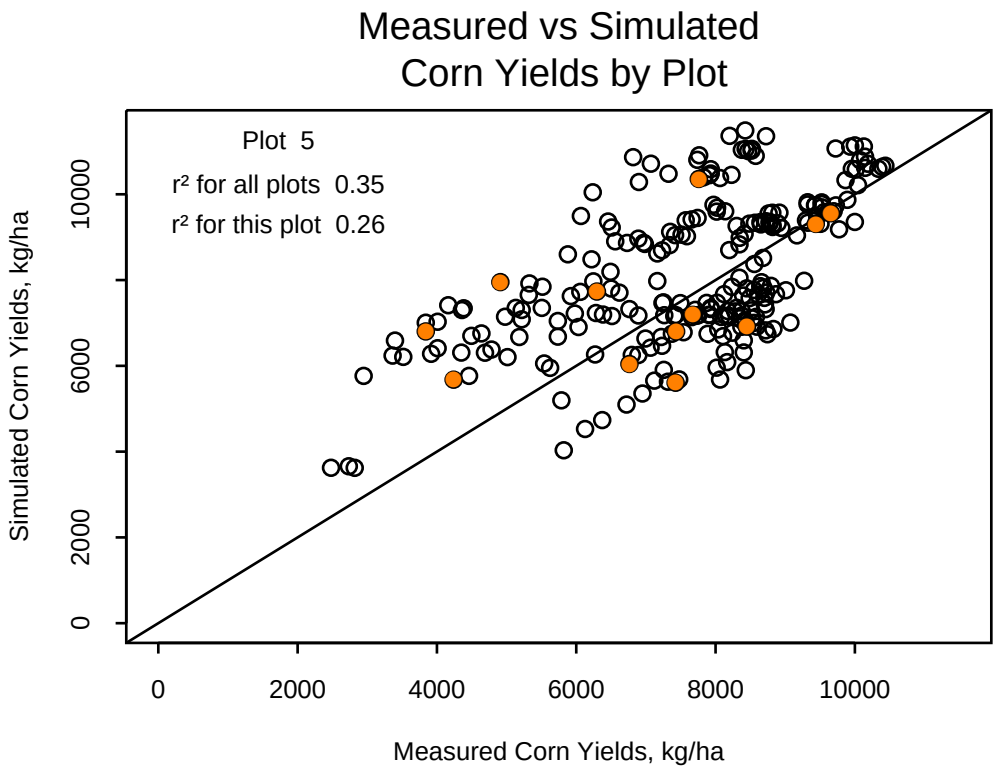


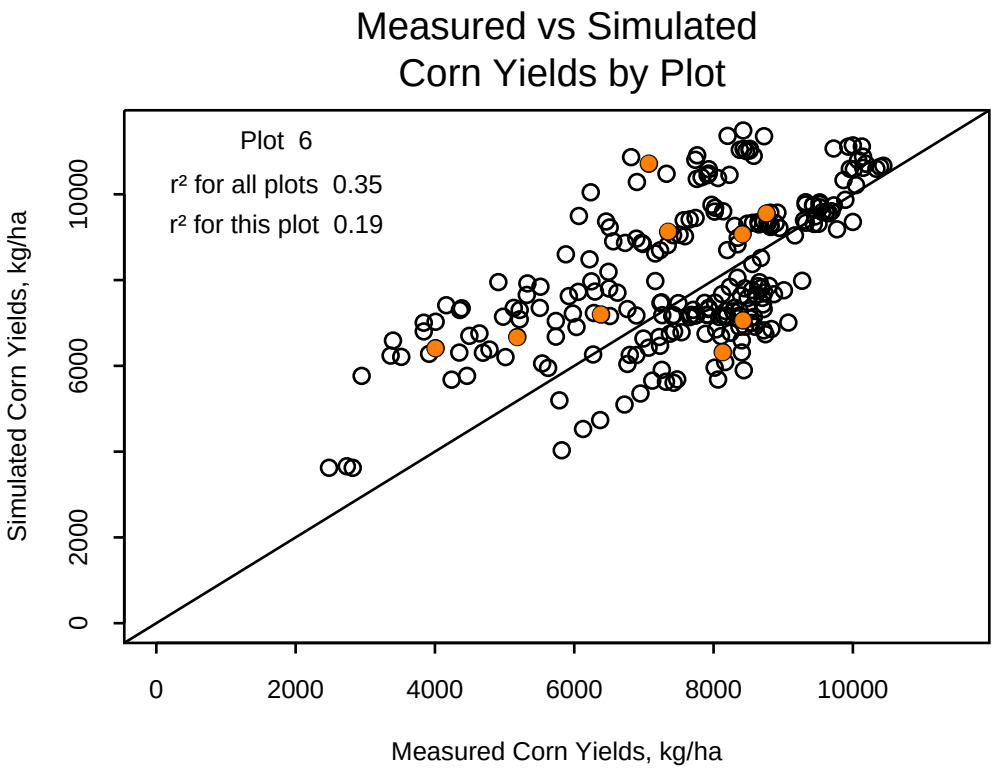

Measured vs Simulated
Corn Yields by Plot
Plot 1
r² for all plots 0.35
r² for this plot 0.02
Simulated Corn Yields, kg/ha
Measured Corn Yields, kg/ha
0
2000
4000
6000
8000
10000

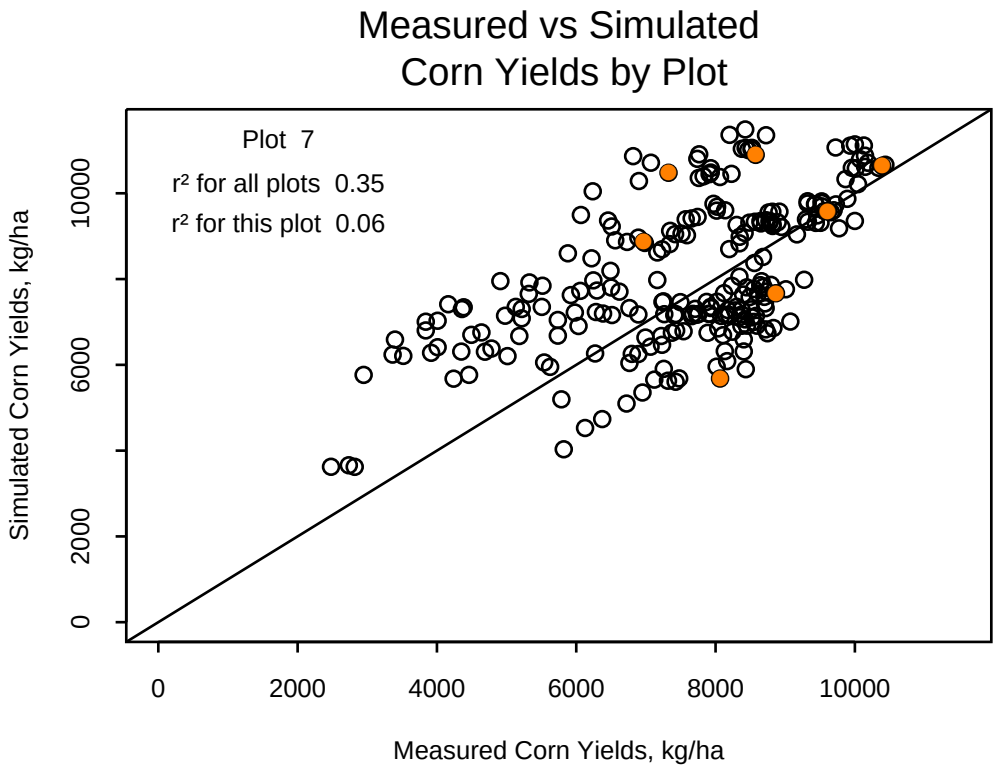

Measured vs Simulated
Corn Yields by Plot
Plot 2
r² for all plots 0.35
r² for this plot 0.46
Simulated Corn Yields, kg/ha
Measured Corn Yields, kg/ha
0
2000
4000
6000
8000
10000

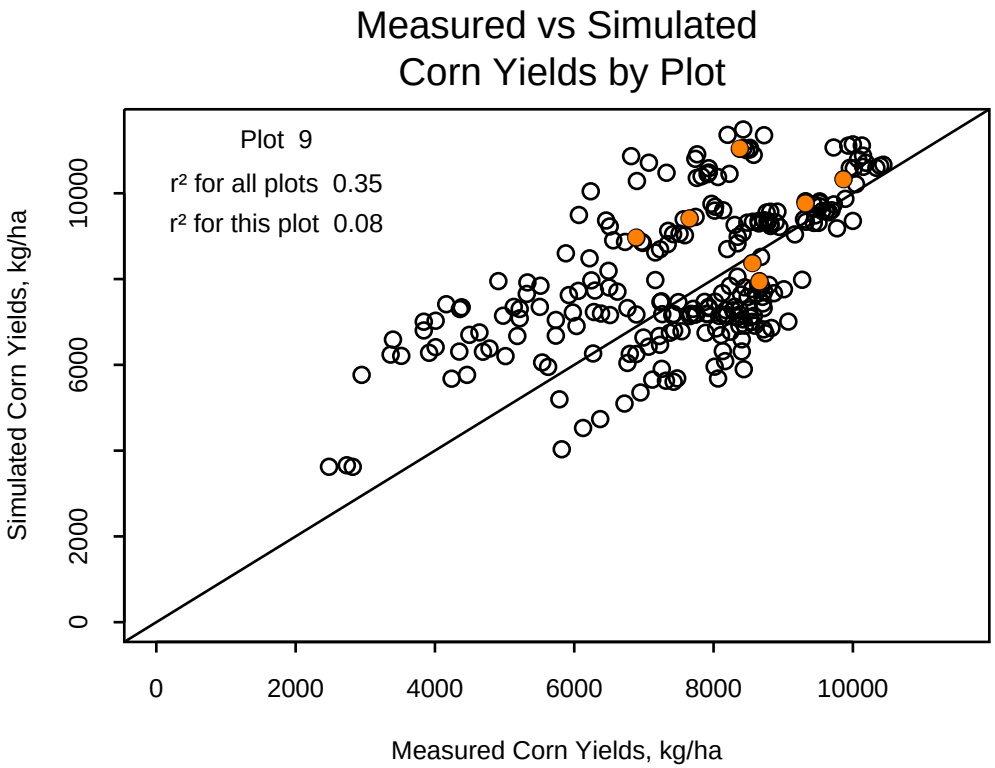

Measured vs Simulated
Corn Yields by Plot
Plot 3
r² for all plots 0.35
r² for this plot 0.07
Simulated Corn Yields, kg/ha
Measured Corn Yields, kg/ha
0
2000
4000
6000
8000
10000

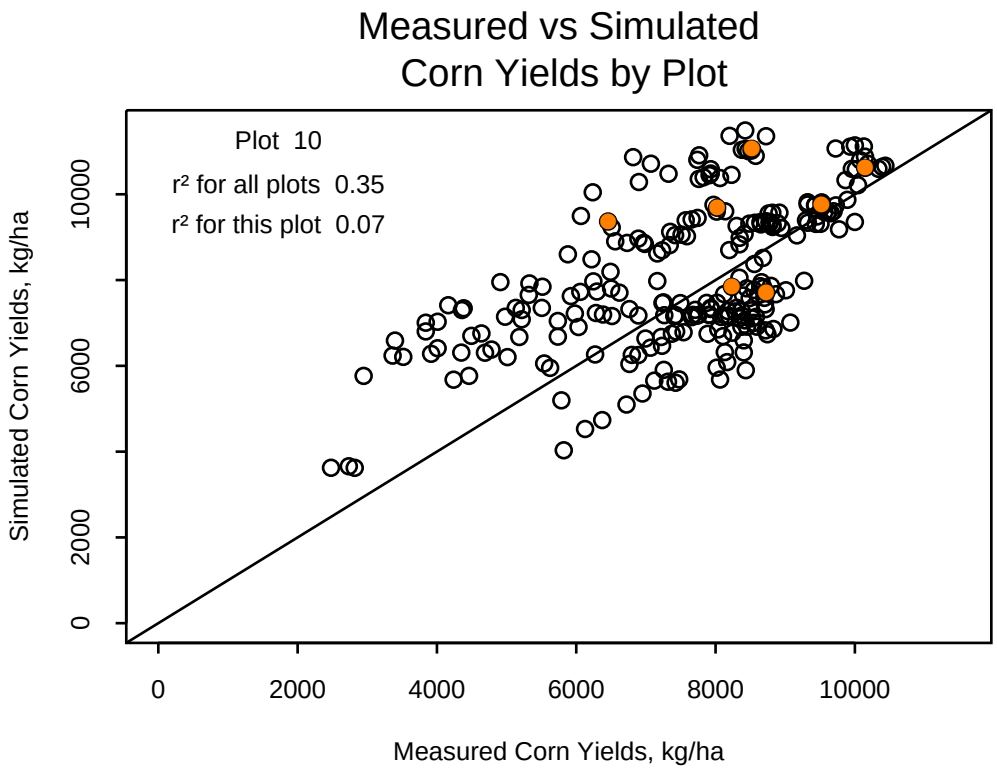

Measured vs Simulated
Corn Yields by Plot
Plot 4
r² for all plots 0.35
r² for this plot 0.06
Simulated Corn Yields, kg/ha
Measured Corn Yields, kg/ha
0
2000
4000
6000
8000
10000

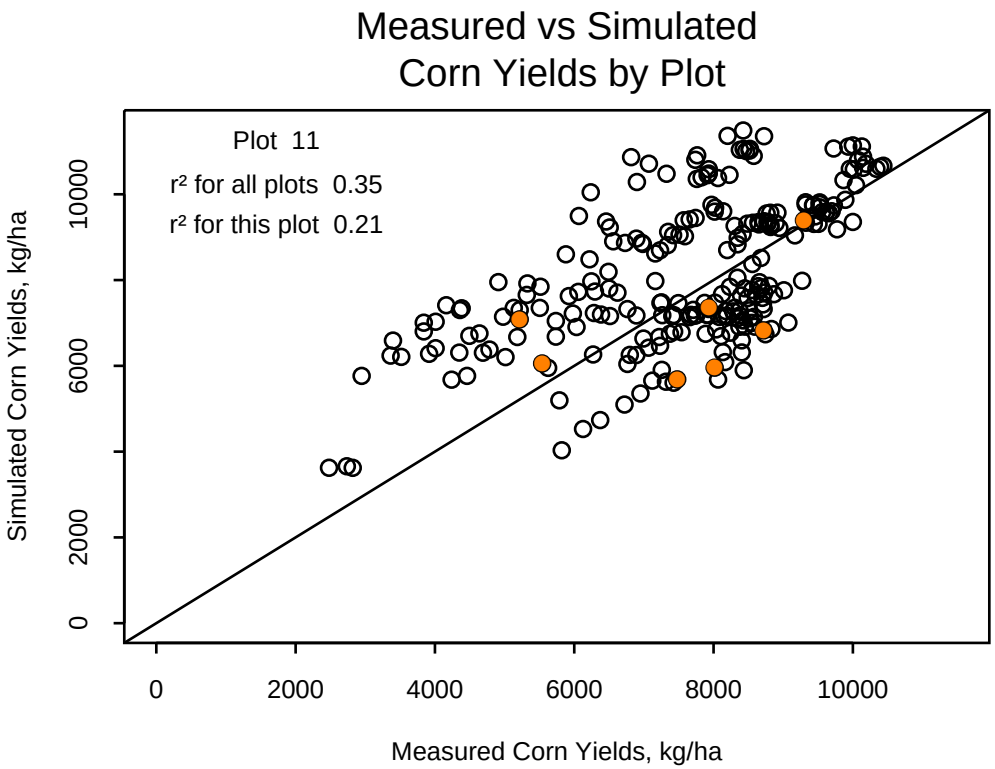

Measured vs Simulated
Corn Yields by Plot
Plot 5
r² for all plots 0.35
r² for this plot 0.26
Simulated Corn Yields, kg/ha
Measured Corn Yields, kg/ha
0
2000
4000
6000
8000
10000

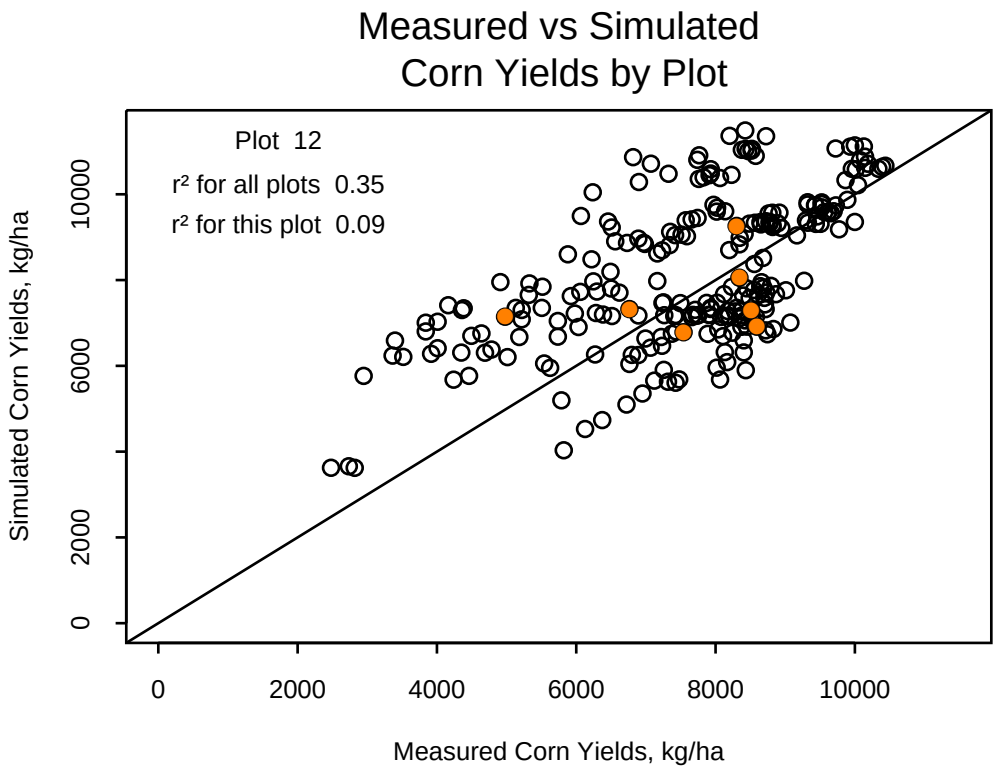

Measured vs Simulated
Corn Yields by Plot
Plot 6
r² for all plots 0.35
r² for this plot 0.19
Simulated Corn Yields, kg/ha
Measured Corn Yields, kg/ha
0
2000
4000
6000
8000
10000

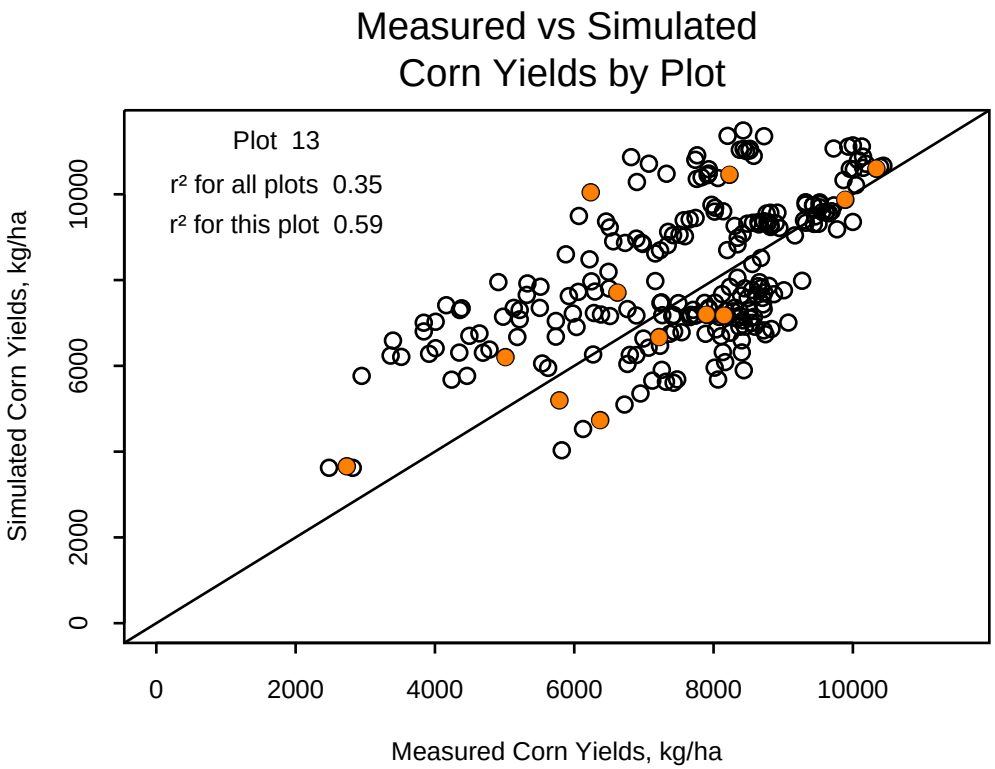

Measured vs Simulated
Corn Yields by Plot
Plot 7
r² for all plots 0.35
r² for this plot 0.06
Simulated Corn Yields, kg/ha
Measured Corn Yields, kg/ha
0
2000
4000
6000
8000
10000

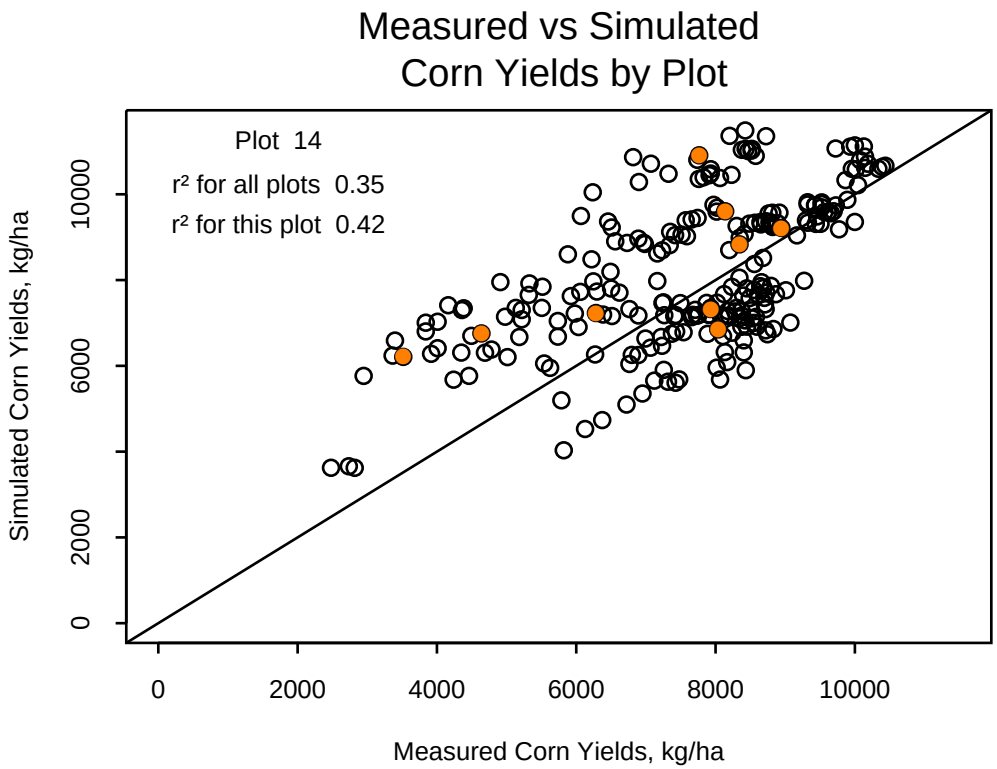

Measured vs Simulated
Corn Yields by Plot
Plot 9
r² for all plots 0.35
r² for this plot 0.08
Simulated Corn Yields, kg/ha
Measured Corn Yields, kg/ha
0
2000
4000
6000
8000
10000

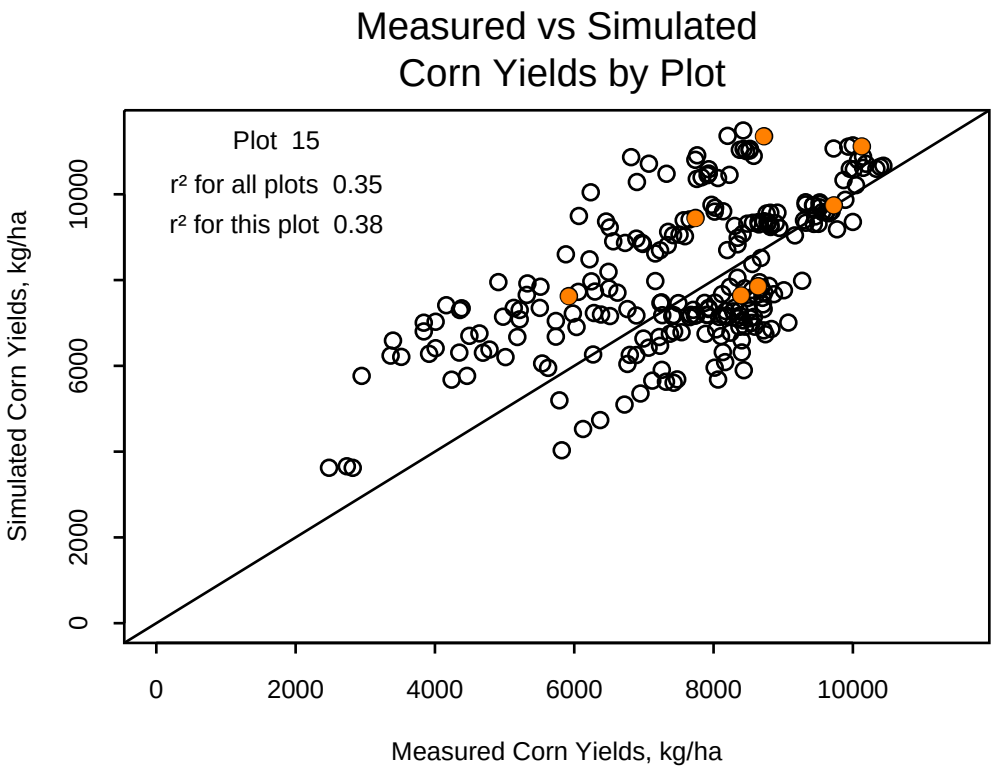

Measured vs Simulated
Corn Yields by Plot
Plot 10
r² for all plots 0.35
r² for this plot 0.07
Simulated Corn Yields, kg/ha
Measured Corn Yields, kg/ha
0
2000
4000
6000
8000
10000

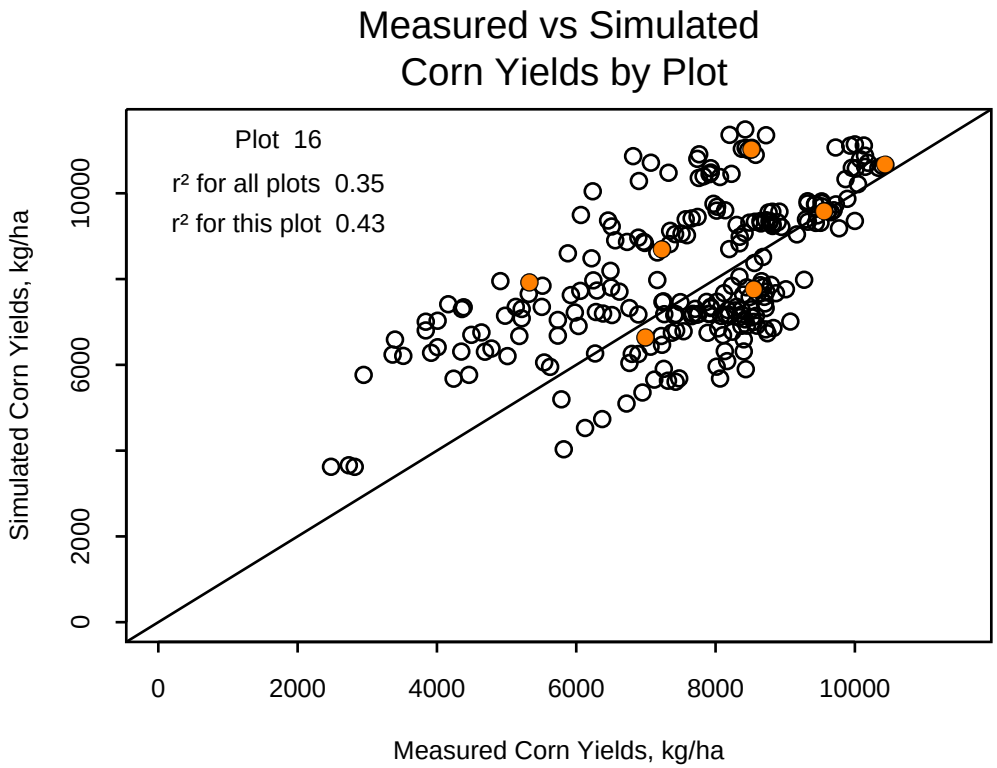

Measured vs Simulated
Corn Yields by Plot
Plot 11
r² for all plots 0.35
r² for this plot 0.21
Simulated Corn Yields, kg/ha
Measured Corn Yields, kg/ha
0
2000
4000
6000
8000
10000

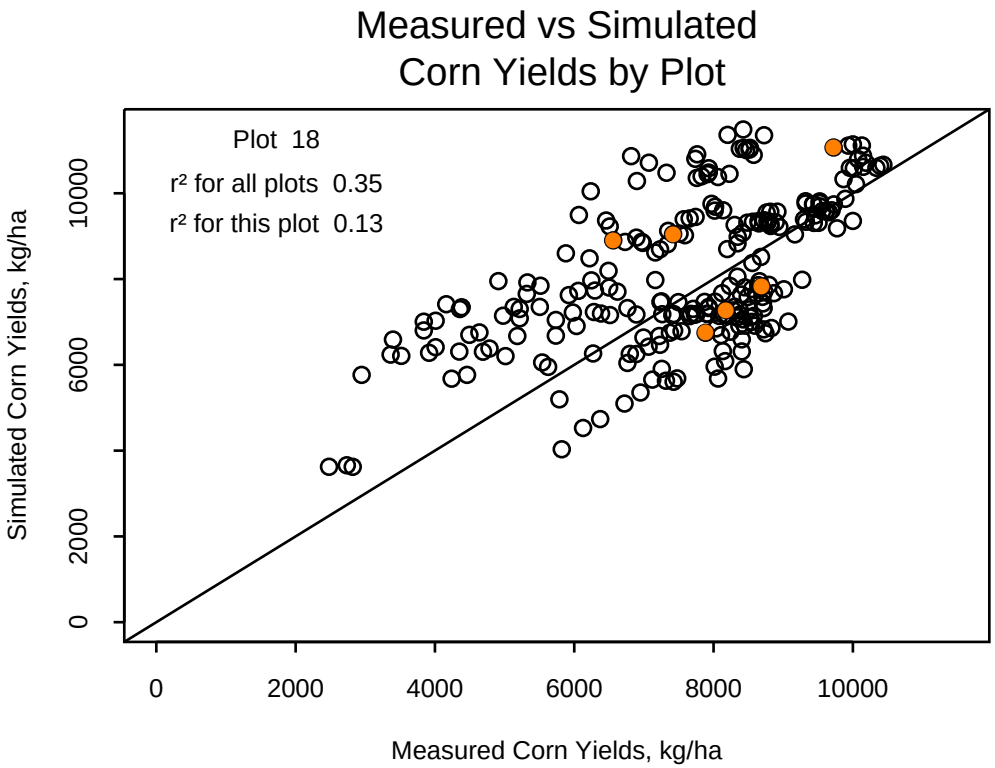

Measured vs Simulated
Corn Yields by Plot
Plot 12
r² for all plots 0.35
r² for this plot 0.09
Simulated Corn Yields, kg/ha
Measured Corn Yields, kg/ha
0
2000
4000
6000
8000
10000

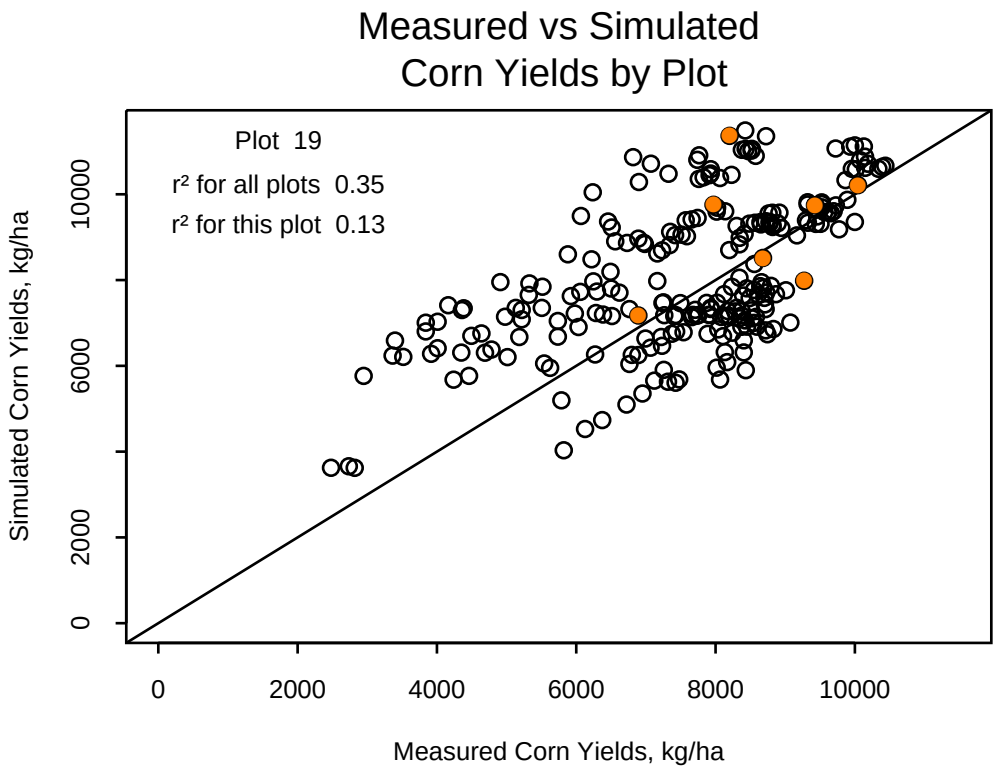

Measured vs Simulated
Corn Yields by Plot
Plot 13
r² for all plots 0.35
r² for this plot 0.59
Simulated Corn Yields, kg/ha
Measured Corn Yields, kg/ha
0
2000
4000
6000
8000
10000

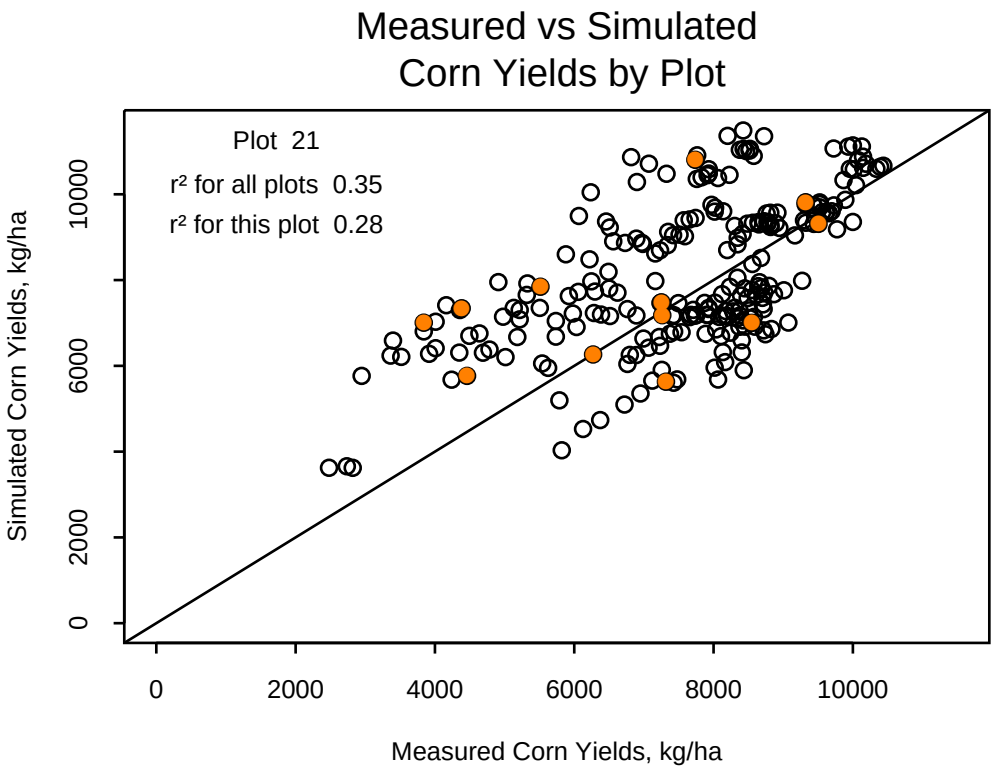

Measured vs Simulated
Corn Yields by Plot
Plot 14
r² for all plots 0.35
r² for this plot 0.42
Simulated Corn Yields, kg/ha
Measured Corn Yields, kg/ha
0
2000
4000
6000
8000
10000

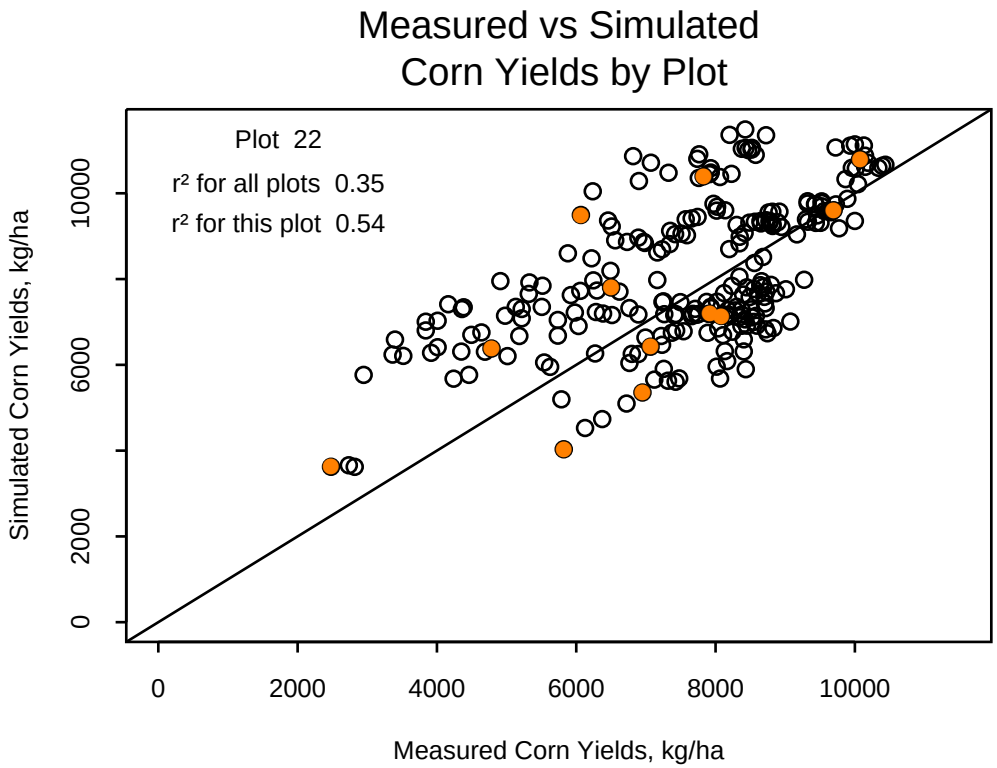

Measured vs Simulated
Corn Yields by Plot
Plot 15
r² for all plots 0.35
r² for this plot 0.38
Simulated Corn Yields, kg/ha
Measured Corn Yields, kg/ha
0
2000
4000
6000
8000
10000

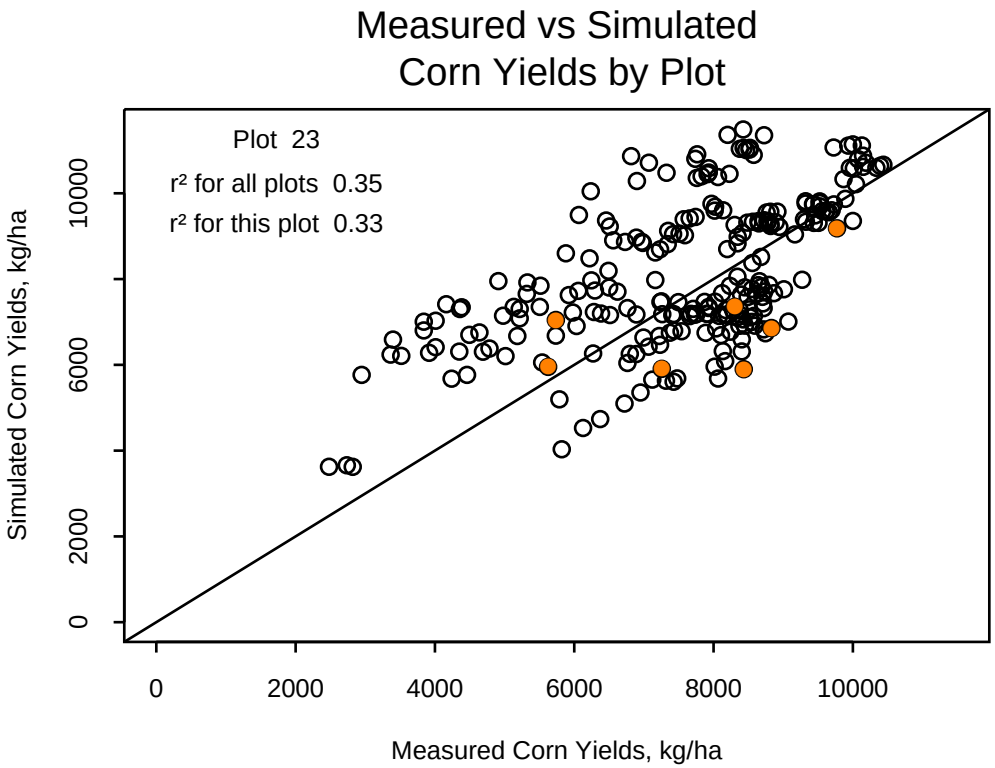

Measured vs Simulated
Corn Yields by Plot
Plot 16
r² for all plots 0.35
r² for this plot 0.43
Simulated Corn Yields, kg/ha
Measured Corn Yields, kg/ha
0
2000
4000
6000
8000
10000

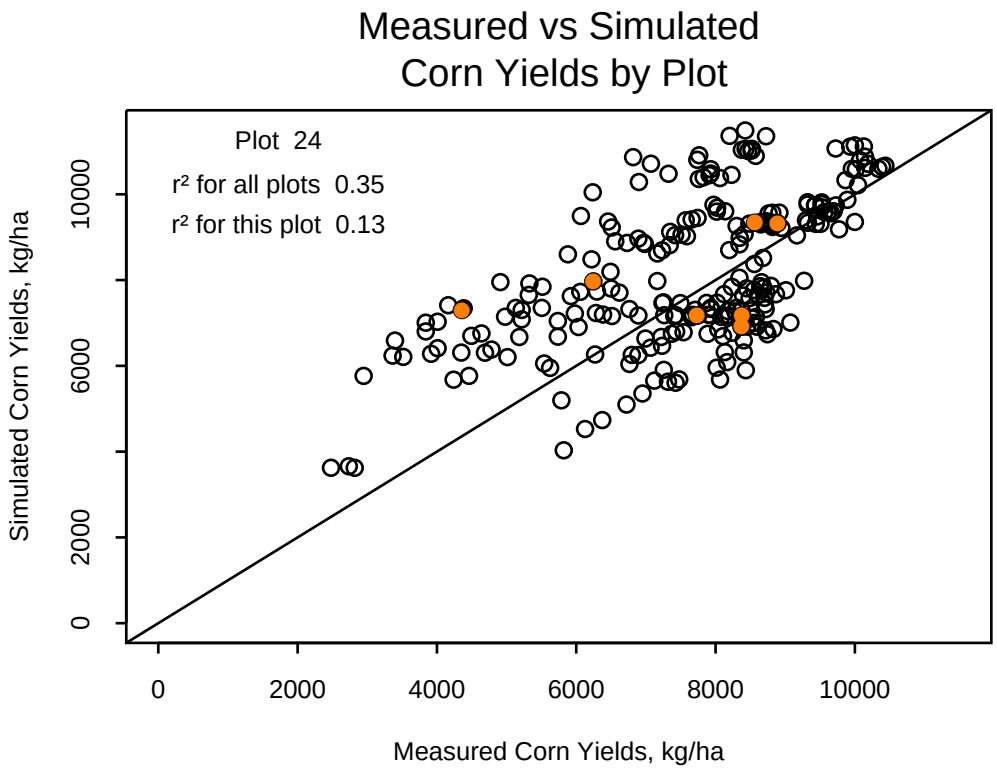

Measured vs Simulated
Corn Yields by Plot
Plot 18
r² for all plots 0.35
r² for this plot 0.13
Simulated Corn Yields, kg/ha
Measured Corn Yields, kg/ha
0
2000
4000
6000
8000
10000

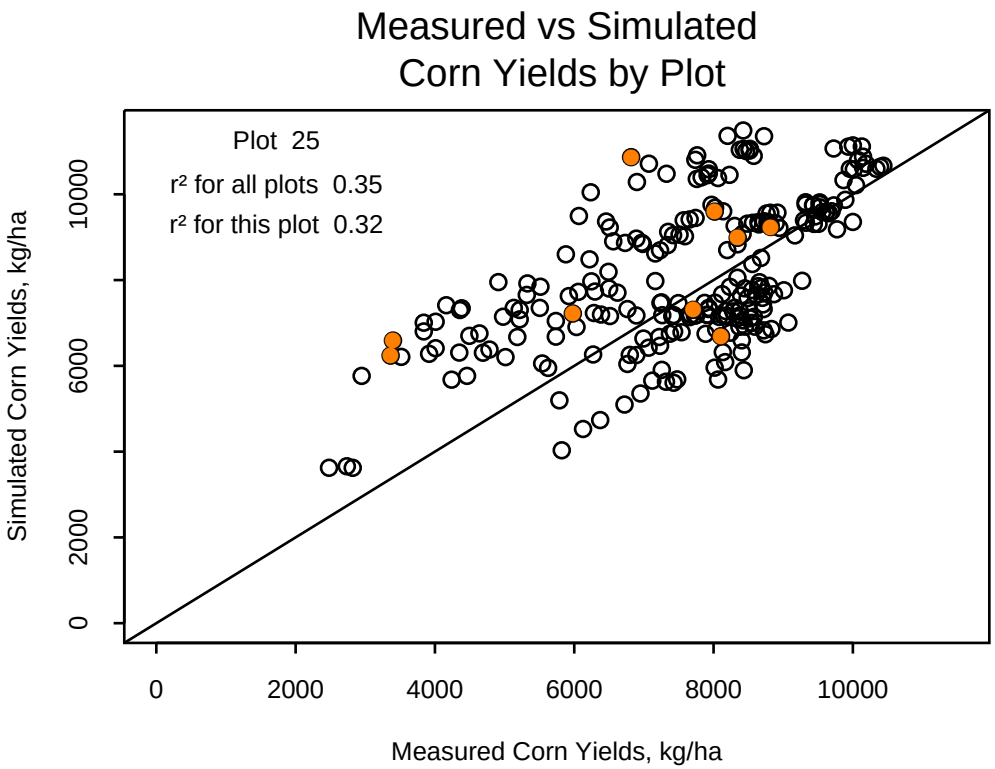

Measured vs Simulated
Corn Yields by Plot
Plot 19
r² for all plots 0.35
r² for this plot 0.13
Simulated Corn Yields, kg/ha
Measured Corn Yields, kg/ha
0
2000
4000
6000
8000
10000

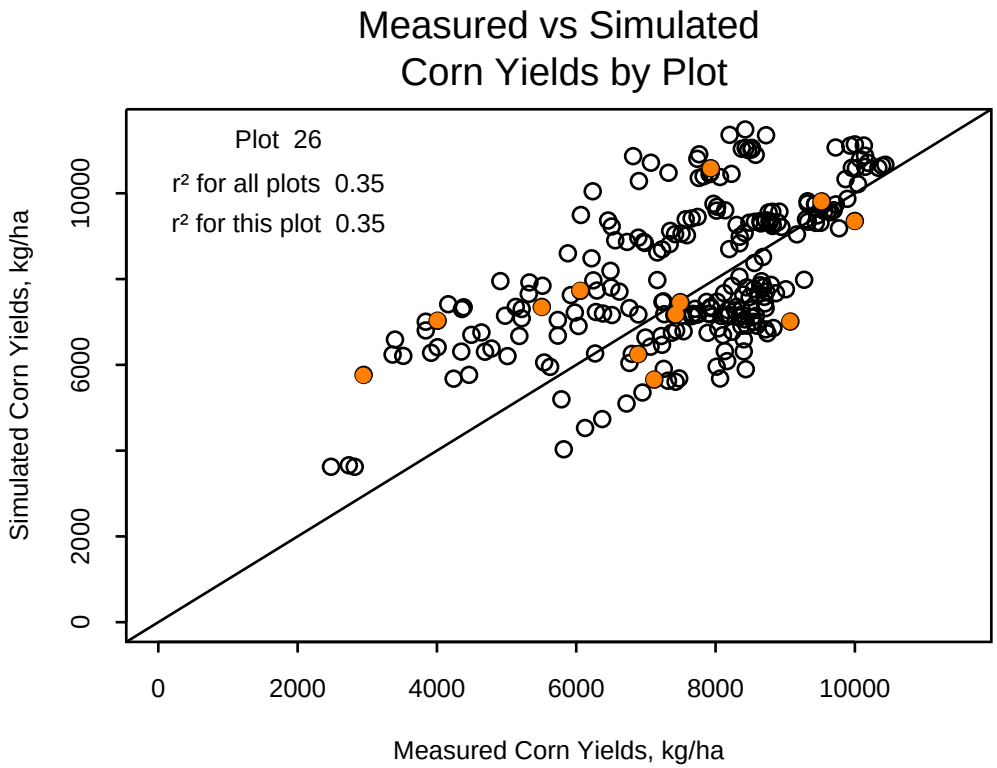

Measured vs Simulated
Corn Yields by Plot
Plot 21
r² for all plots 0.35
r² for this plot 0.28
Simulated Corn Yields, kg/ha
Measured Corn Yields, kg/ha
0
2000
4000
6000
8000
10000

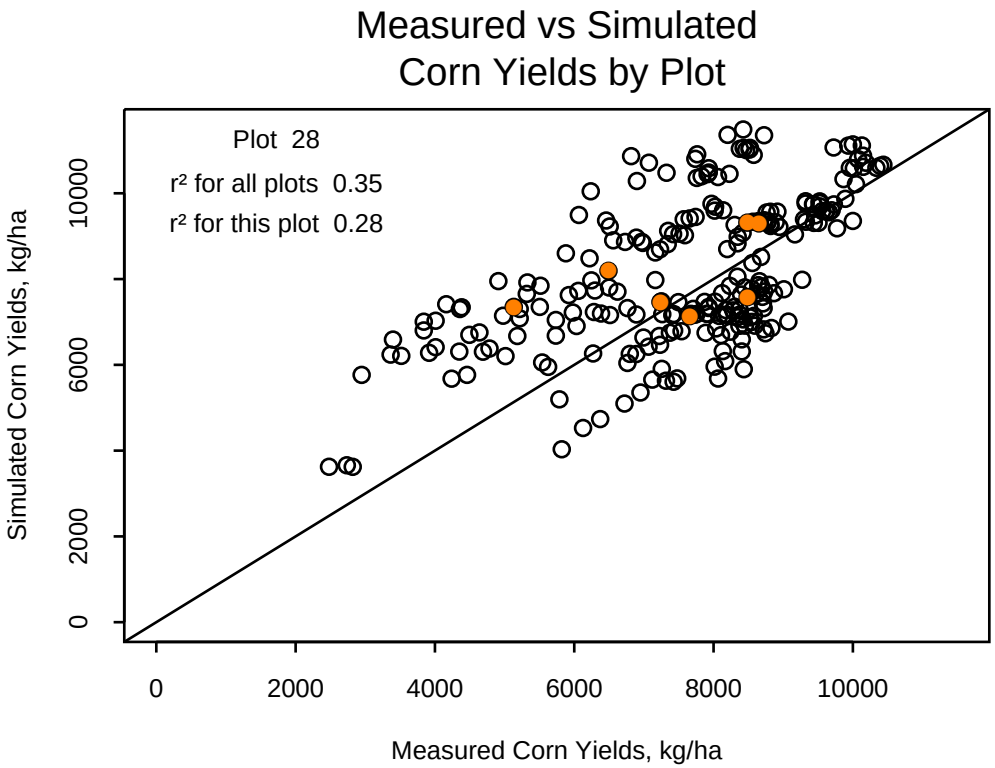

Measured vs Simulated
Corn Yields by Plot
Plot 22
r² for all plots 0.35
r² for this plot 0.54
Simulated Corn Yields, kg/ha
Measured Corn Yields, kg/ha
0
2000
4000
6000
8000
10000

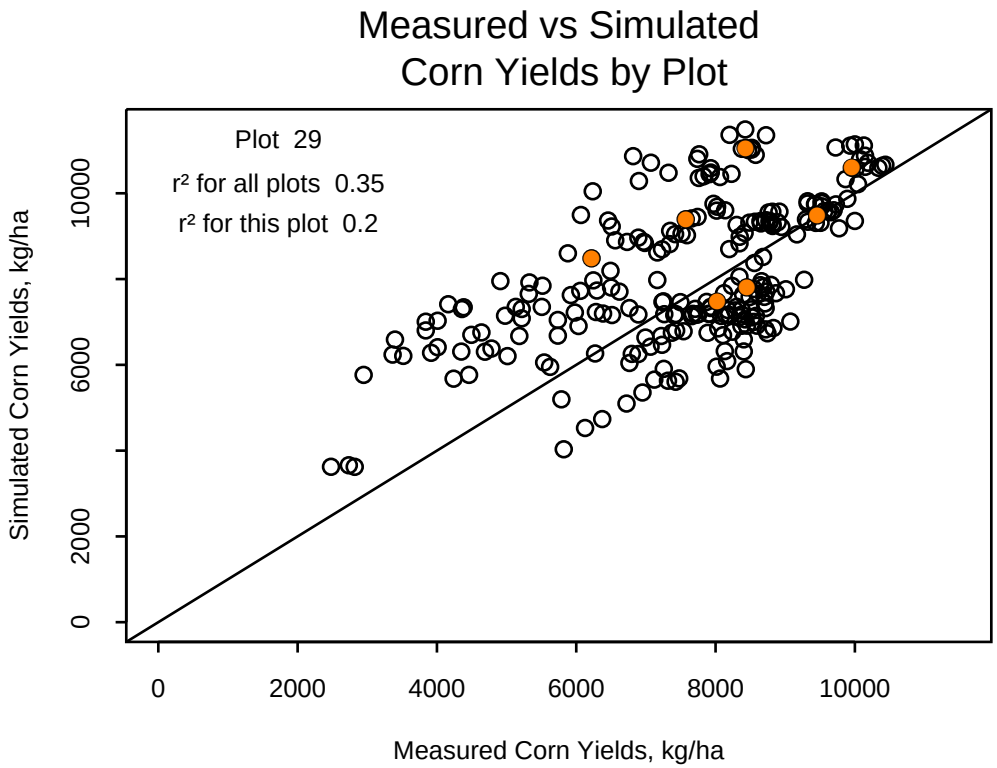

Measured vs Simulated
Corn Yields by Plot
Plot 23
r² for all plots 0.35
r² for this plot 0.33
Simulated Corn Yields, kg/ha
Measured Corn Yields, kg/ha
0
2000
4000
6000
8000
10000

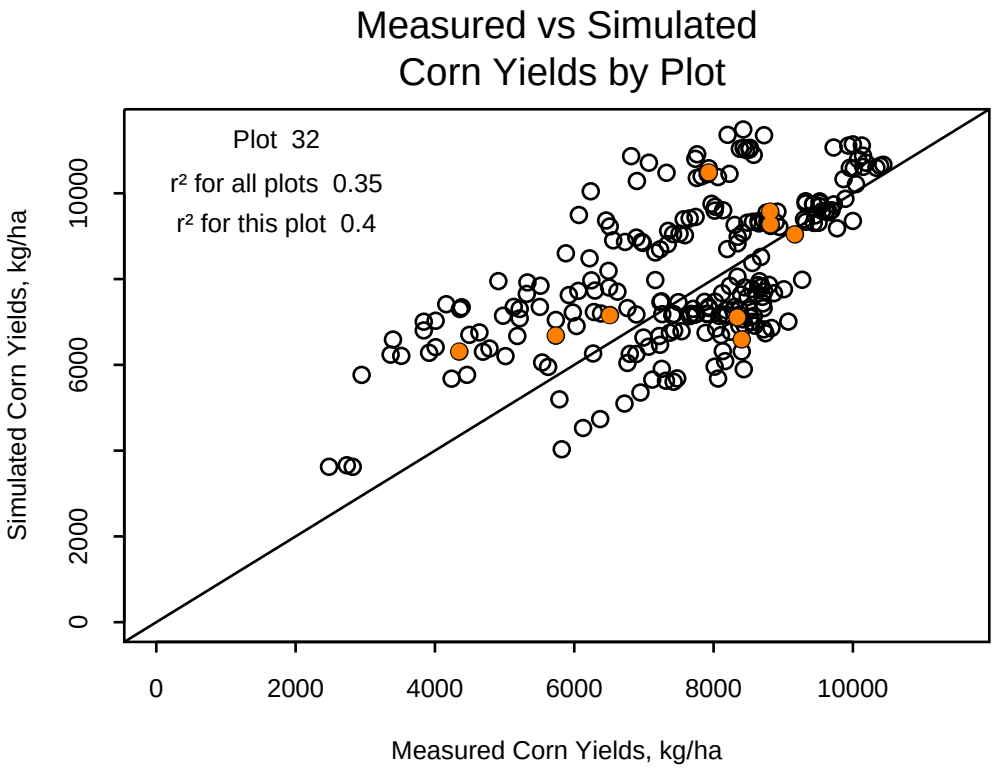

Measured vs Simulated
Corn Yields by Plot
Plot 24
r² for all plots 0.35
r² for this plot 0.13
Simulated Corn Yields, kg/ha
Measured Corn Yields, kg/ha
0
2000
4000
6000
8000
10000

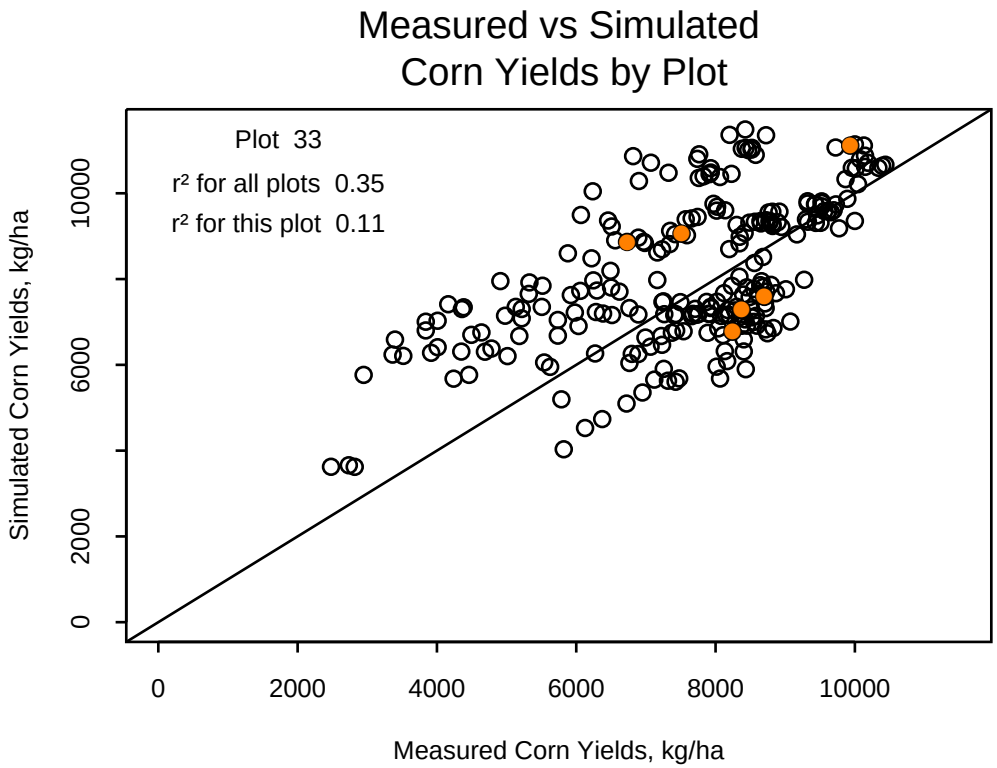

Measured vs Simulated
Corn Yields by Plot
Plot 25
r² for all plots 0.35
r² for this plot 0.32
Simulated Corn Yields, kg/ha
Measured Corn Yields, kg/ha
0
2000
4000
6000
8000
10000

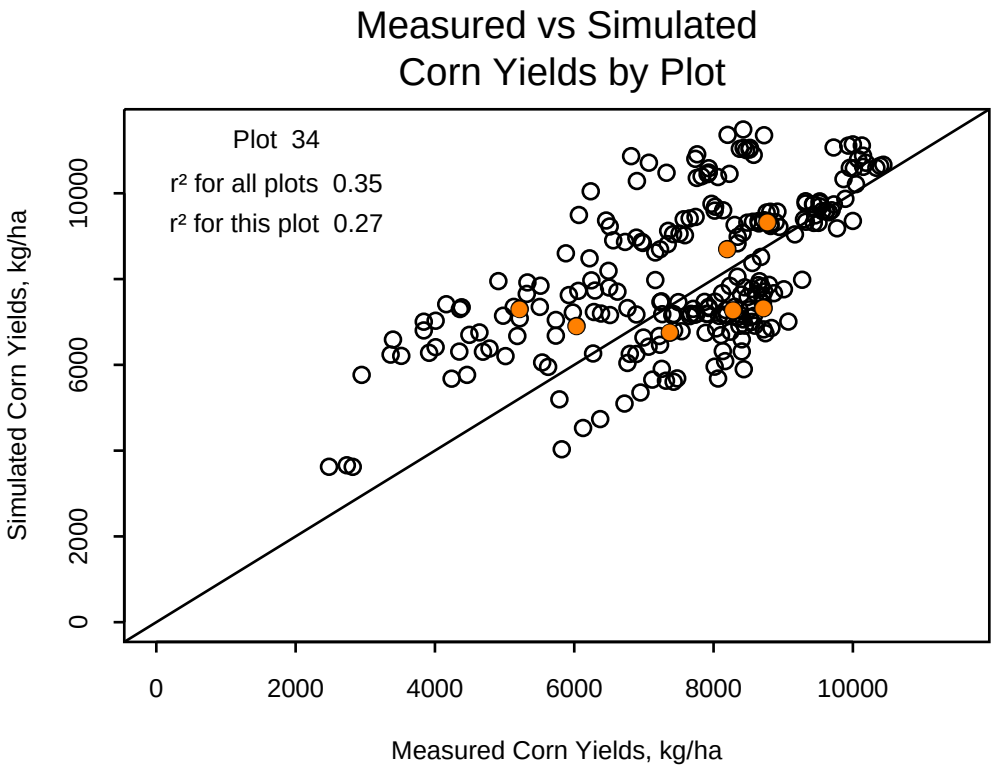

Measured vs Simulated
Corn Yields by Plot
Plot 26
r² for all plots 0.35
r² for this plot 0.35
Simulated Corn Yields, kg/ha
Measured Corn Yields, kg/ha
0
2000
4000
6000
8000
10000

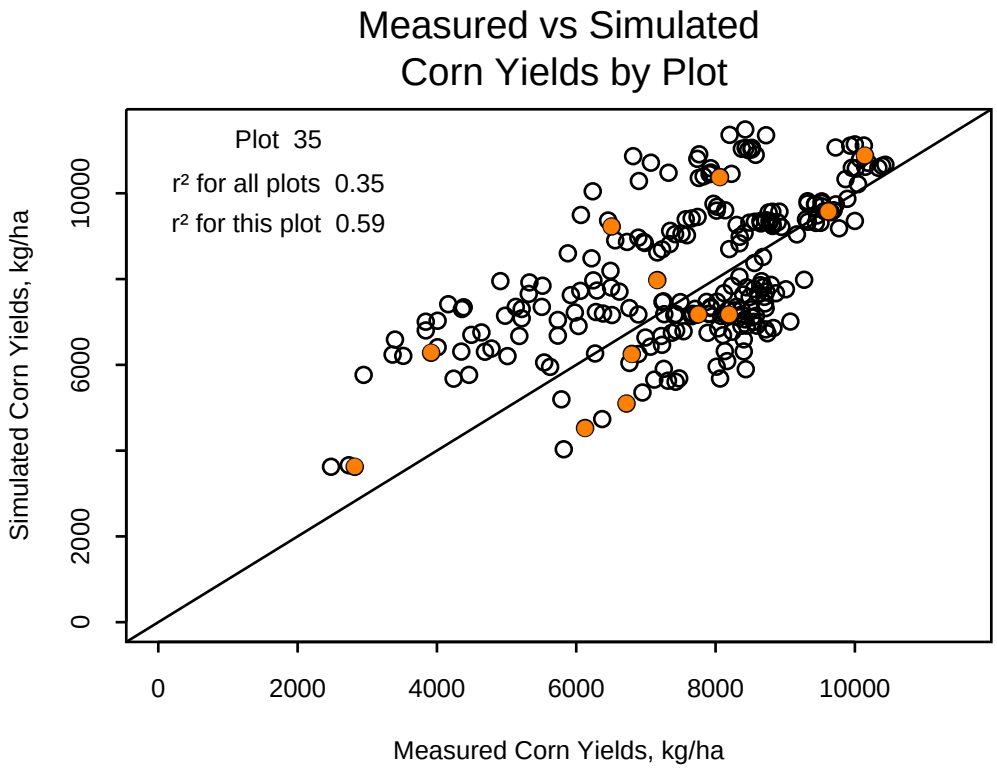

Measured vs Simulated
Corn Yields by Plot
Plot 28
r² for all plots 0.35
r² for this plot 0.28
Simulated Corn Yields, kg/ha
Measured Corn Yields, kg/ha
0
2000
4000
6000
8000
10000

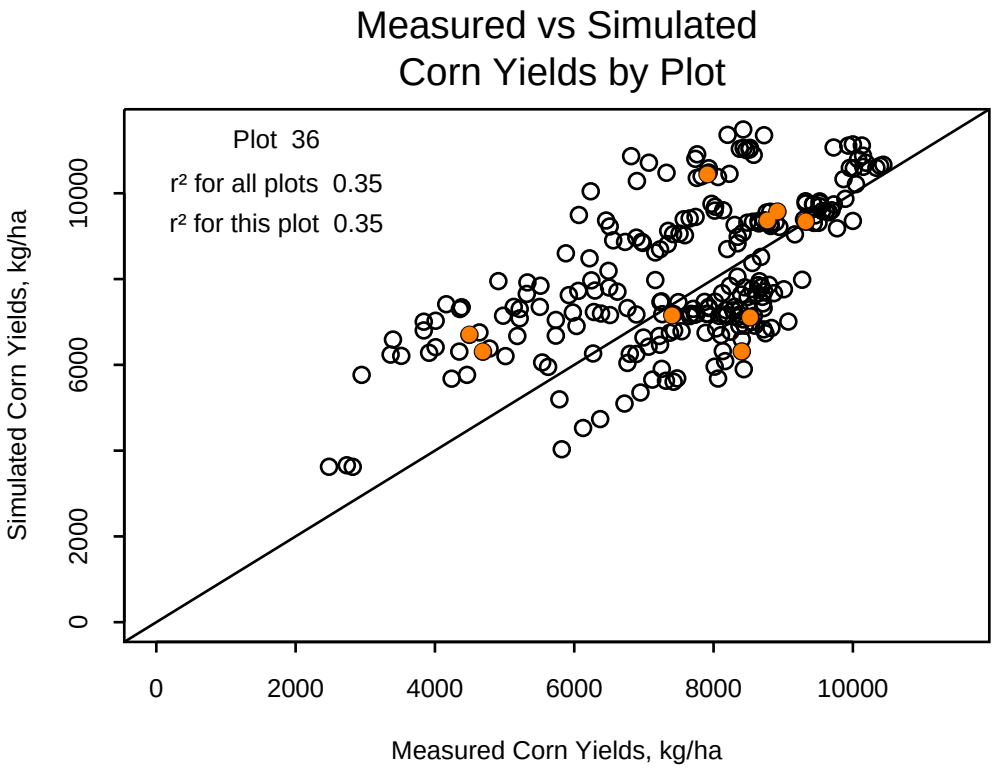

Measured vs Simulated
Corn Yields by Plot
Plot 29
r² for all plots 0.35
r² for this plot 0.2
Simulated Corn Yields, kg/ha
Measured Corn Yields, kg/ha
0
2000
4000
6000
8000
10000

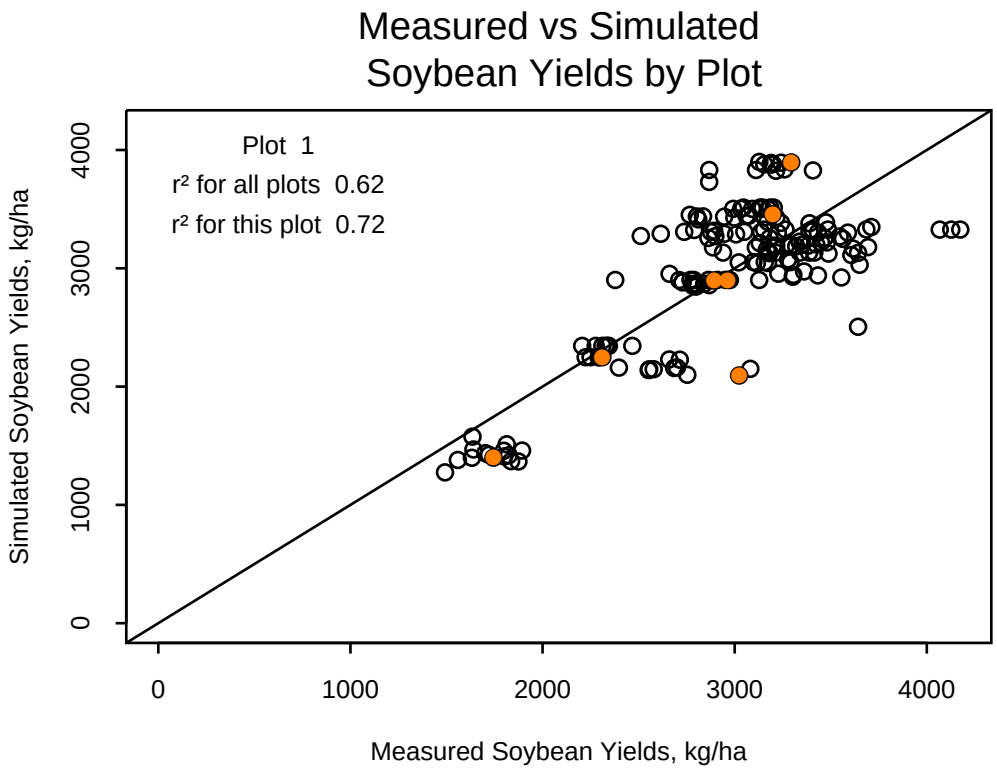

Measured vs Simulated
Corn Yields by Plot
Plot 32
r² for all plots 0.35
r² for this plot 0.4
Simulated Corn Yields, kg/ha
Measured Corn Yields, kg/ha
0
2000
4000
6000
8000
10000

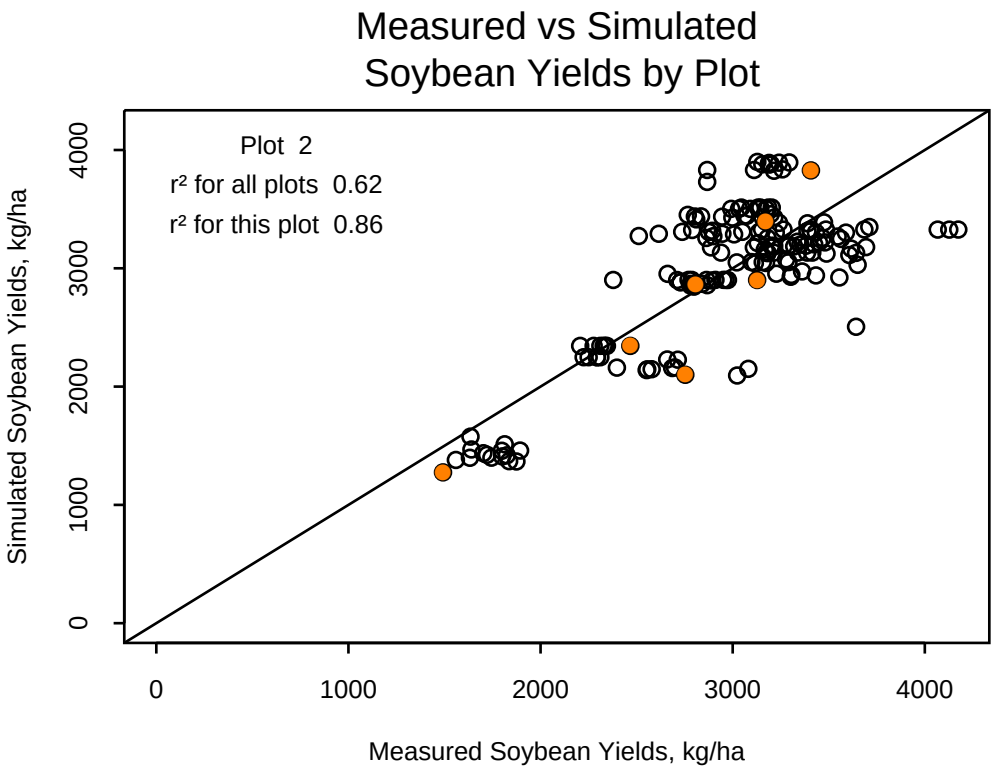

Measured vs Simulated
Corn Yields by Plot
Plot 33
r² for all plots 0.35
r² for this plot 0.11
Simulated Corn Yields, kg/ha
Measured Corn Yields, kg/ha
0
2000
4000
6000
8000
10000

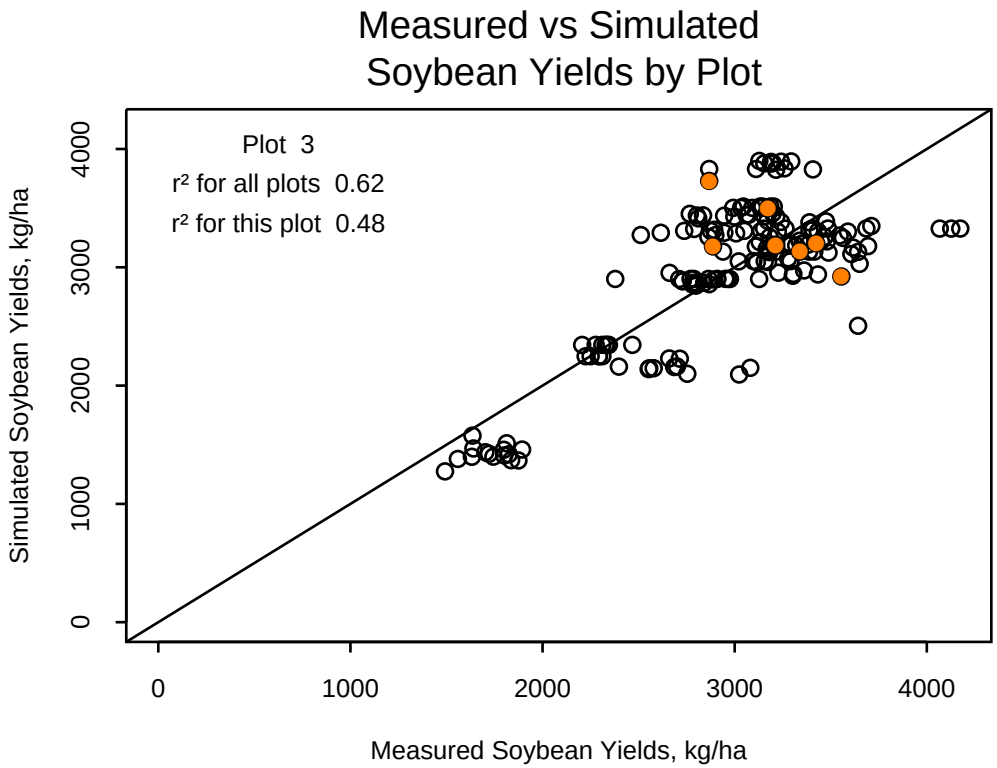

Measured vs Simulated
Corn Yields by Plot
Plot 34
r² for all plots 0.35
r² for this plot 0.27
Simulated Corn Yields, kg/ha
Measured Corn Yields, kg/ha
0
2000
4000
6000
8000
10000

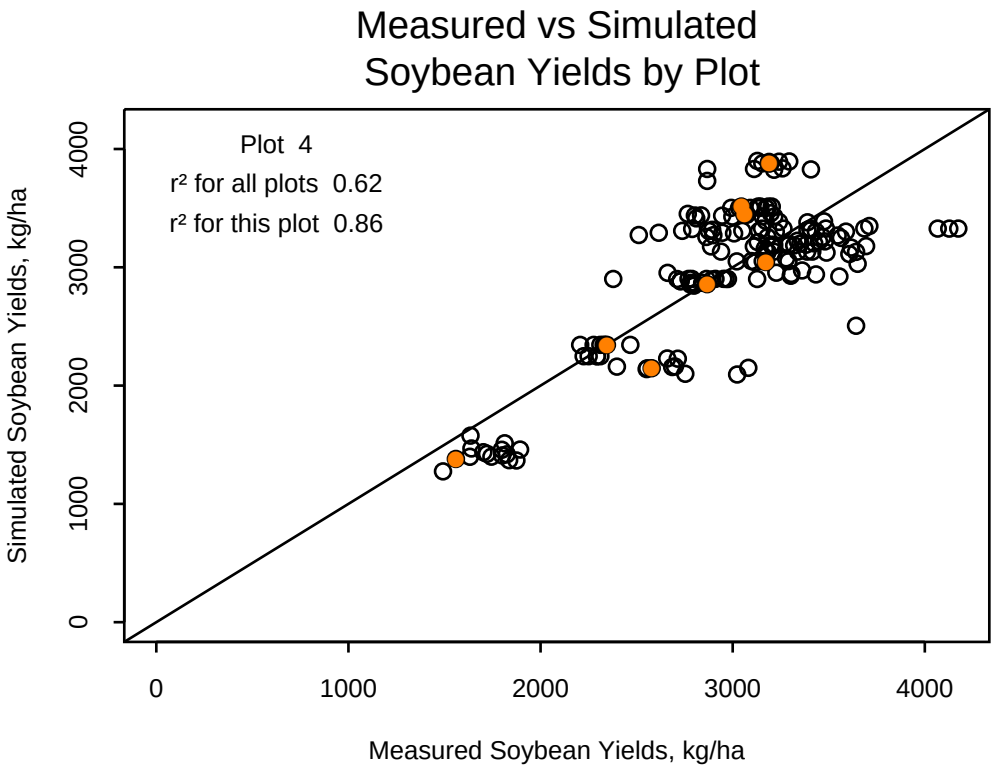

Measured vs Simulated
Corn Yields by Plot
Plot 35
r² for all plots 0.35
r² for this plot 0.59
Simulated Corn Yields, kg/ha
Measured Corn Yields, kg/ha
0
2000
4000
6000
8000
10000

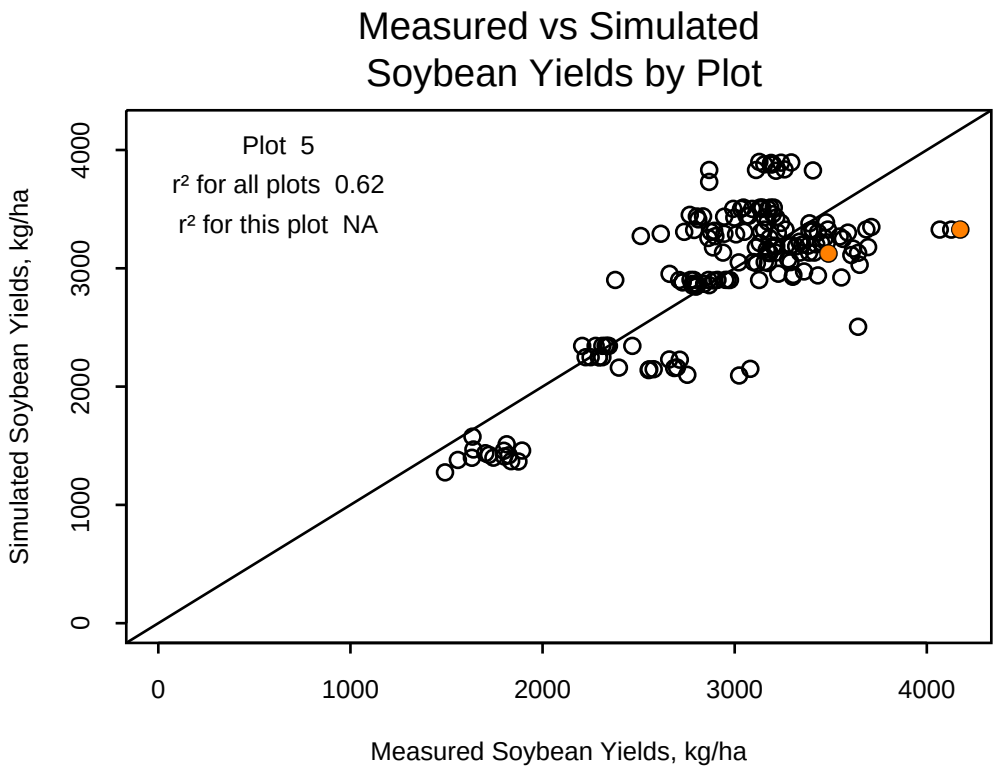

Measured vs Simulated
Corn Yields by Plot
Plot 36
r² for all plots 0.35
r² for this plot 0.35
Simulated Corn Yields, kg/ha
Measured Corn Yields, kg/ha
0
2000
4000
6000
8000
10000

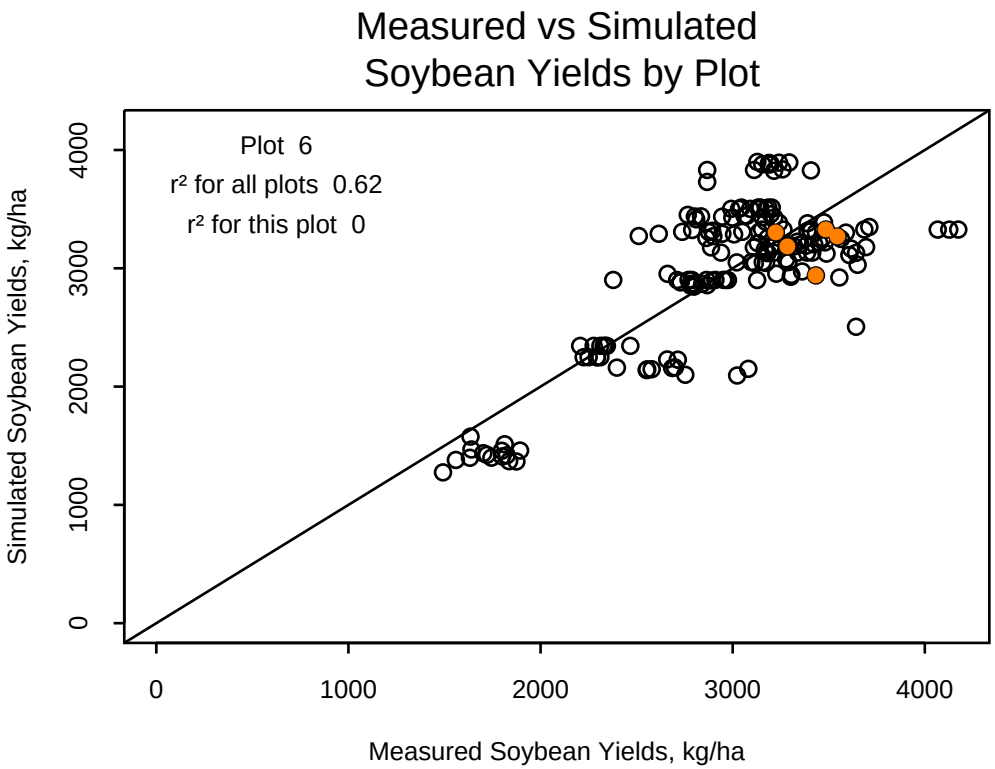

Measured vs Simulated
Soybean Yields by Plot
Plot 1
r² for all plots 0.62
r² for this plot 0.72
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
0
1000
2000
3000
4000

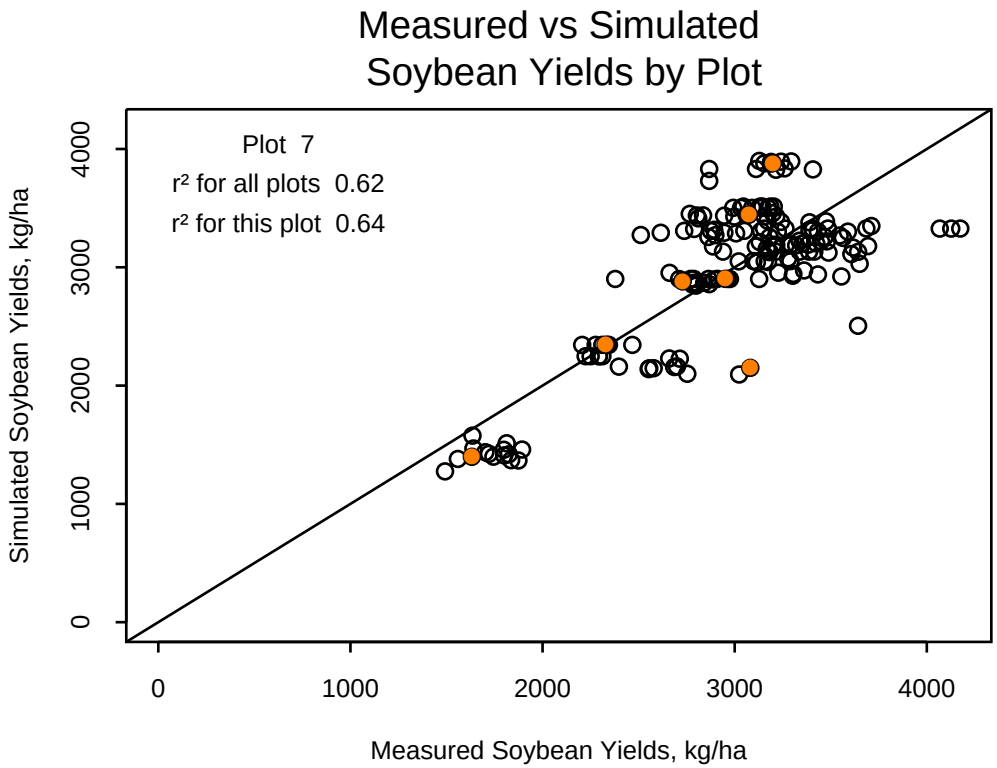

Measured vs Simulated
Soybean Yields by Plot
Plot 2
r² for all plots 0.62
r² for this plot 0.86
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
0
1000
2000
3000
4000

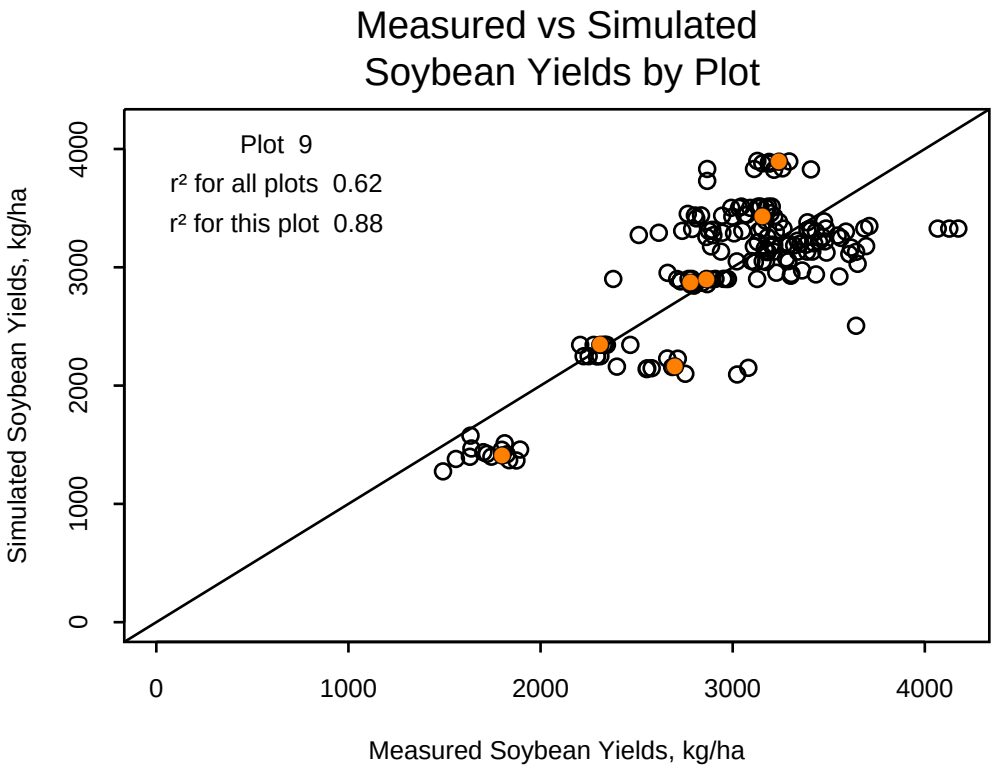

Measured vs Simulated
Soybean Yields by Plot
Plot 3
r² for all plots 0.62
r² for this plot 0.48
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
0
1000
2000
3000
4000

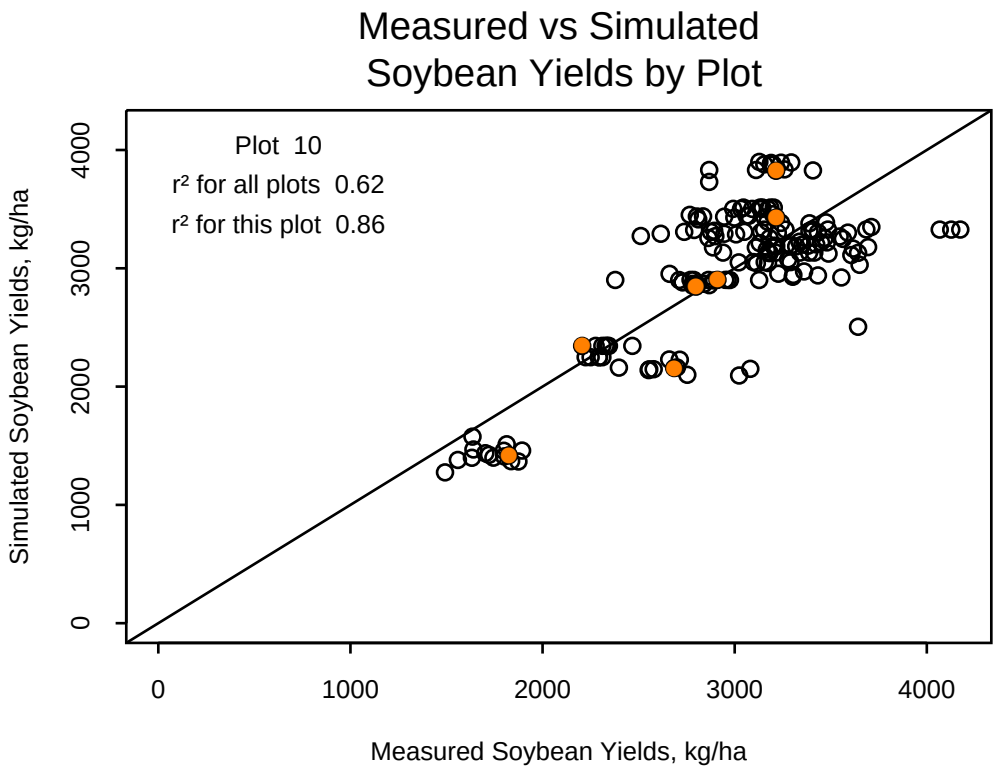

Measured vs Simulated
Soybean Yields by Plot
Plot 4
r² for all plots 0.62
r² for this plot 0.86
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
0
1000
2000
3000
4000

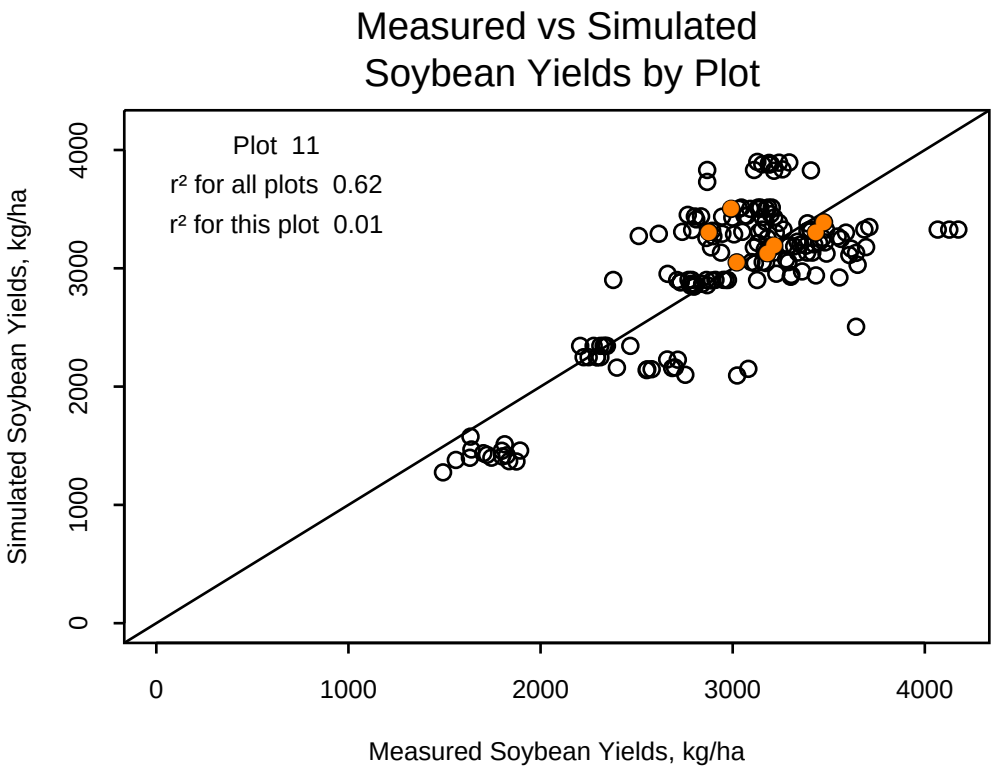

Measured vs Simulated
Soybean Yields by Plot
Plot 5
r² for all plots 0.62
r² for this plot NA
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
0
1000
2000
3000
4000

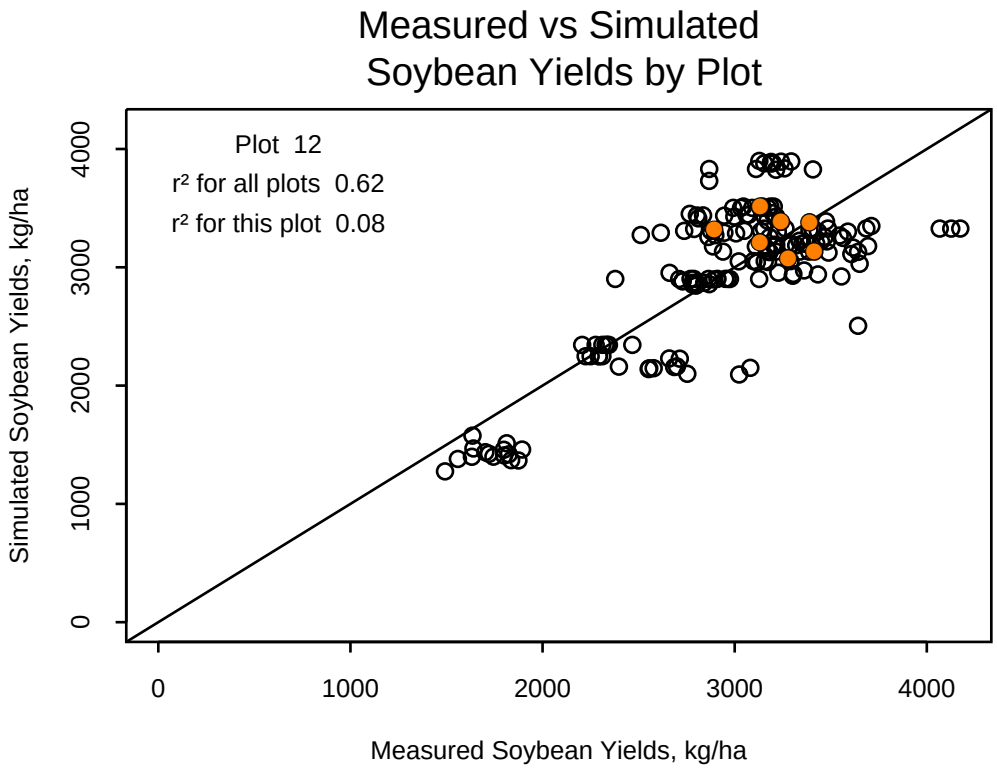

Measured vs Simulated
Soybean Yields by Plot
Plot 6
r² for all plots 0.62
r² for this plot 0
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
0
1000
2000
3000
4000

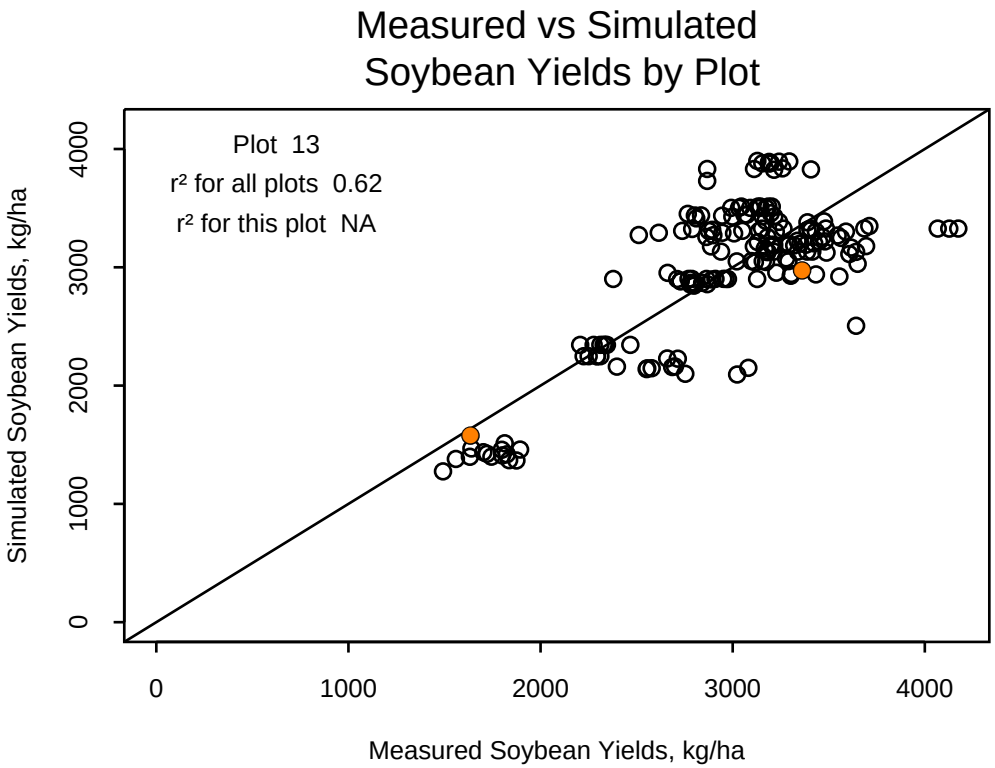

Measured vs Simulated
Soybean Yields by Plot
Plot 7
r² for all plots 0.62
r² for this plot 0.64
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
0
1000
2000
3000
4000

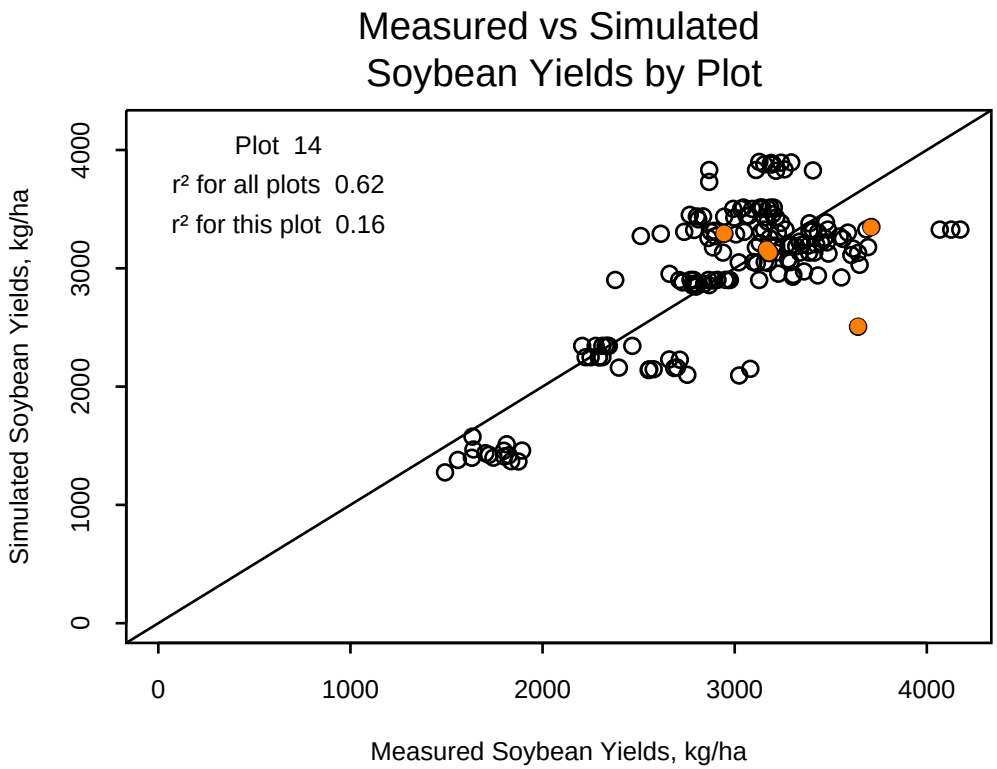

Measured vs Simulated
Soybean Yields by Plot
Plot 9
r² for all plots 0.62
r² for this plot 0.88
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
0
1000
2000
3000
4000

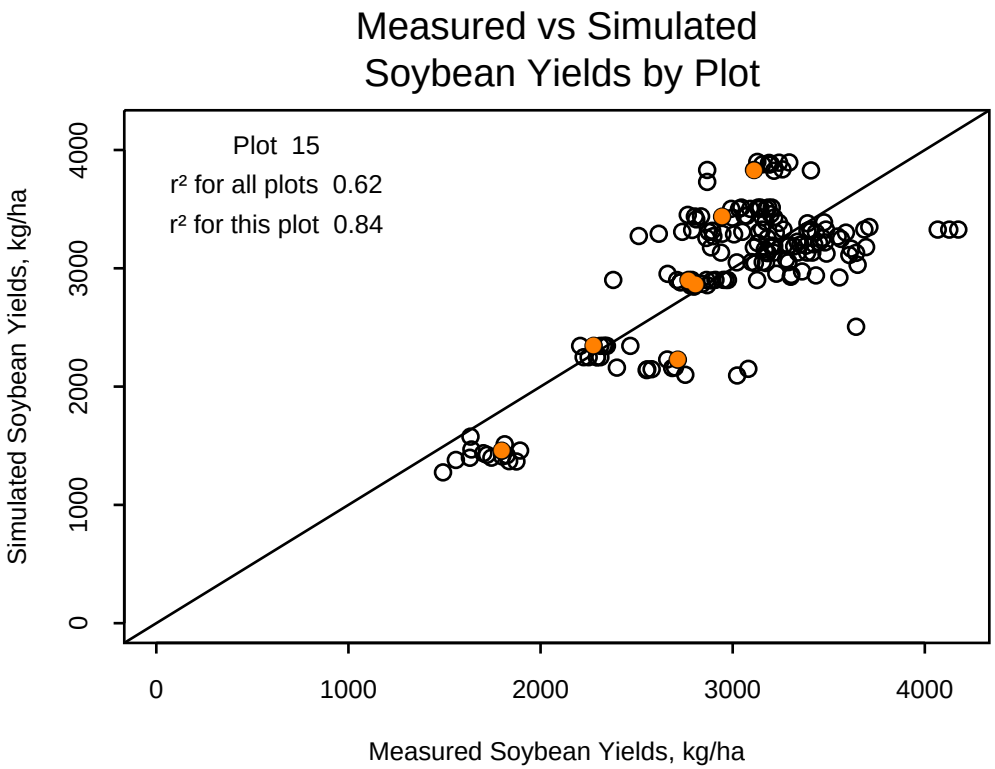

Measured vs Simulated
Soybean Yields by Plot
Plot 10
r² for all plots 0.62
r² for this plot 0.86
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
0
1000
2000
3000
4000

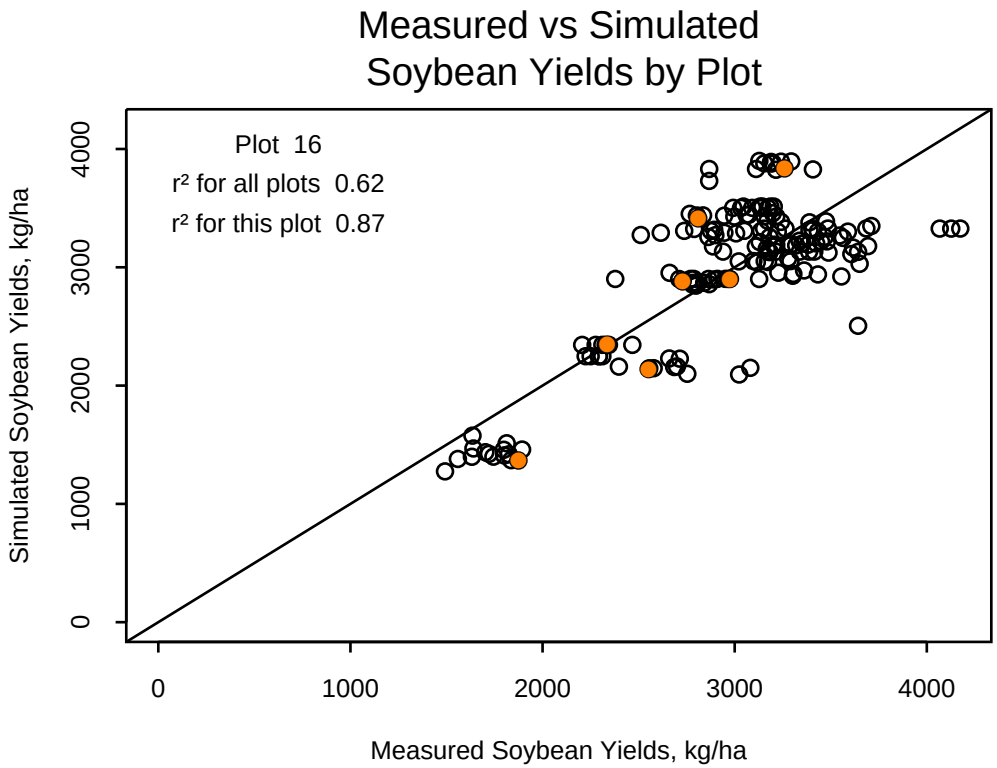

Measured vs Simulated
Soybean Yields by Plot
Plot 11
r² for all plots 0.62
r² for this plot 0.01
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
0
1000
2000
3000
4000

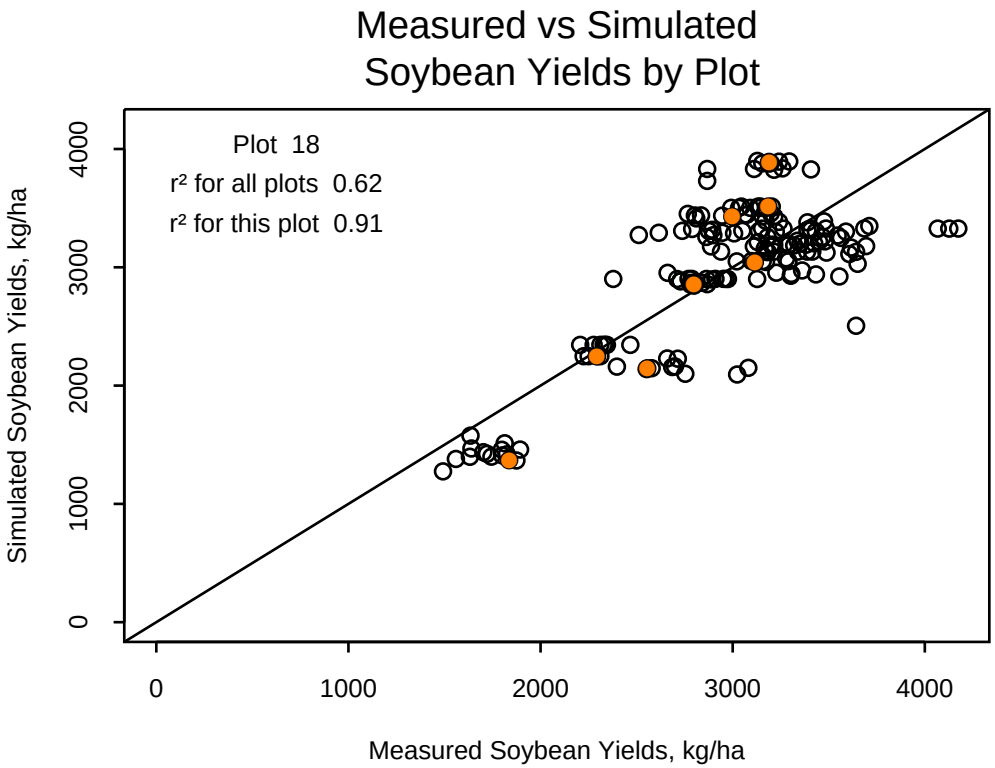

Measured vs Simulated
Soybean Yields by Plot
Plot 12
r² for all plots 0.62
r² for this plot 0.08
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
0
1000
2000
3000
4000

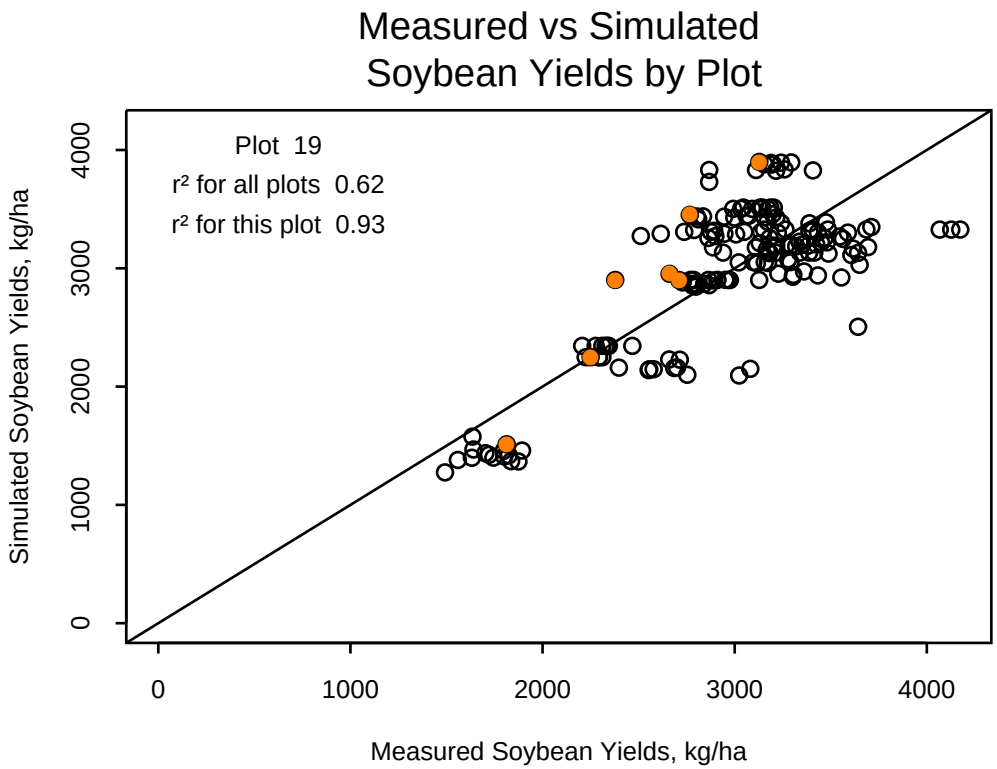

Measured vs Simulated
Soybean Yields by Plot
Plot 13
r² for all plots 0.62
r² for this plot NA
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
0
1000
2000
3000
4000

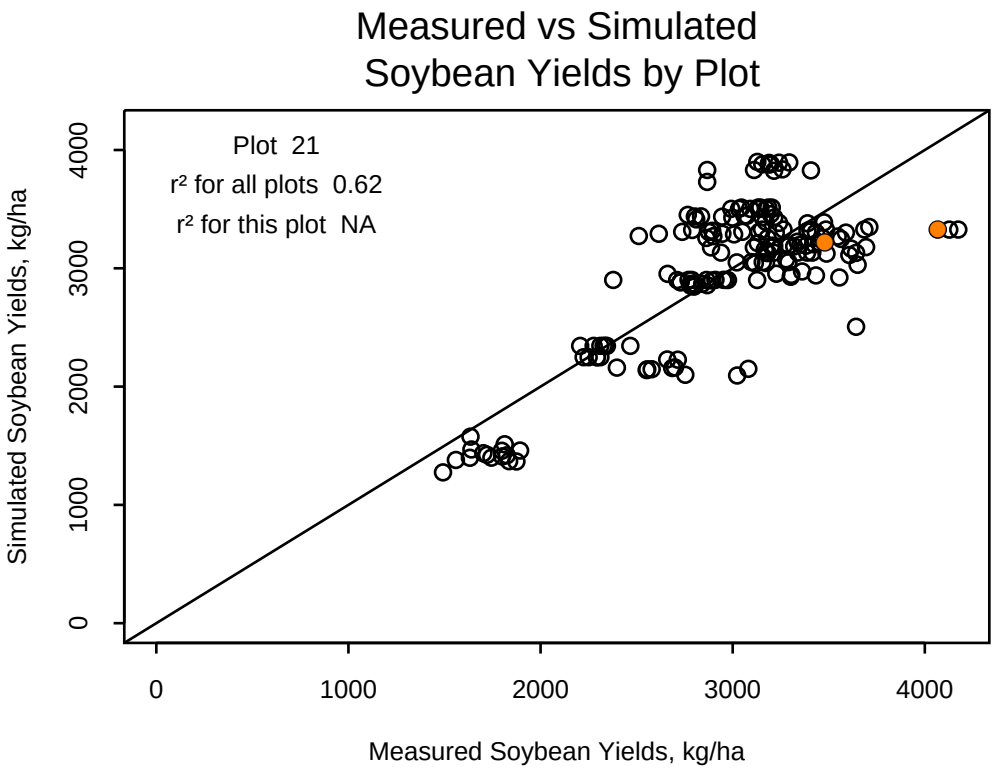

Measured vs Simulated
Soybean Yields by Plot
Plot 14
r² for all plots 0.62
r² for this plot 0.16
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
0
1000
2000
3000
4000

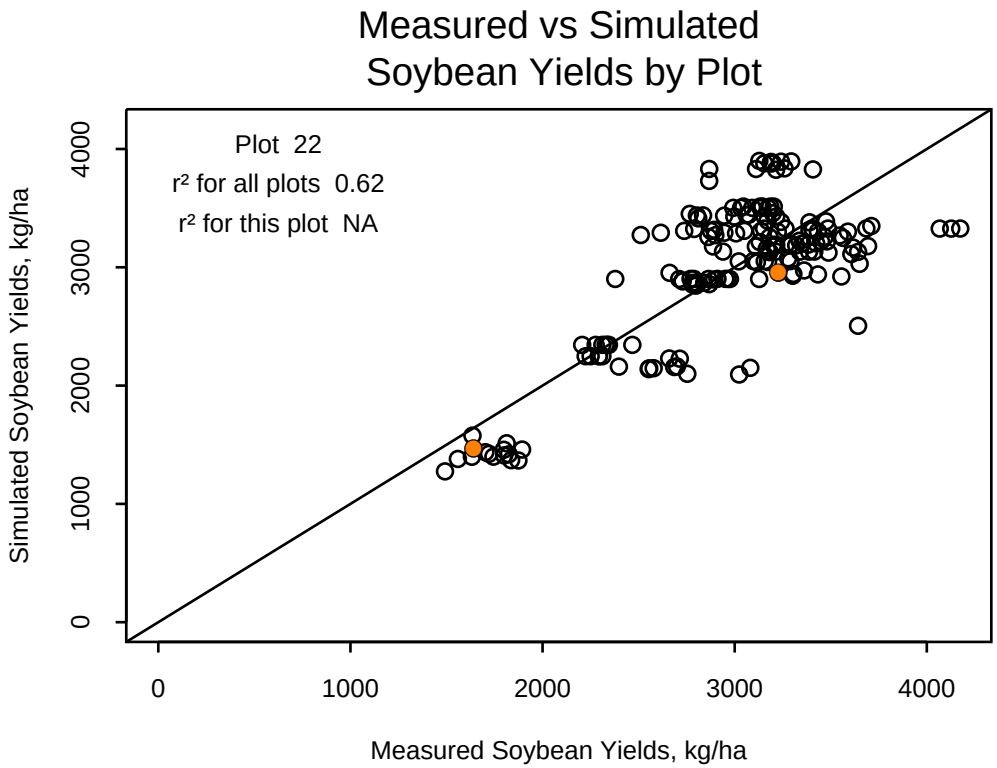

Measured vs Simulated
Soybean Yields by Plot
Plot 15
r² for all plots 0.62
r² for this plot 0.84
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
0
1000
2000
3000
4000

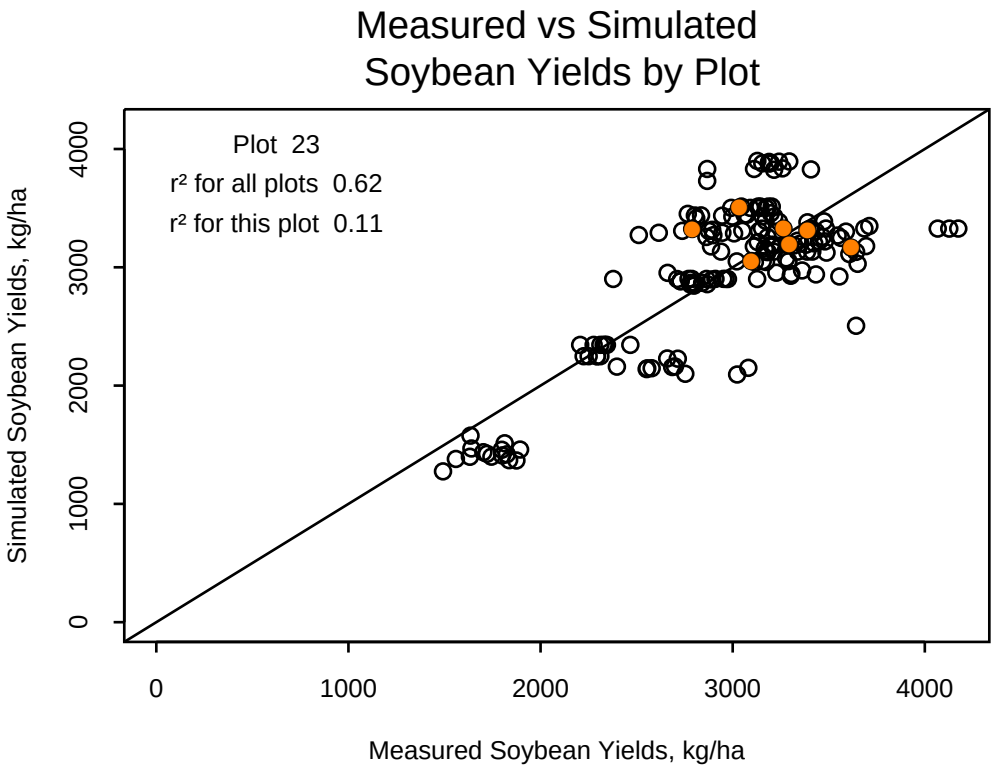

Measured vs Simulated
Soybean Yields by Plot
Plot 16
r² for all plots 0.62
r² for this plot 0.87
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
0
1000
2000
3000
4000

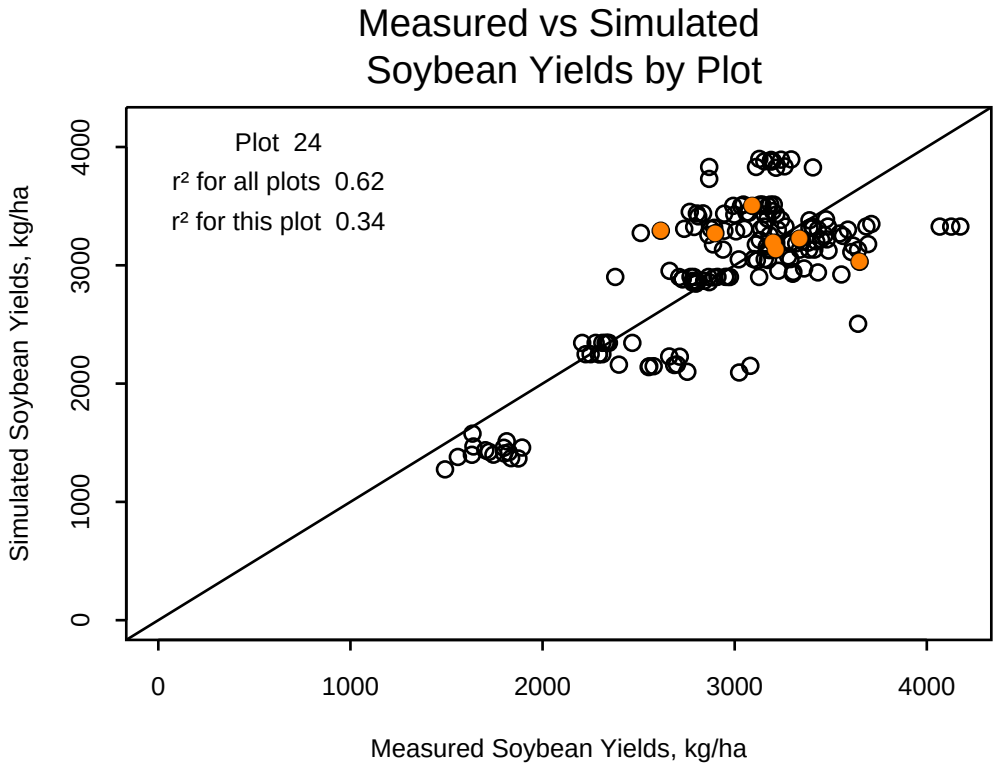

Measured vs Simulated
Soybean Yields by Plot
Plot 18
r² for all plots 0.62
r² for this plot 0.91
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
0
1000
2000
3000
4000

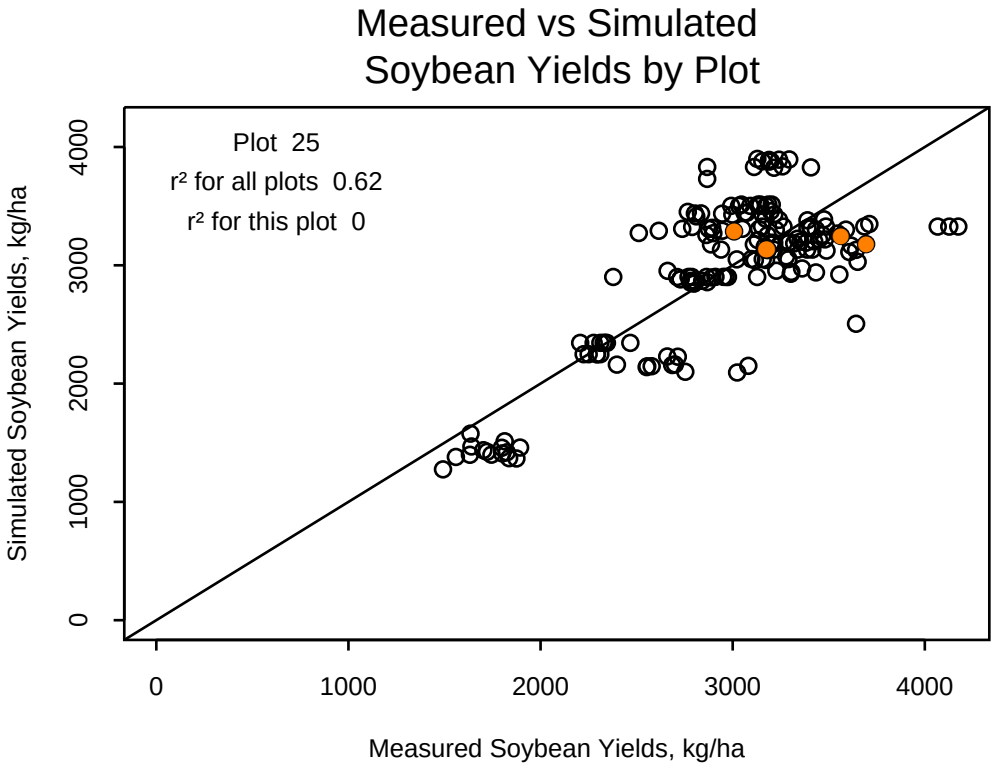

Measured vs Simulated
Soybean Yields by Plot
Plot 19
r² for all plots 0.62
r² for this plot 0.93
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
0
1000
2000
3000
4000

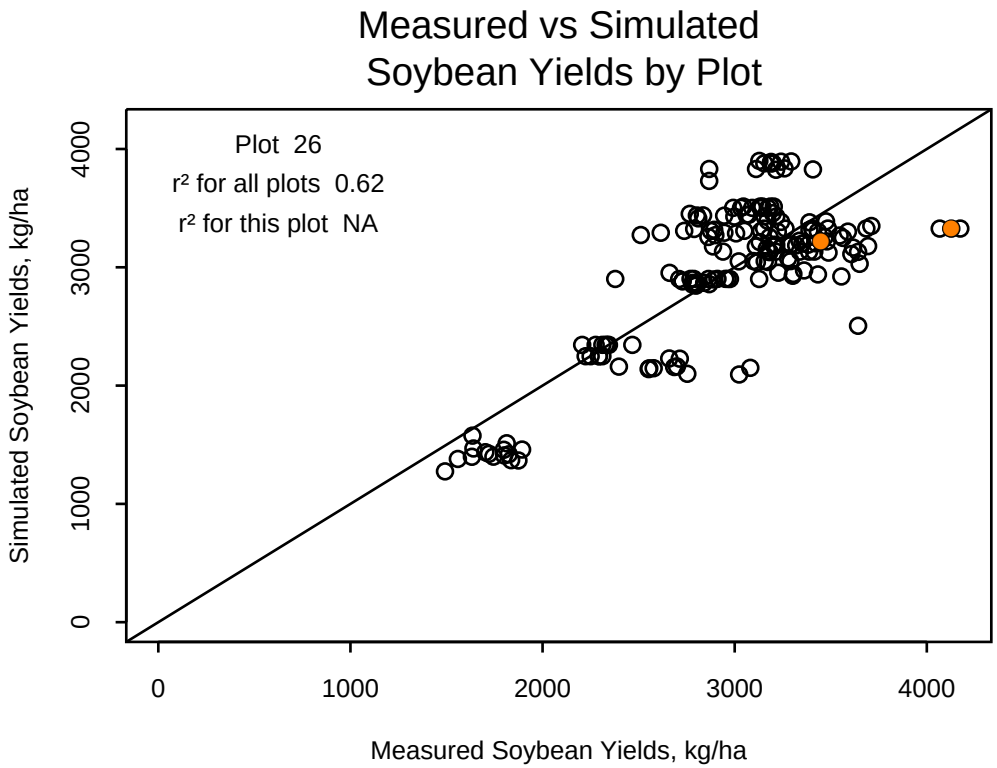

Measured vs Simulated
Soybean Yields by Plot
Plot 21
r² for all plots 0.62
r² for this plot NA
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
0
1000
2000
3000
4000

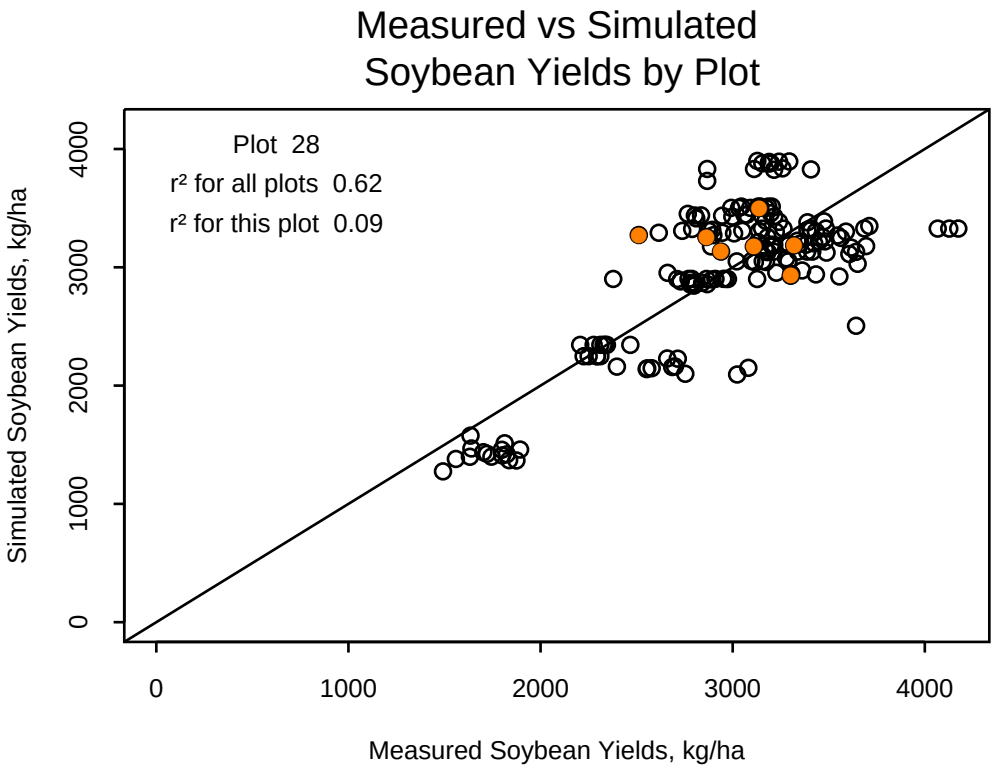

Measured vs Simulated
Soybean Yields by Plot
Plot 22
r² for all plots 0.62
r² for this plot NA
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
0
1000
2000
3000
4000

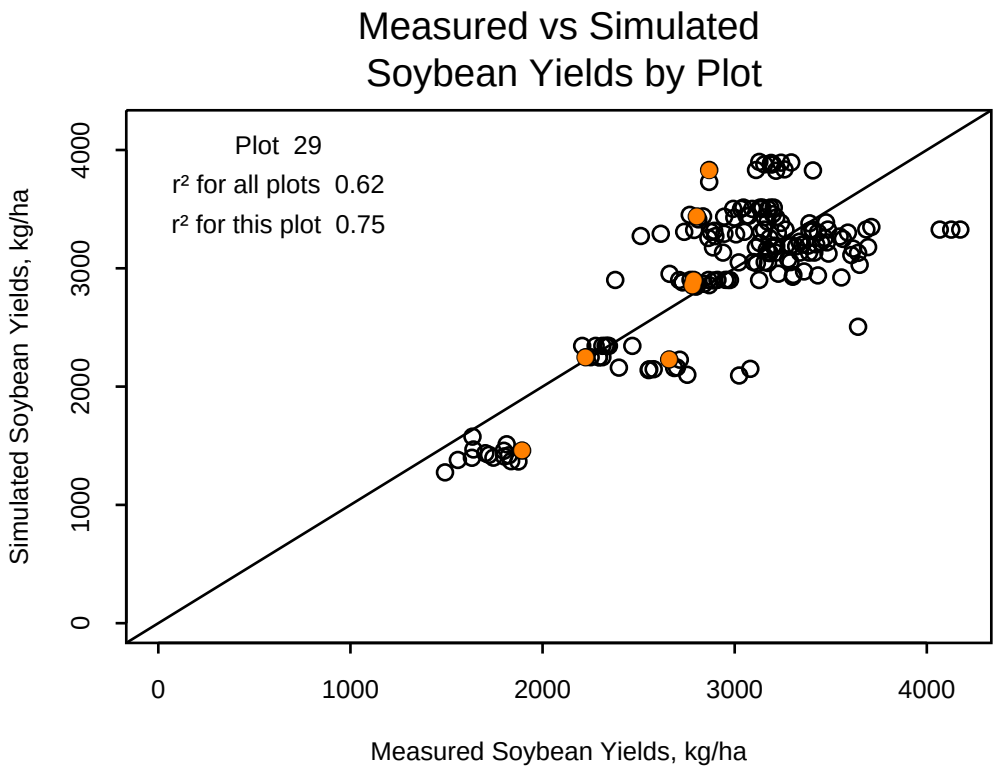

Measured vs Simulated
Soybean Yields by Plot
Plot 23
r² for all plots 0.62
r² for this plot 0.11
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
0
1000
2000
3000
4000

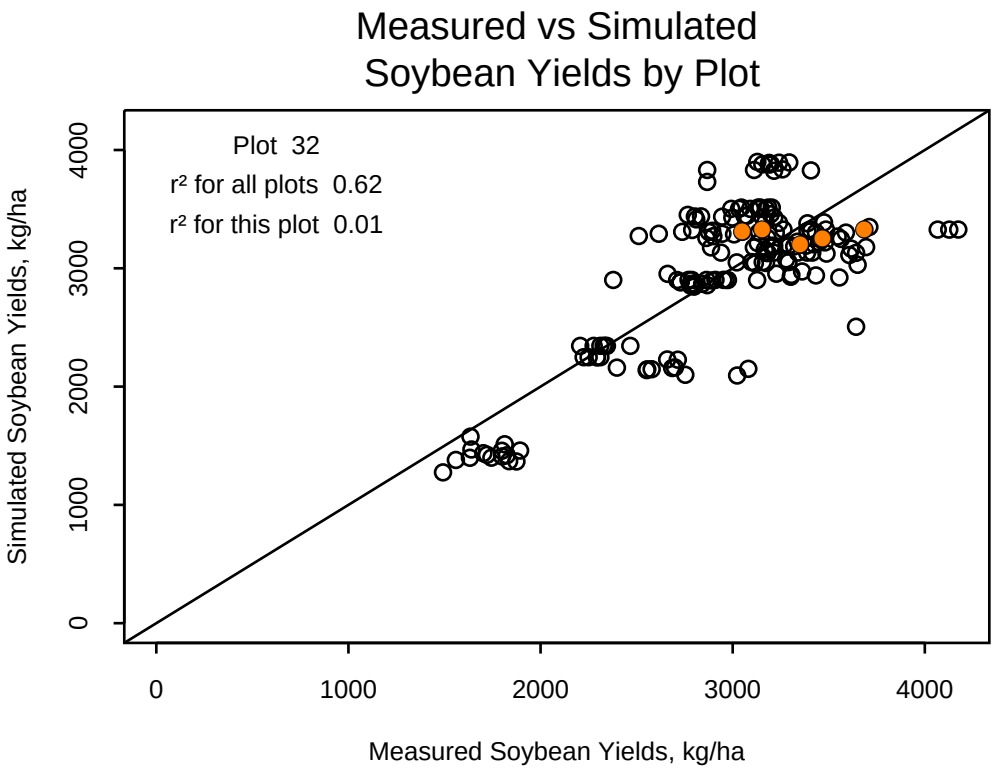

Measured vs Simulated
Soybean Yields by Plot
Plot 24
r² for all plots 0.62
r² for this plot 0.34
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
0
1000
2000
3000
4000

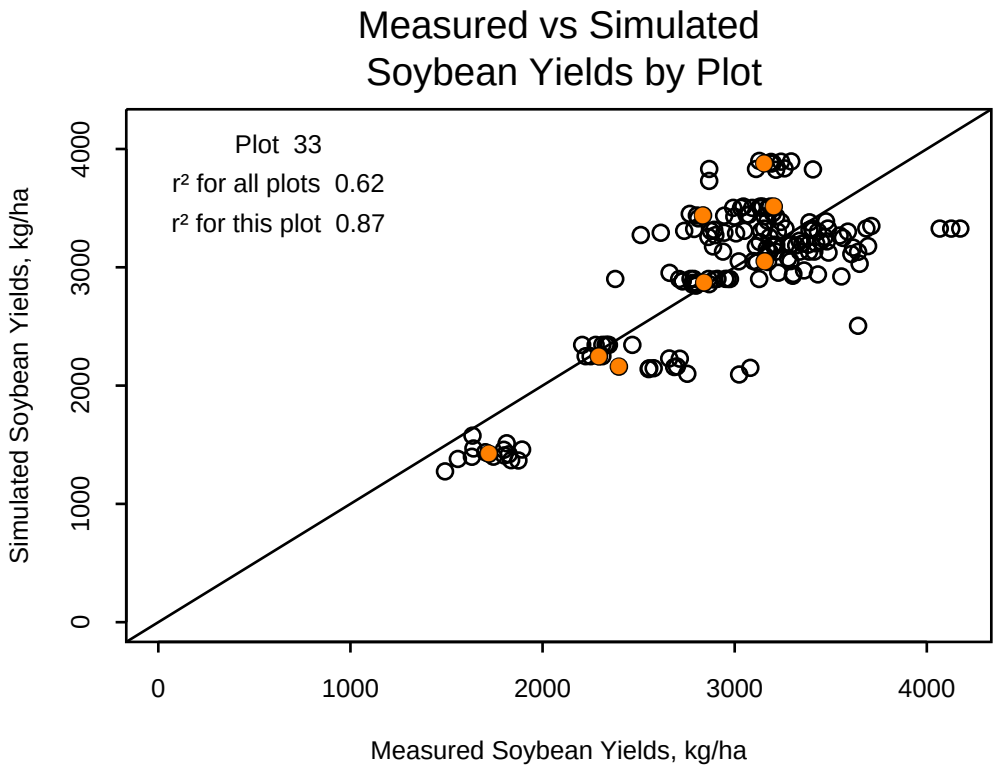

Measured vs Simulated
Soybean Yields by Plot
Plot 25
r² for all plots 0.62
r² for this plot 0
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
0
1000
2000
3000
4000

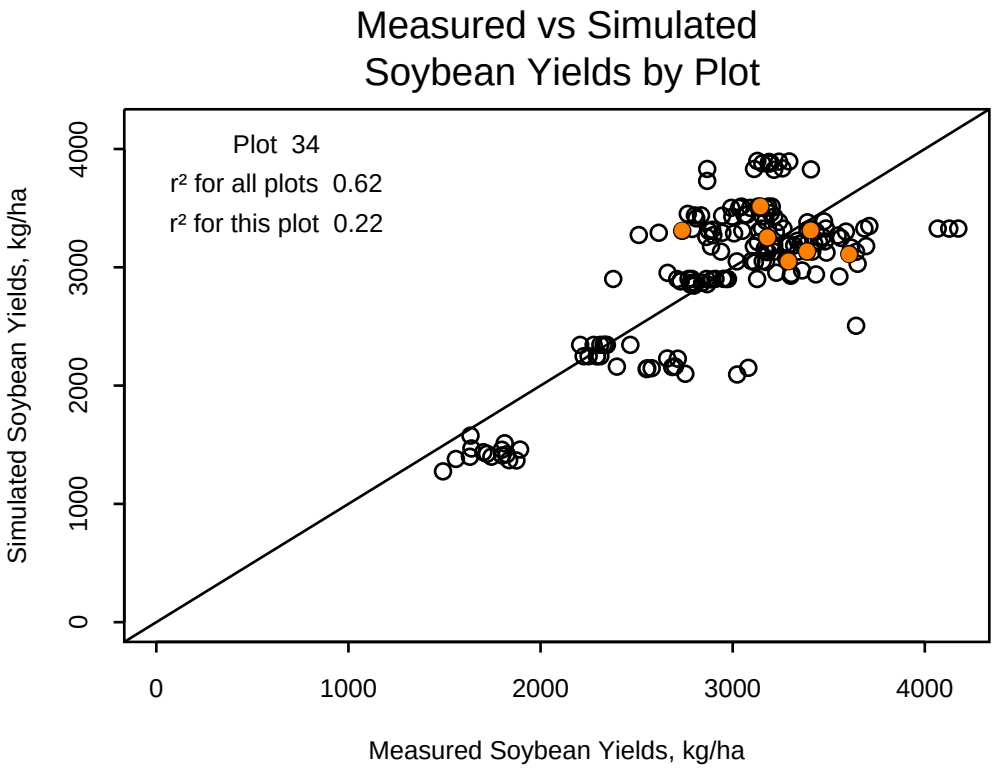

Measured vs Simulated
Soybean Yields by Plot
Plot 26
r² for all plots 0.62
r² for this plot NA
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
0
1000
2000
3000
4000

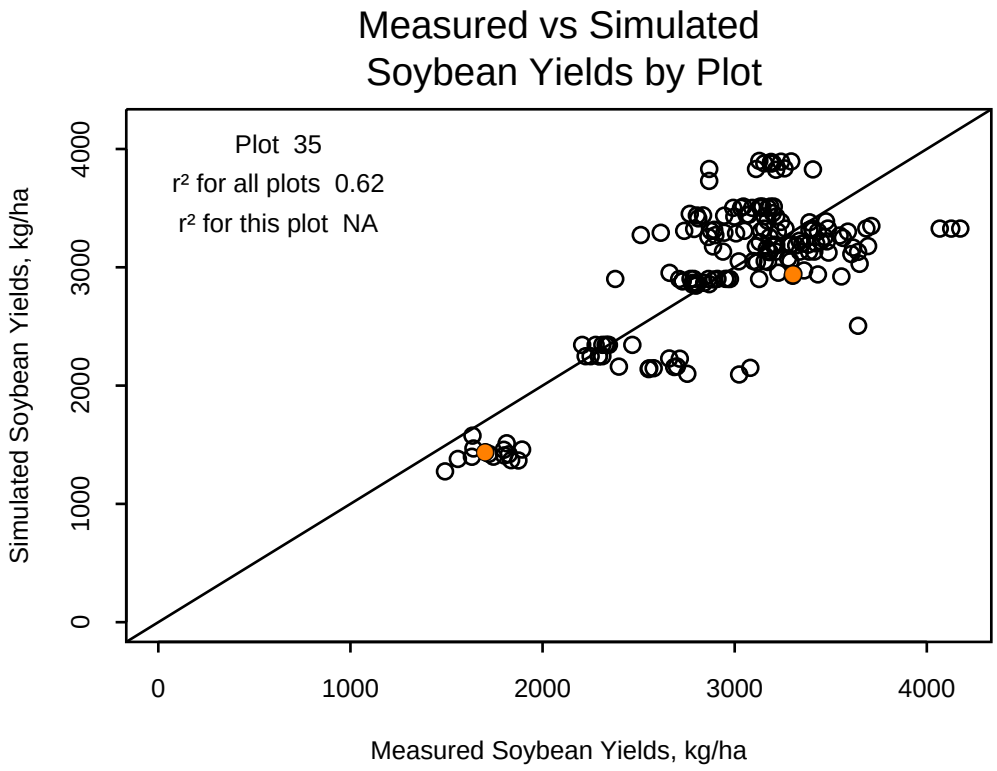

Measured vs Simulated
Soybean Yields by Plot
Plot 28
r² for all plots 0.62
r² for this plot 0.09
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
0
1000
2000
3000
4000

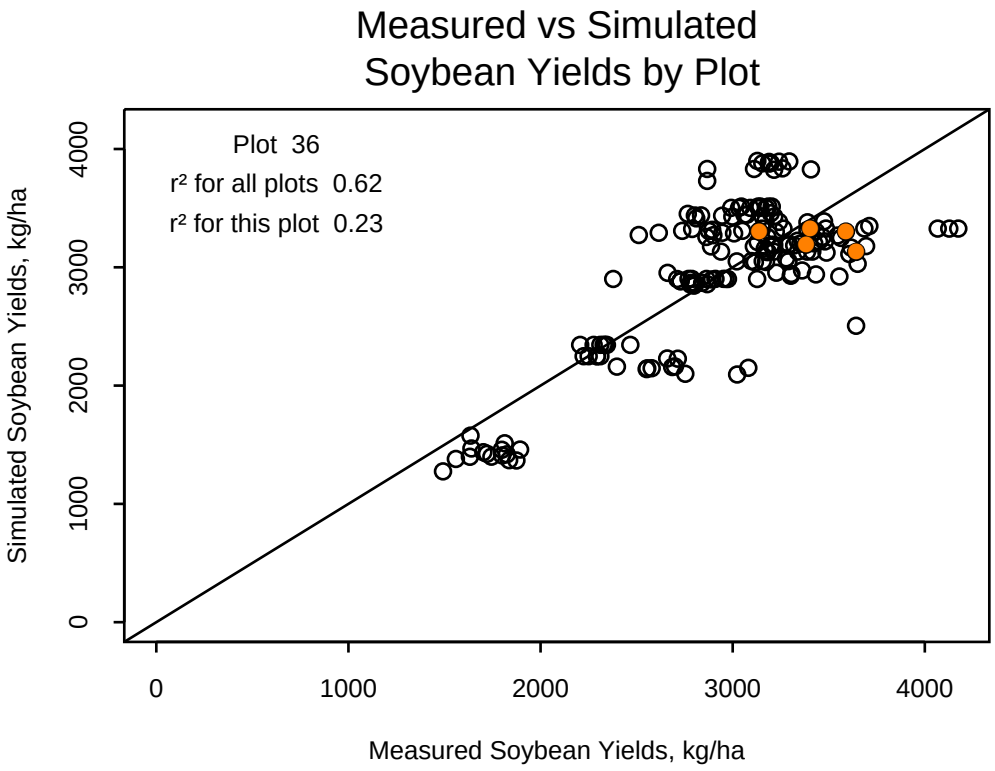

Measured vs Simulated
Soybean Yields by Plot
Plot 29
r² for all plots 0.62
r² for this plot 0.75
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
0
1000
2000
3000
4000

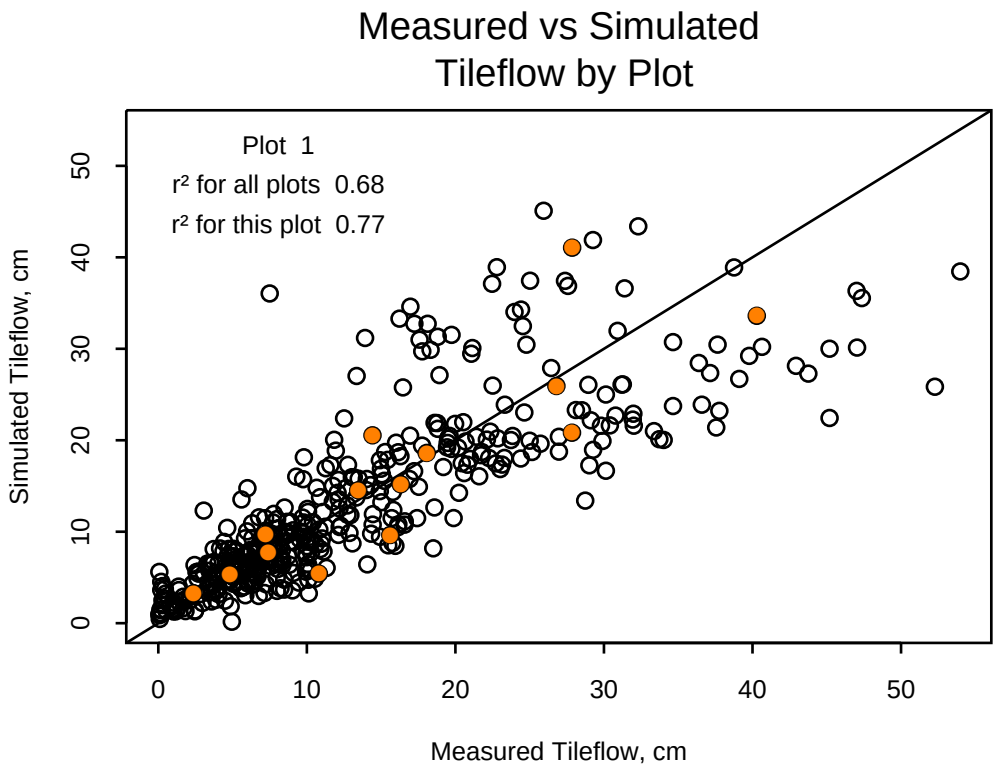

Measured vs Simulated
Soybean Yields by Plot
Plot 32
r² for all plots 0.62
r² for this plot 0.01
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
0
1000
2000
3000
4000

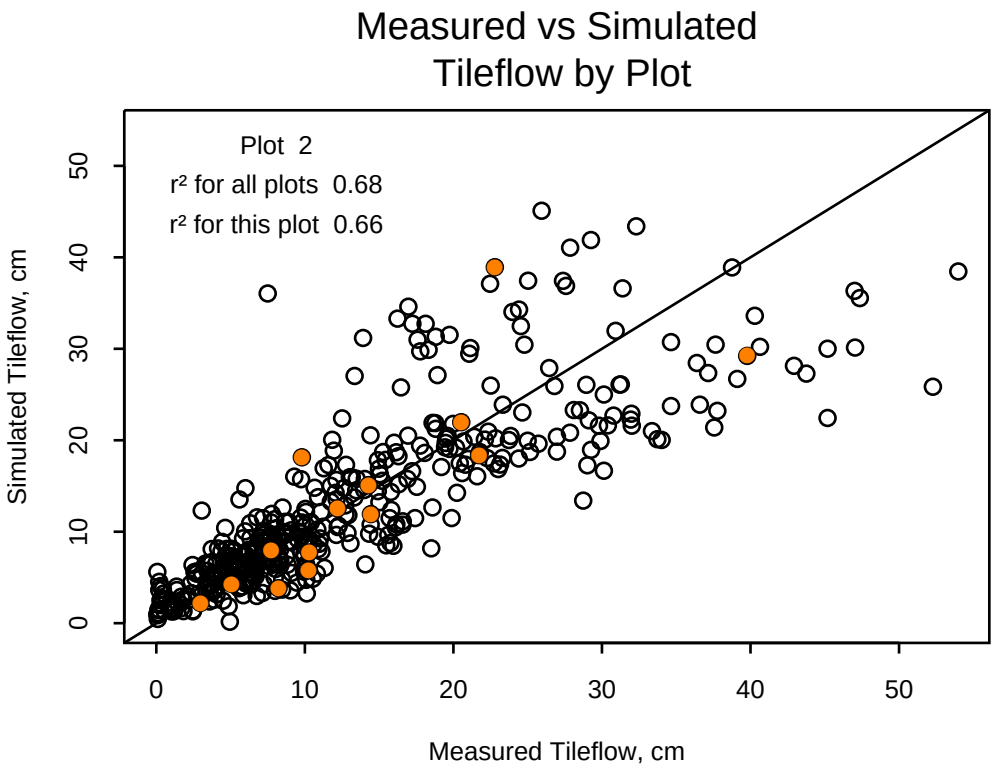

Measured vs Simulated
Soybean Yields by Plot
Plot 33
r² for all plots 0.62
r² for this plot 0.87
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
0
1000
2000
3000
4000

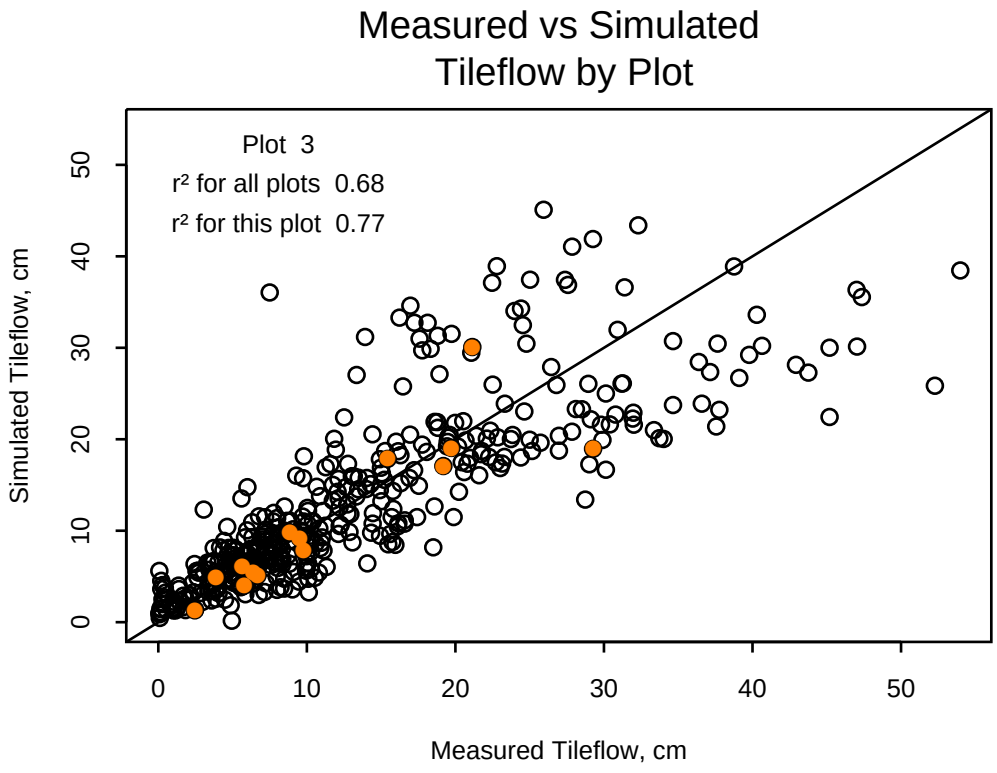

Measured vs Simulated
Soybean Yields by Plot
Plot 34
r² for all plots 0.62
r² for this plot 0.22
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
0
1000
2000
3000
4000

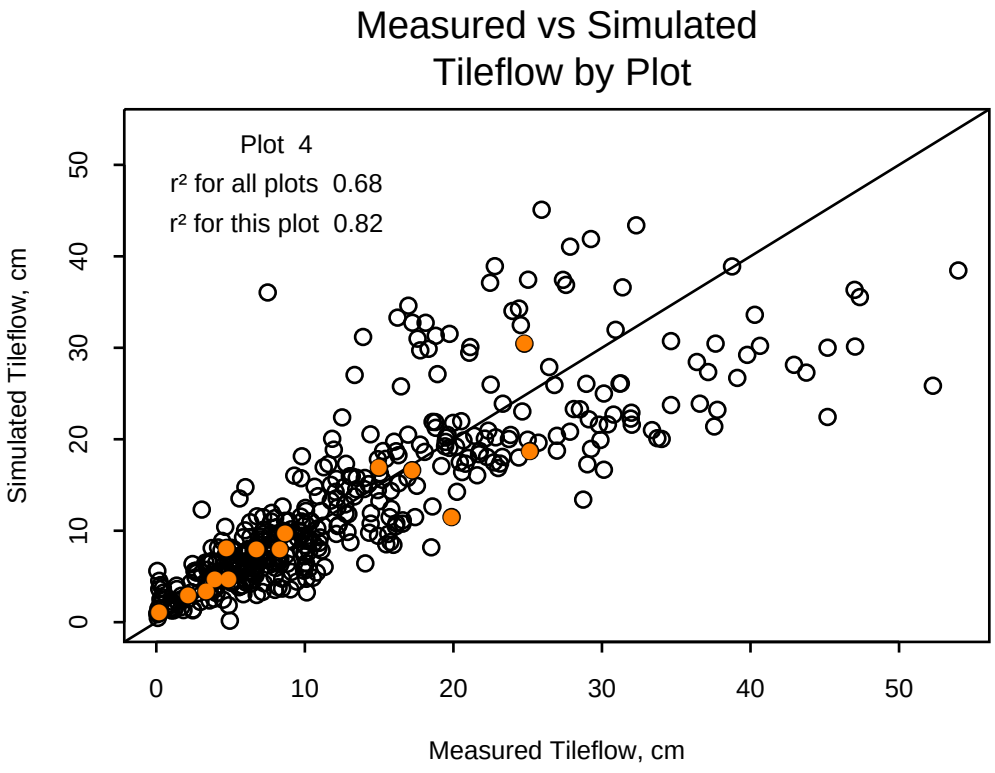

Measured vs Simulated
Soybean Yields by Plot
Plot 35
r² for all plots 0.62
r² for this plot NA
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
0
1000
2000
3000
4000

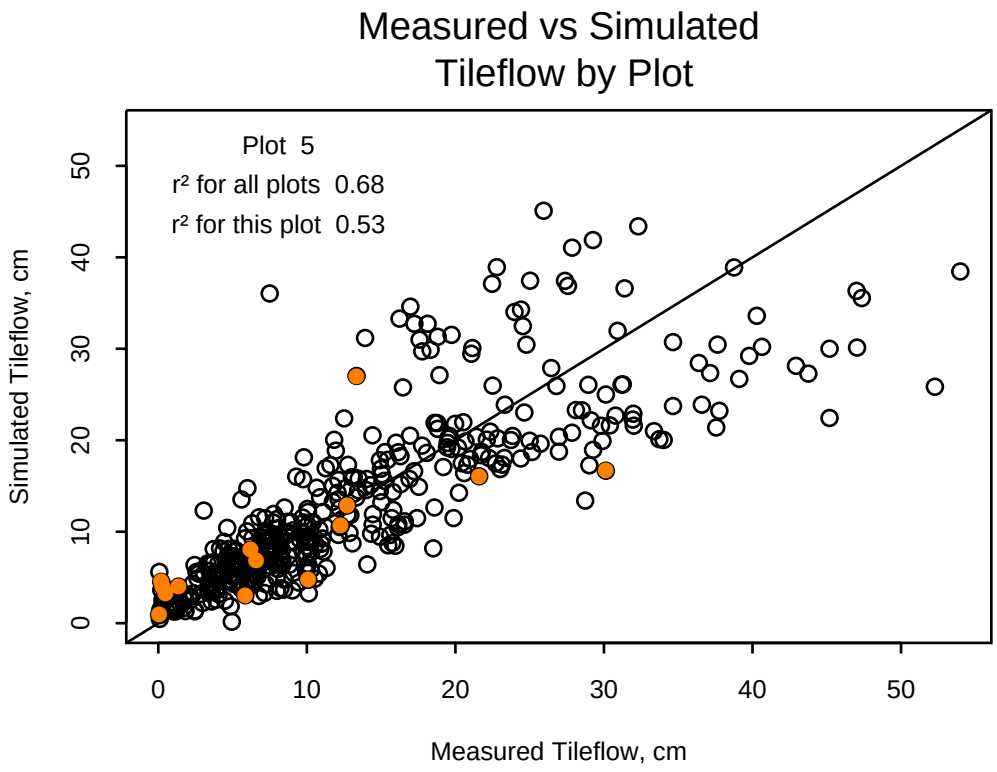

Measured vs Simulated
Soybean Yields by Plot
Plot 36
r² for all plots 0.62
r² for this plot 0.23
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
0
1000
2000
3000
4000

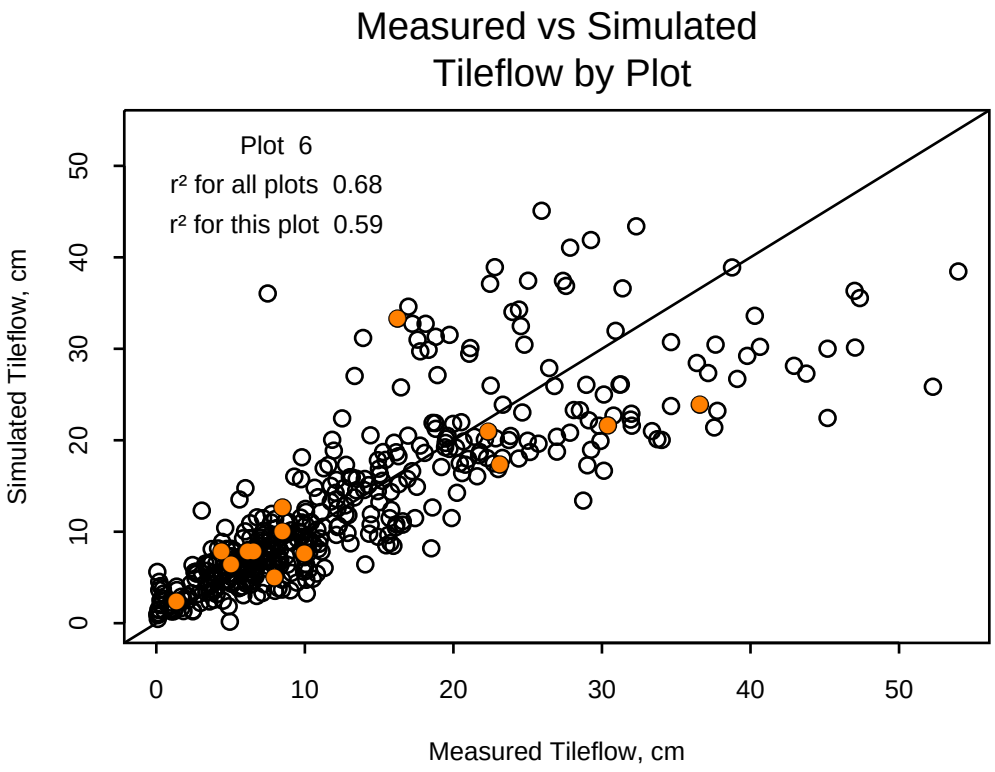

Measured vs Simulated
Tileflow by Plot
Plot 1
r² for all plots 0.68
r² for this plot 0.77
Simulated Tileflow, cm
Measured Tileflow, cm
0
10
20
30
40
50

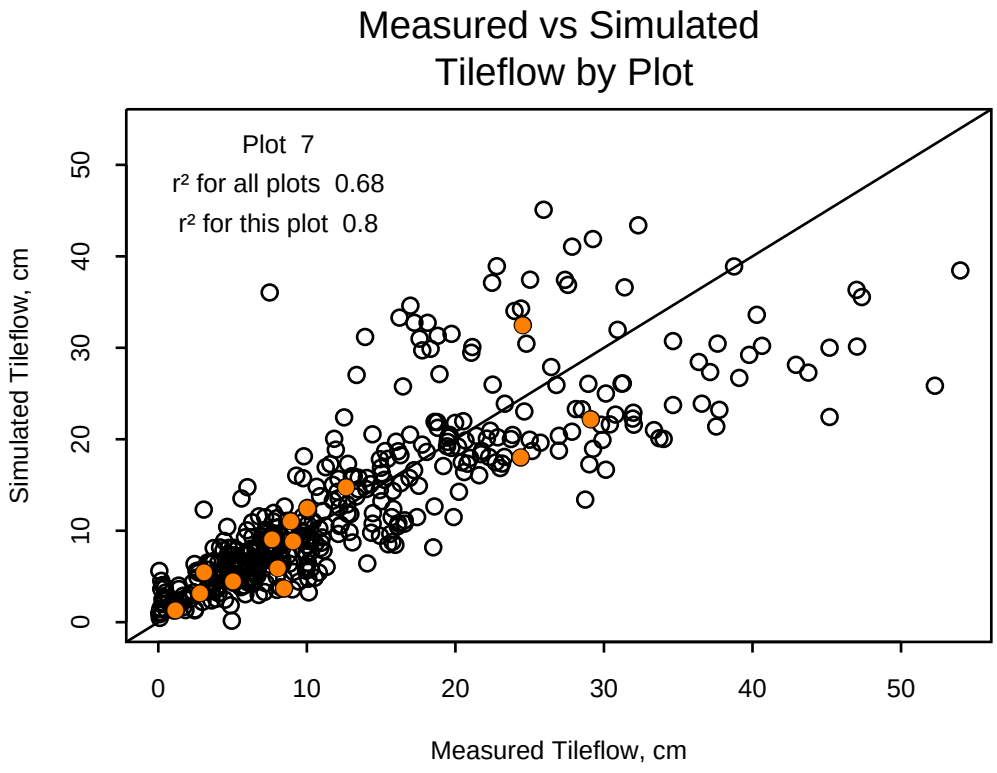

Measured vs Simulated
Tileflow by Plot
Plot 2
r² for all plots 0.68
r² for this plot 0.66
Simulated Tileflow, cm
Measured Tileflow, cm
0
10
20
30
40
50

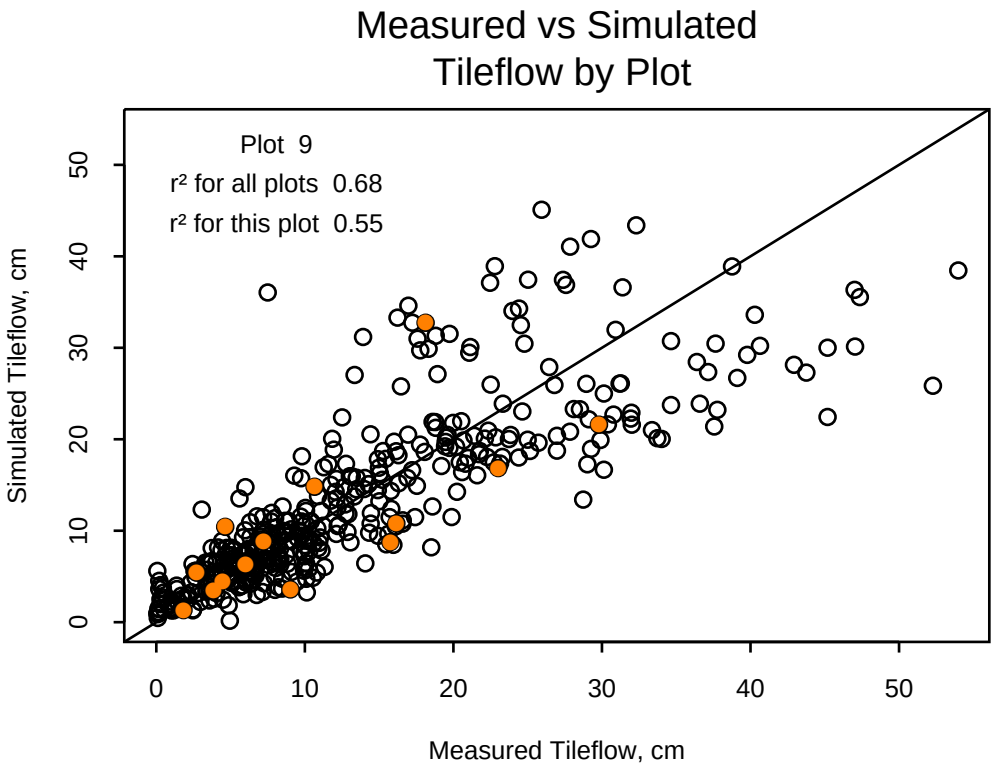

Measured vs Simulated
Tileflow by Plot
Plot 3
r² for all plots 0.68
r² for this plot 0.77
Simulated Tileflow, cm
Measured Tileflow, cm
0
10
20
30
40
50

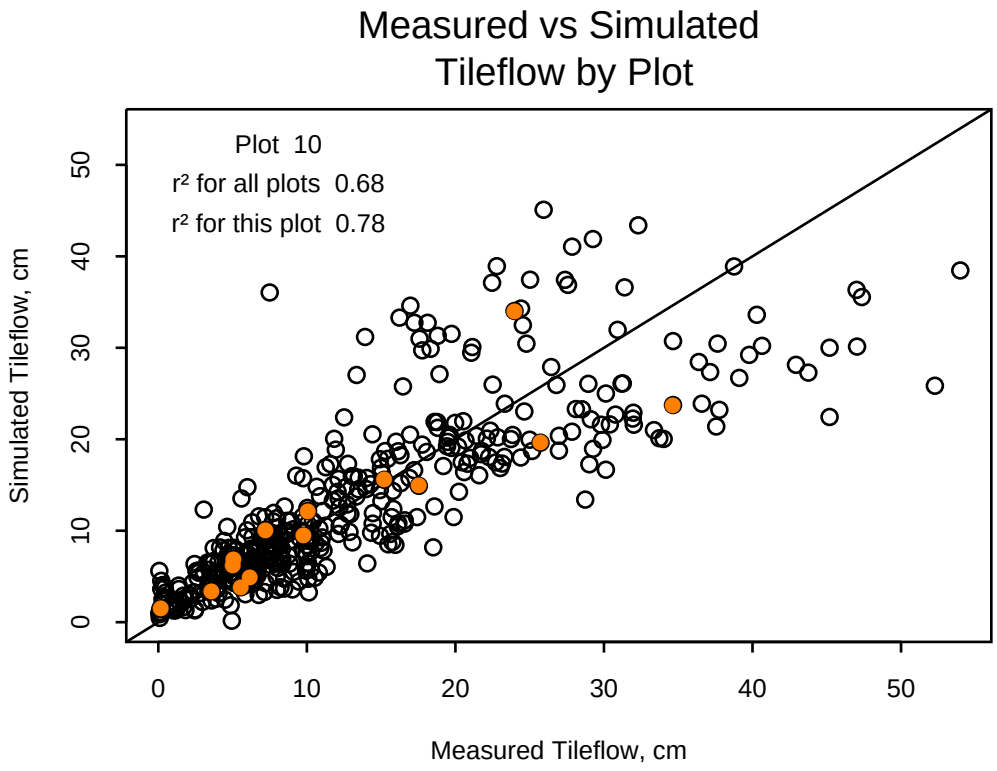

Measured vs Simulated
Tileflow by Plot
Plot 4
r² for all plots 0.68
r² for this plot 0.82
Simulated Tileflow, cm
Measured Tileflow, cm
0
10
20
30
40
50

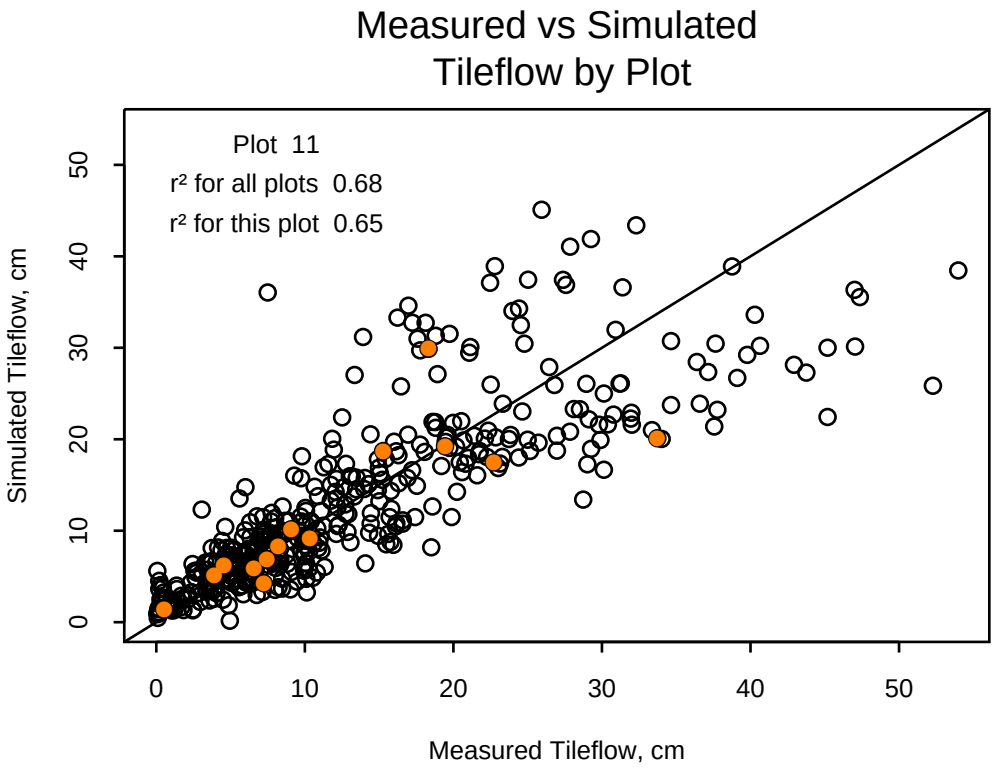

Measured vs Simulated
Tileflow by Plot
Plot 5
r² for all plots 0.68
r² for this plot 0.53
Simulated Tileflow, cm
Measured Tileflow, cm
0
10
20
30
40
50

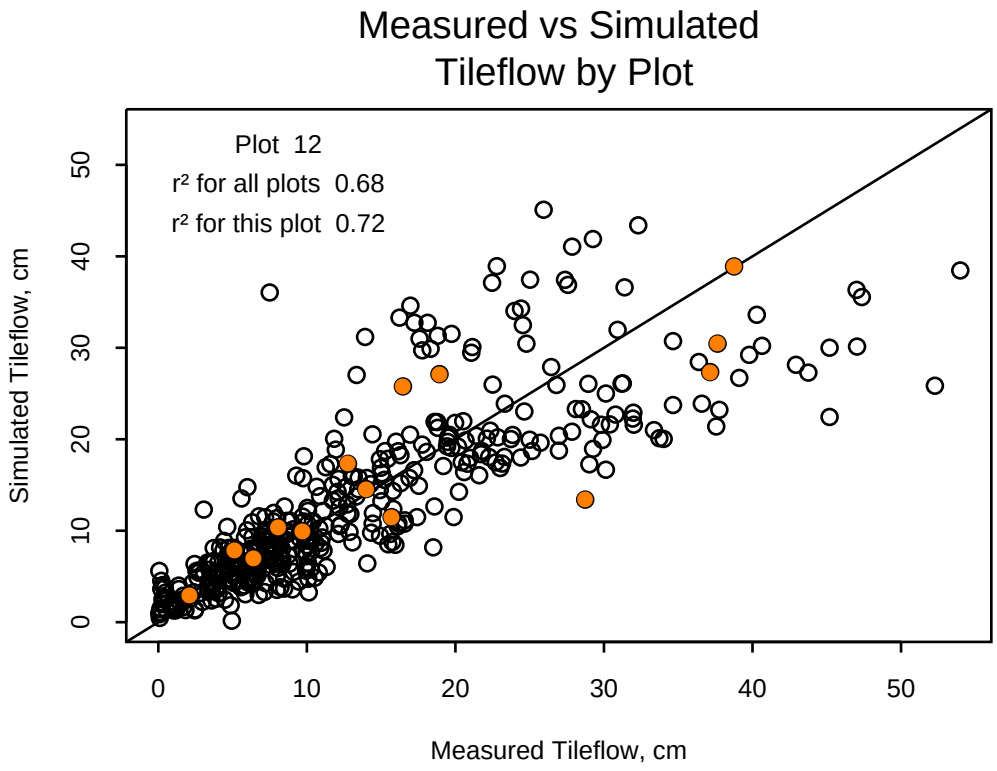

Measured vs Simulated
Tileflow by Plot
Plot 6
r² for all plots 0.68
r² for this plot 0.59
Simulated Tileflow, cm
Measured Tileflow, cm
0
10
20
30
40
50

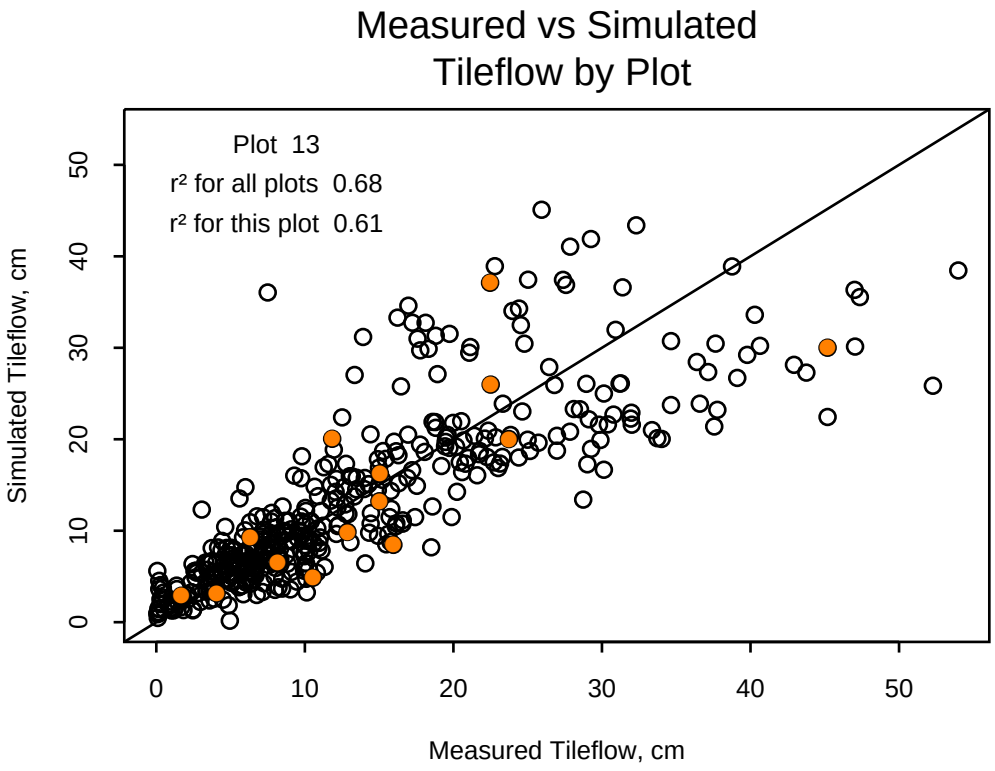

Measured vs Simulated
Tileflow by Plot
Plot 7
r² for all plots 0.68
r² for this plot 0.8
Simulated Tileflow, cm
Measured Tileflow, cm
0
10
20
30
40
50

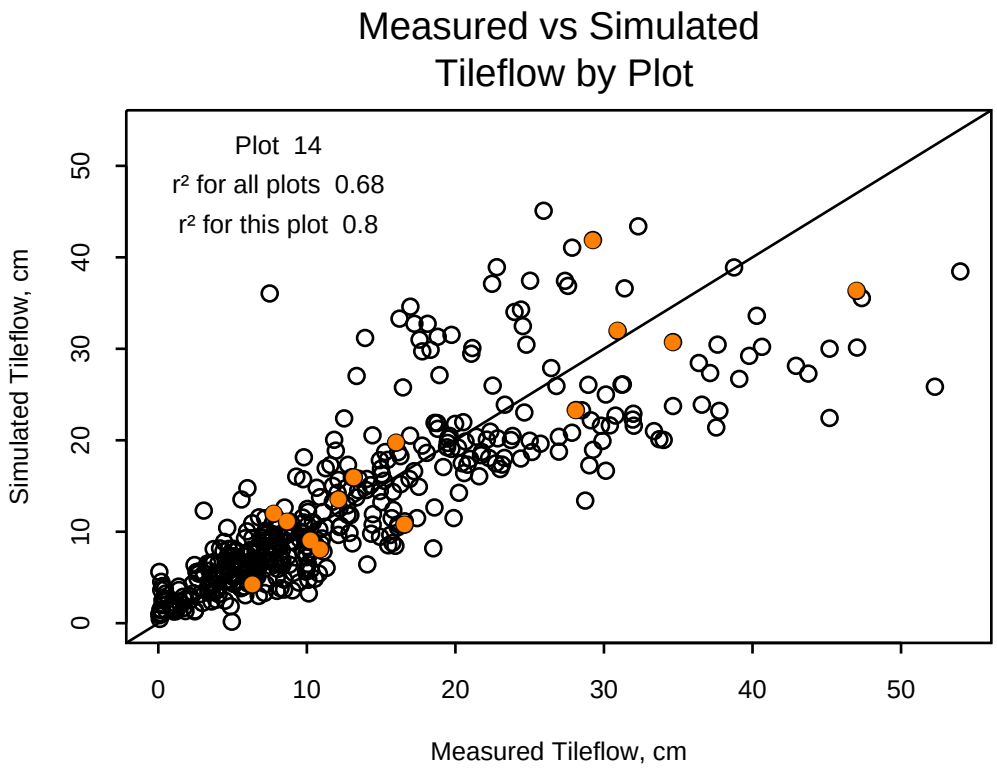

Measured vs Simulated
Tileflow by Plot
Plot 9
r² for all plots 0.68
r² for this plot 0.55
Simulated Tileflow, cm
Measured Tileflow, cm
0
10
20
30
40
50

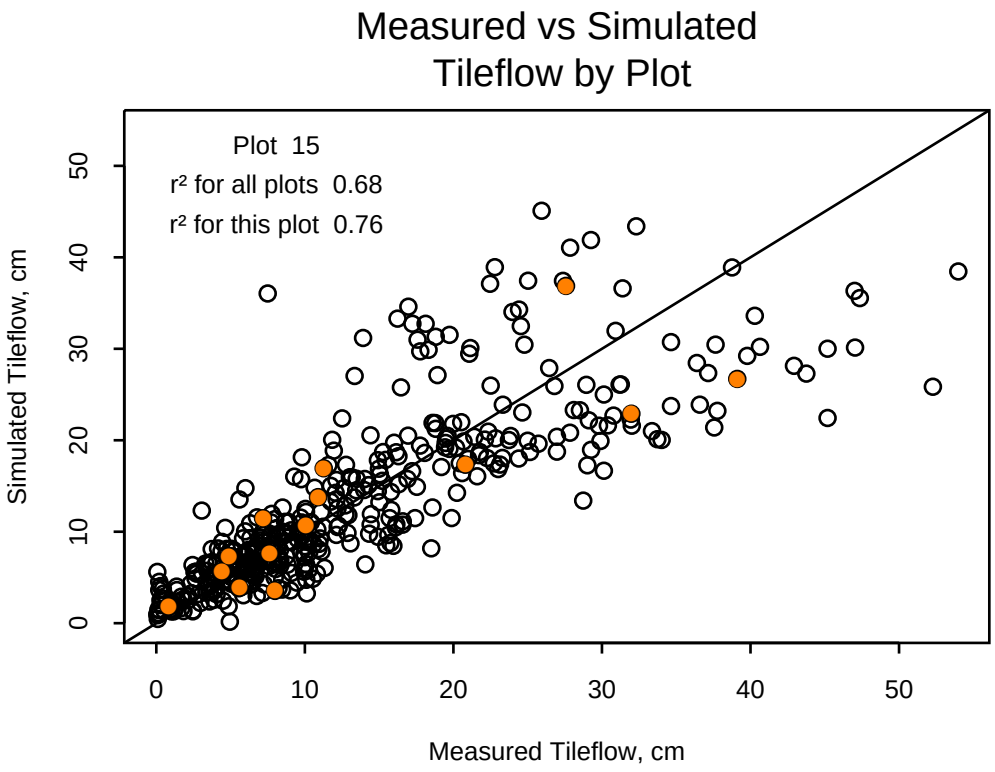

Measured vs Simulated
Tileflow by Plot
Plot 10
r² for all plots 0.68
r² for this plot 0.78
Simulated Tileflow, cm
Measured Tileflow, cm
0
10
20
30
40
50

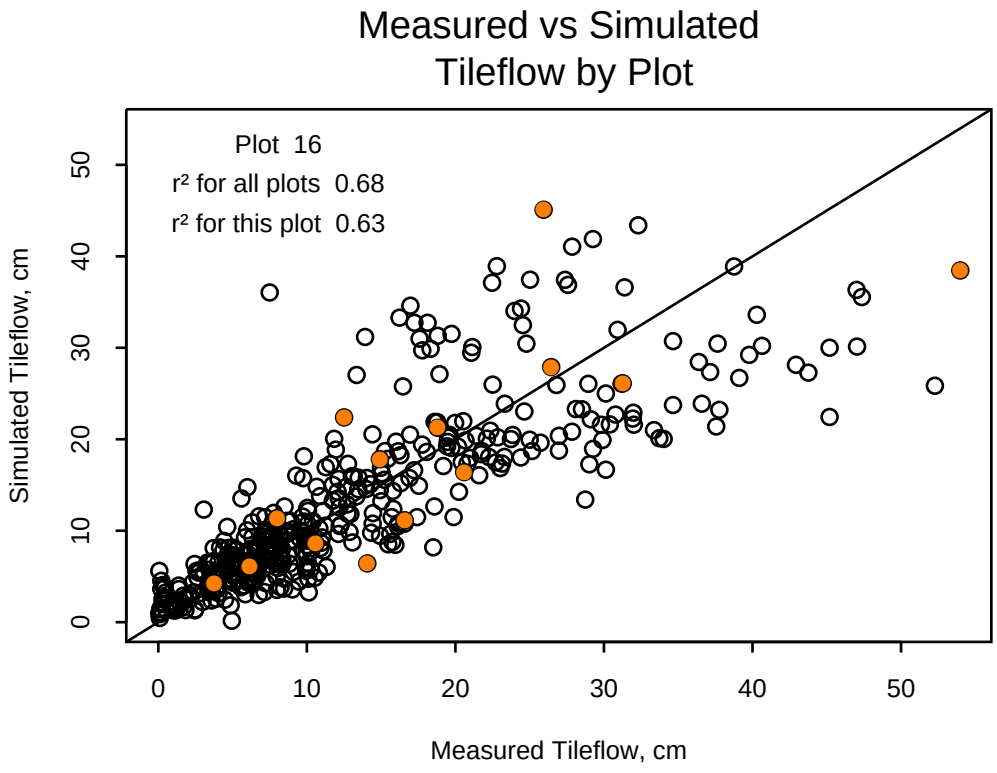

Measured vs Simulated
Tileflow by Plot
Plot 11
r² for all plots 0.68
r² for this plot 0.65
Simulated Tileflow, cm
Measured Tileflow, cm
0
10
20
30
40
50

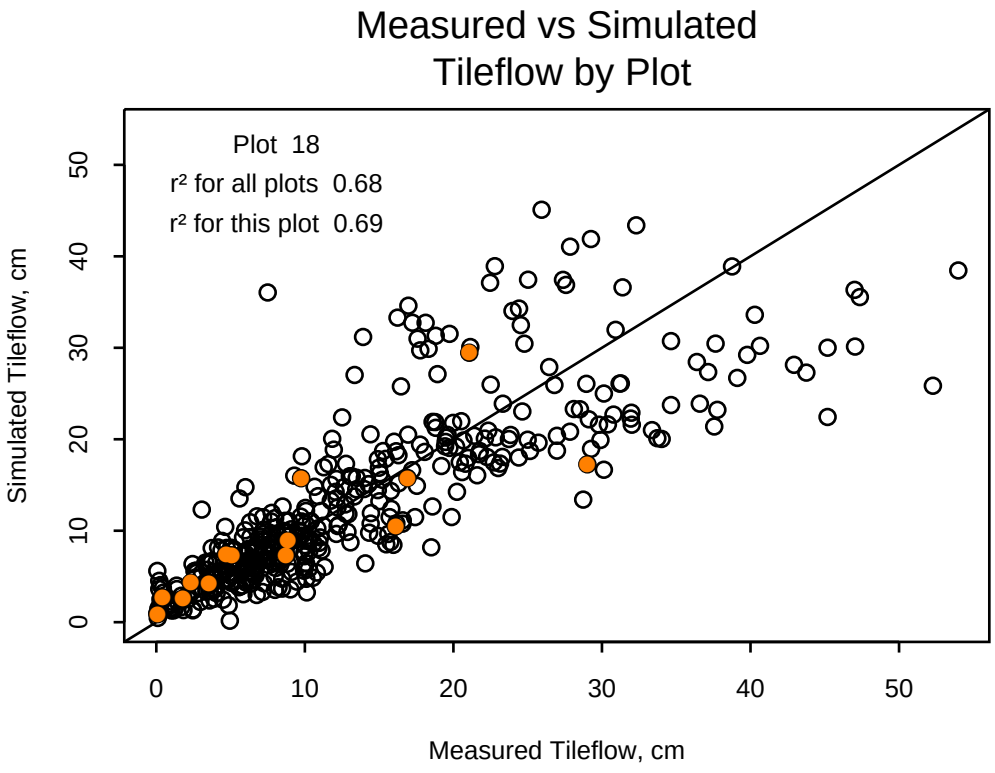

Measured vs Simulated
Tileflow by Plot
Plot 12
r² for all plots 0.68
r² for this plot 0.72
Simulated Tileflow, cm
Measured Tileflow, cm
0
10
20
30
40
50

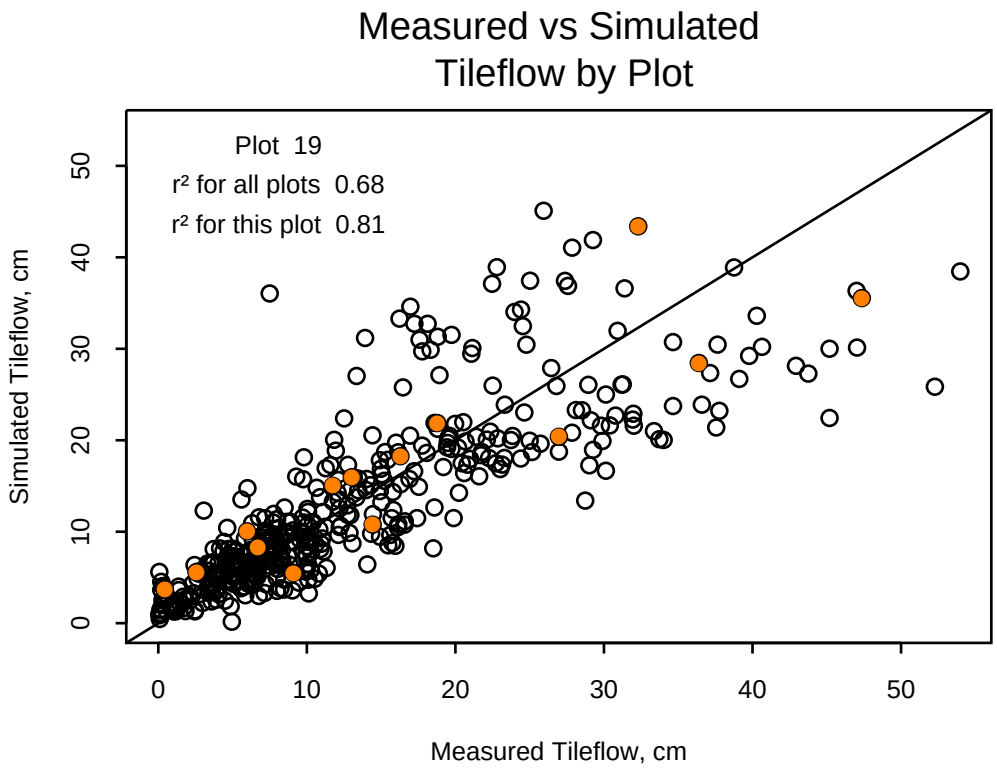

Measured vs Simulated
Tileflow by Plot
Plot 13
r² for all plots 0.68
r² for this plot 0.61
Simulated Tileflow, cm
Measured Tileflow, cm
0
10
20
30
40
50

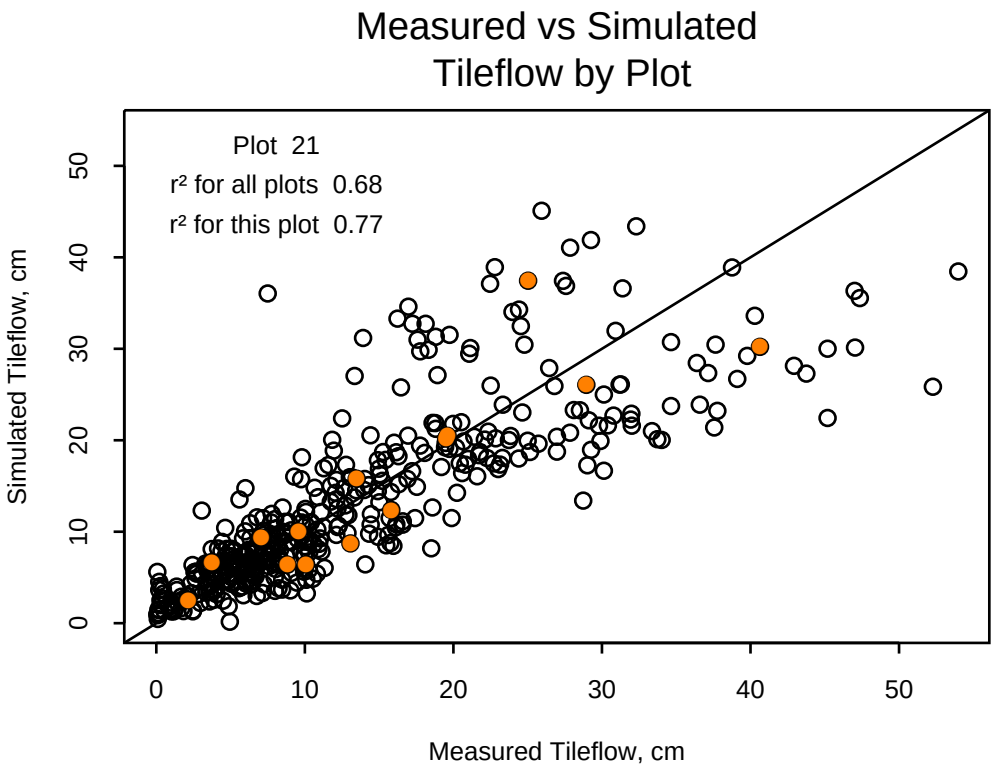

Measured vs Simulated
Tileflow by Plot
Plot 14
r² for all plots 0.68
r² for this plot 0.8
Simulated Tileflow, cm
Measured Tileflow, cm
0
10
20
30
40
50

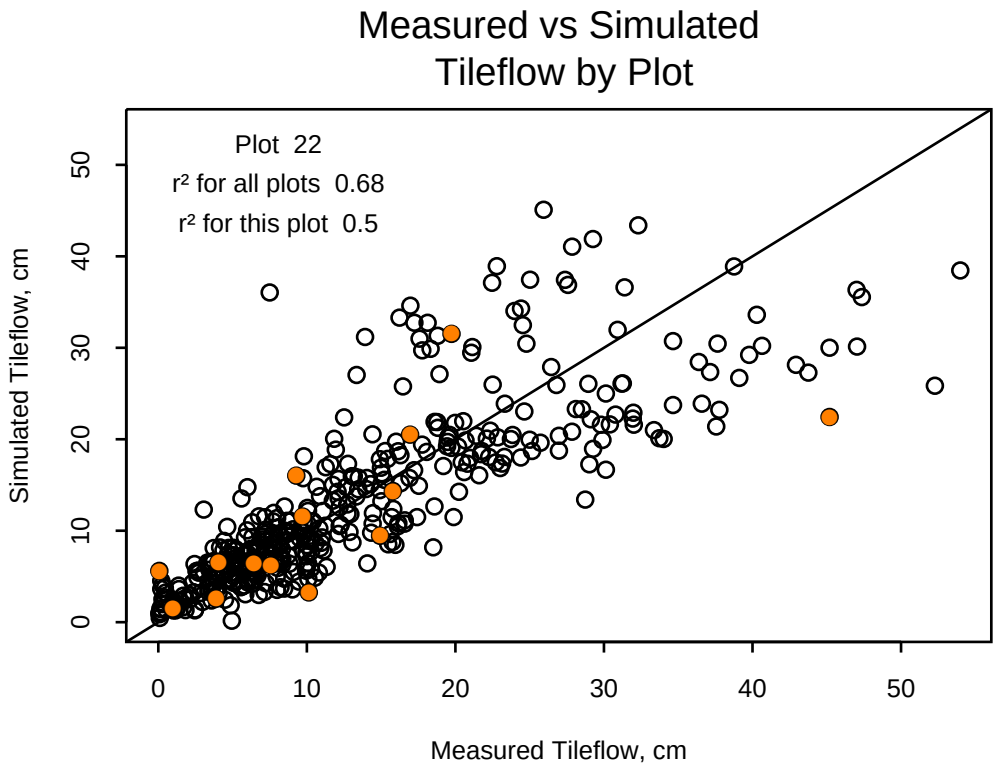

Measured vs Simulated
Tileflow by Plot
Plot 15
r² for all plots 0.68
r² for this plot 0.76
Simulated Tileflow, cm
Measured Tileflow, cm
0
10
20
30
40
50

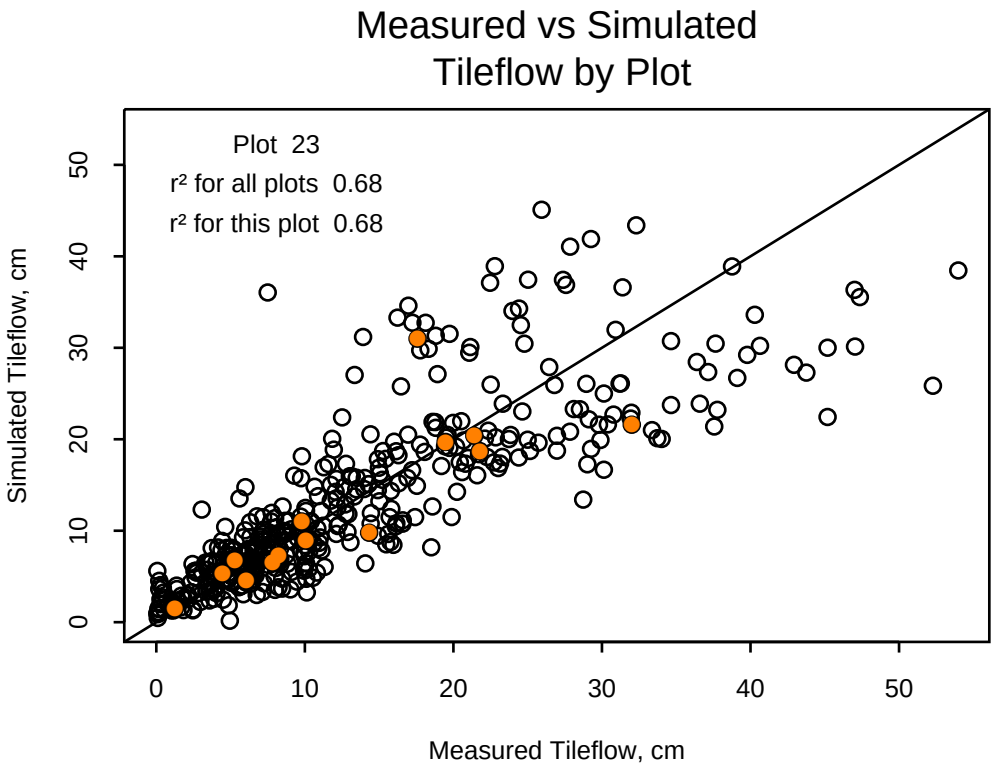

Measured vs Simulated
Tileflow by Plot
Plot 16
r² for all plots 0.68
r² for this plot 0.63
Simulated Tileflow, cm
Measured Tileflow, cm
0
10
20
30
40
50

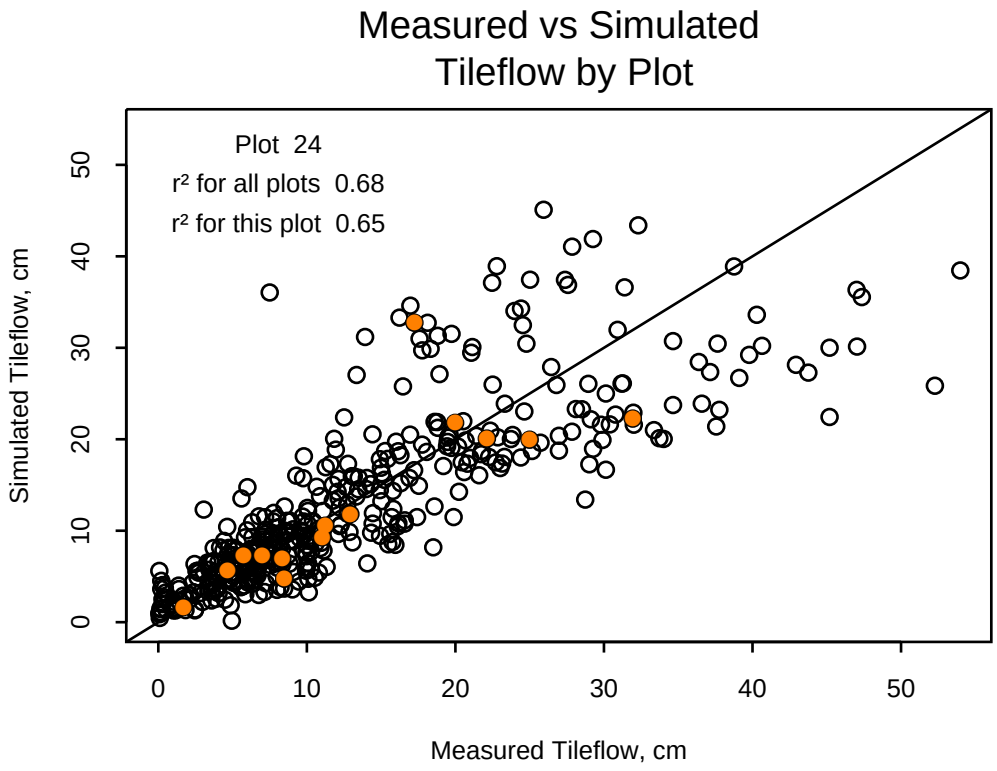

Measured vs Simulated
Tileflow by Plot
Plot 18
r² for all plots 0.68
r² for this plot 0.69
Simulated Tileflow, cm
Measured Tileflow, cm
0
10
20
30
40
50

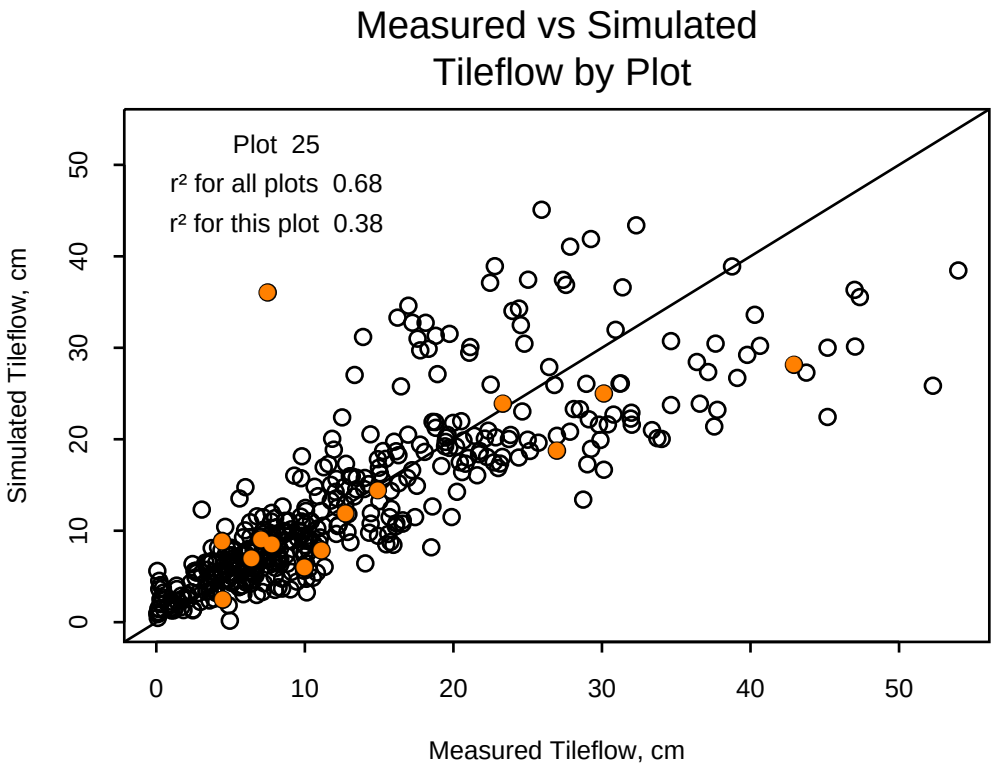

Measured vs Simulated
Tileflow by Plot
Plot 19
r² for all plots 0.68
r² for this plot 0.81
Simulated Tileflow, cm
Measured Tileflow, cm
0
10
20
30
40
50

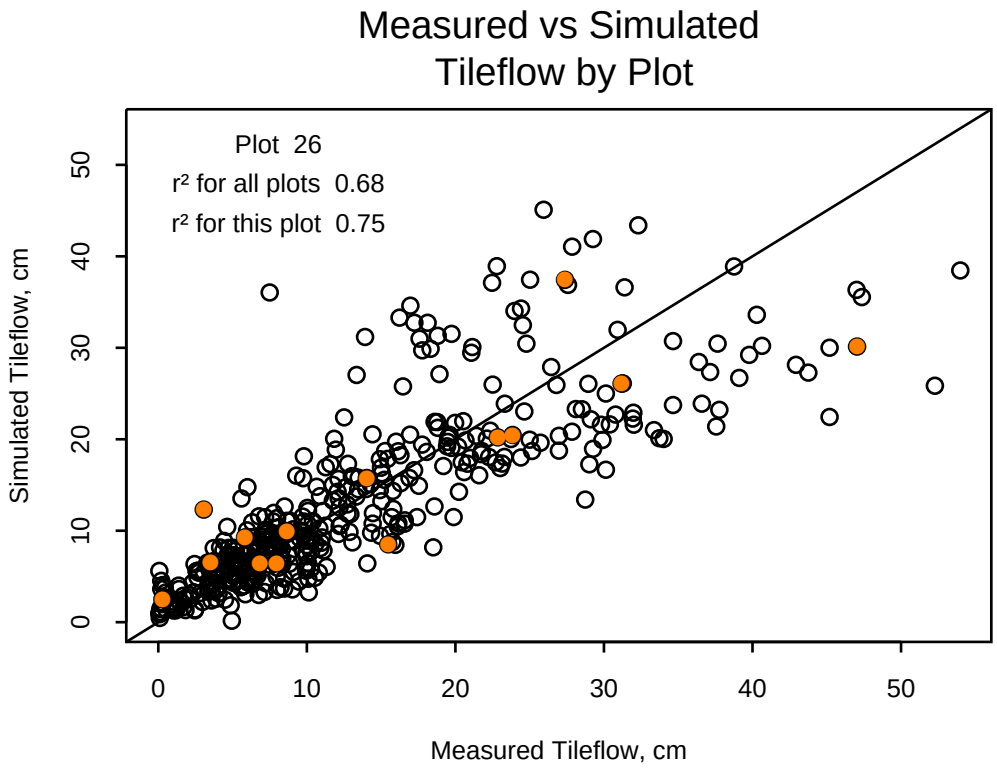

Measured vs Simulated
Tileflow by Plot
Plot 21
r² for all plots 0.68
r² for this plot 0.77
Simulated Tileflow, cm
Measured Tileflow, cm
0
10
20
30
40
50

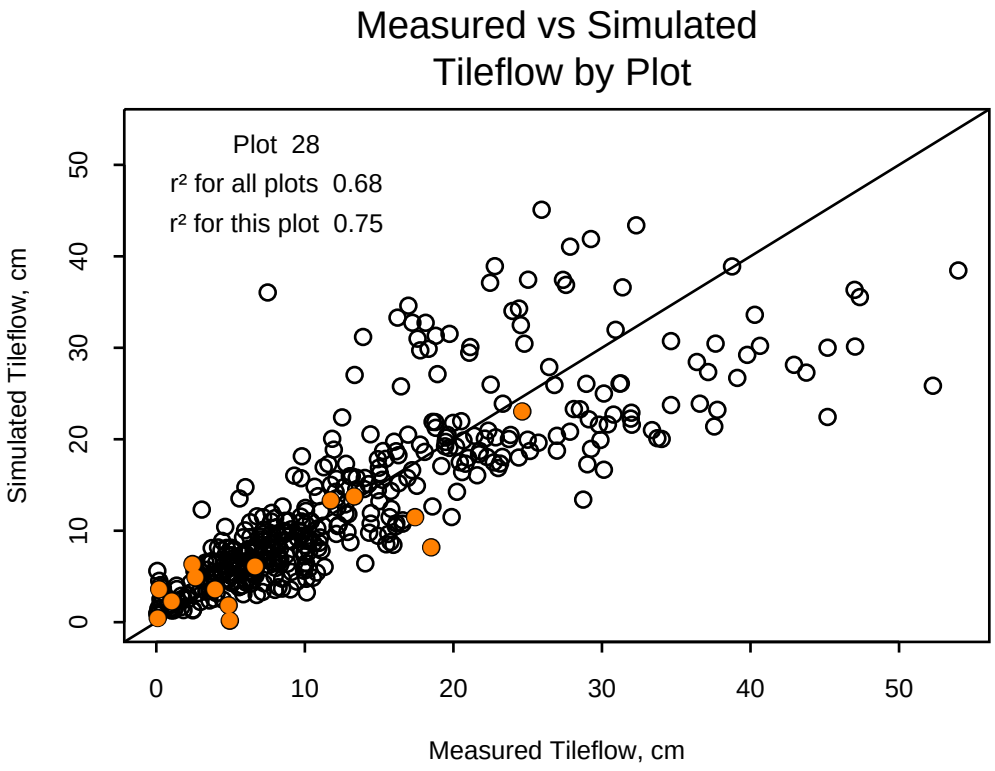

Measured vs Simulated
Tileflow by Plot
Plot 22
r² for all plots 0.68
r² for this plot 0.5
Simulated Tileflow, cm
Measured Tileflow, cm
0
10
20
30
40
50

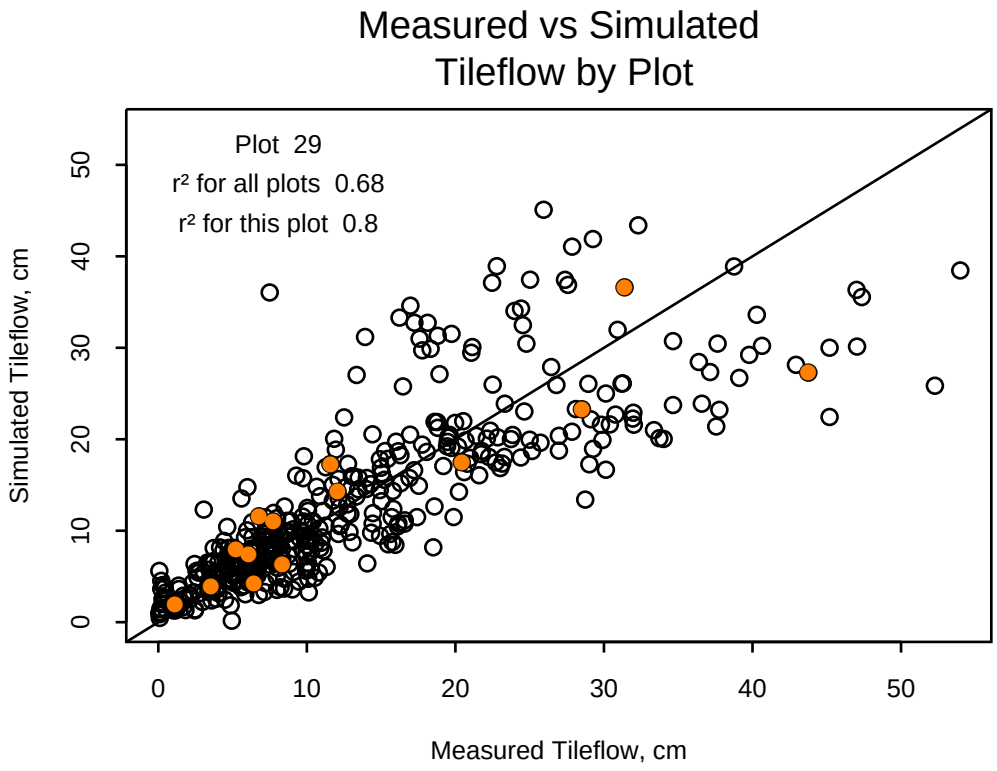

Measured vs Simulated
Tileflow by Plot
Plot 23
r² for all plots 0.68
r² for this plot 0.68
Simulated Tileflow, cm
Measured Tileflow, cm
0
10
20
30
40
50

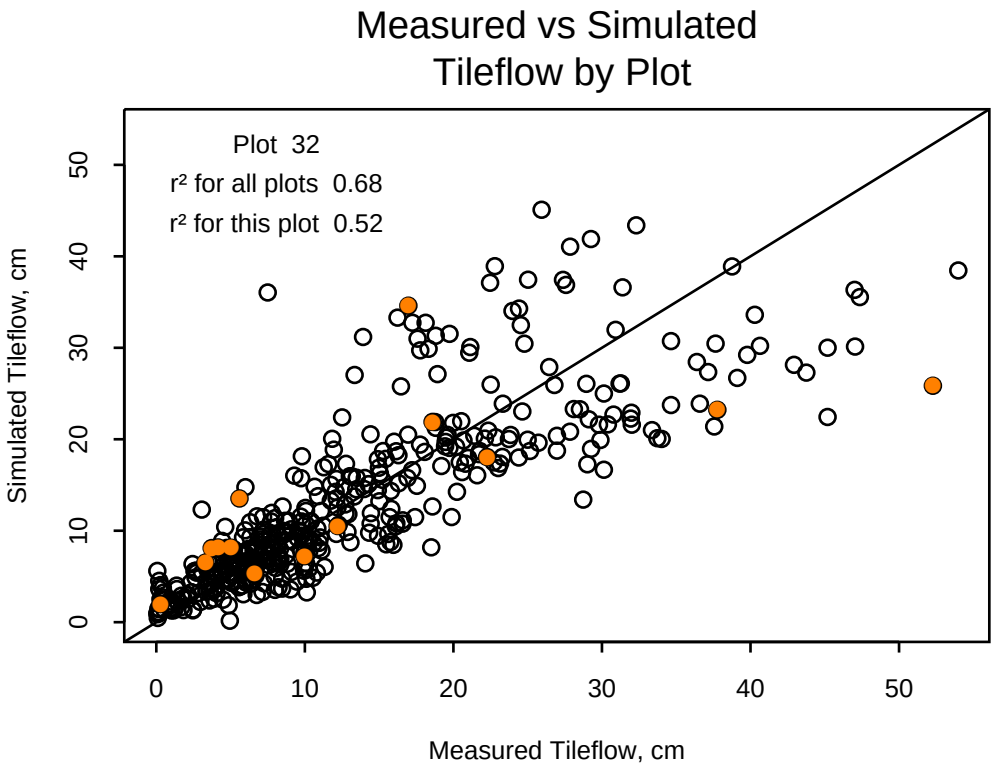

Measured vs Simulated
Tileflow by Plot
Plot 24
r² for all plots 0.68
r² for this plot 0.65
Simulated Tileflow, cm
Measured Tileflow, cm
0
10
20
30
40
50

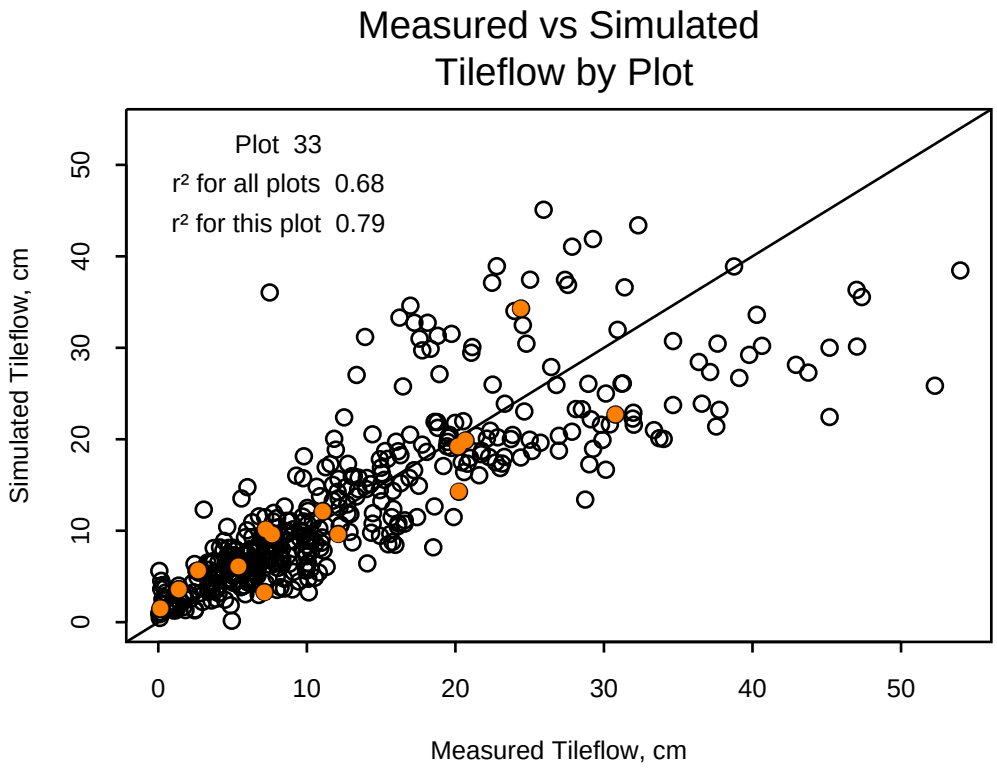

Measured vs Simulated
Tileflow by Plot
Plot 25
r² for all plots 0.68
r² for this plot 0.38
Simulated Tileflow, cm
Measured Tileflow, cm
0
10
20
30
40
50

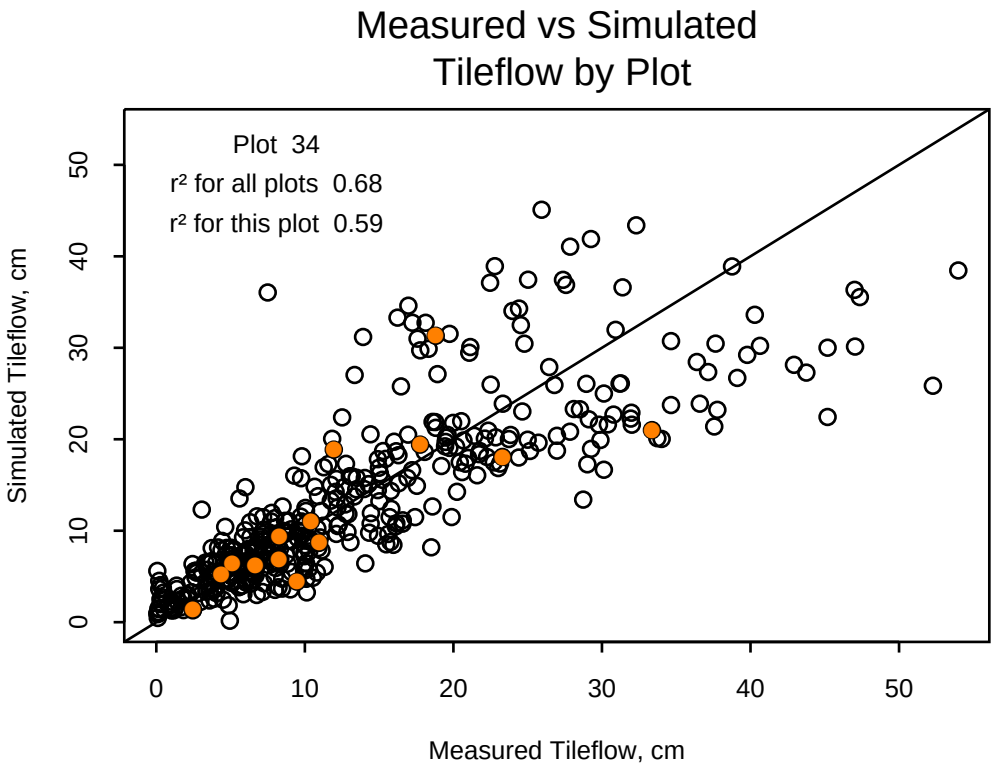

Measured vs Simulated
Tileflow by Plot
Plot 26
r² for all plots 0.68
r² for this plot 0.75
Simulated Tileflow, cm
Measured Tileflow, cm
0
10
20
30
40
50

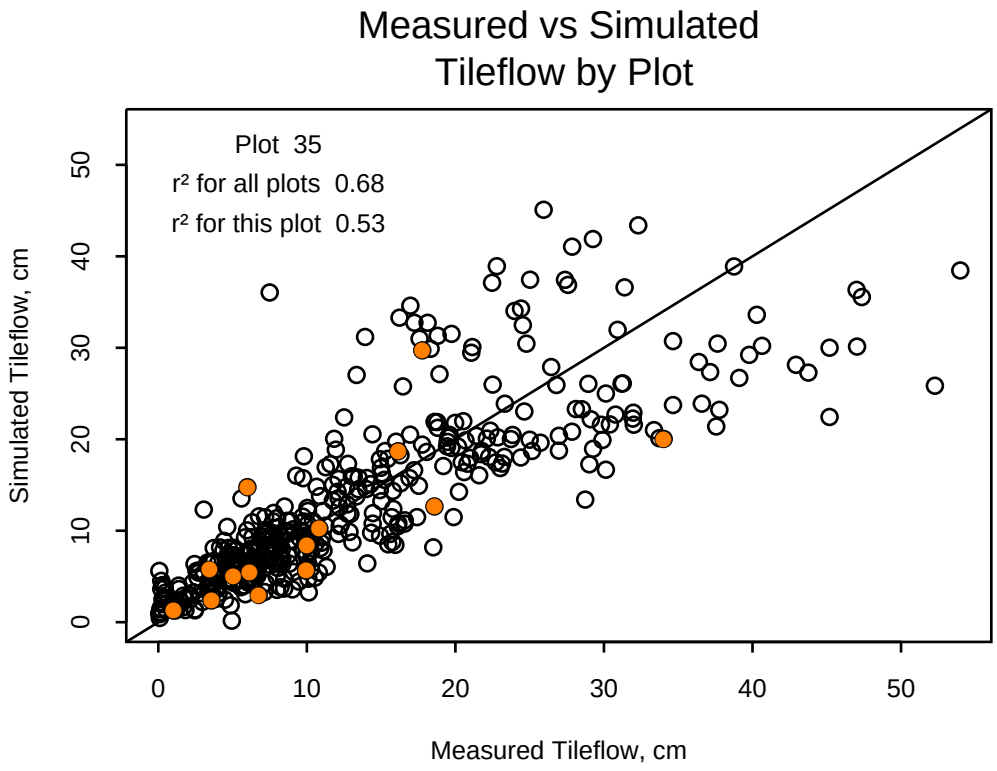

Measured vs Simulated
Tileflow by Plot
Plot 28
r² for all plots 0.68
r² for this plot 0.75
Simulated Tileflow, cm
Measured Tileflow, cm
0
10
20
30
40
50

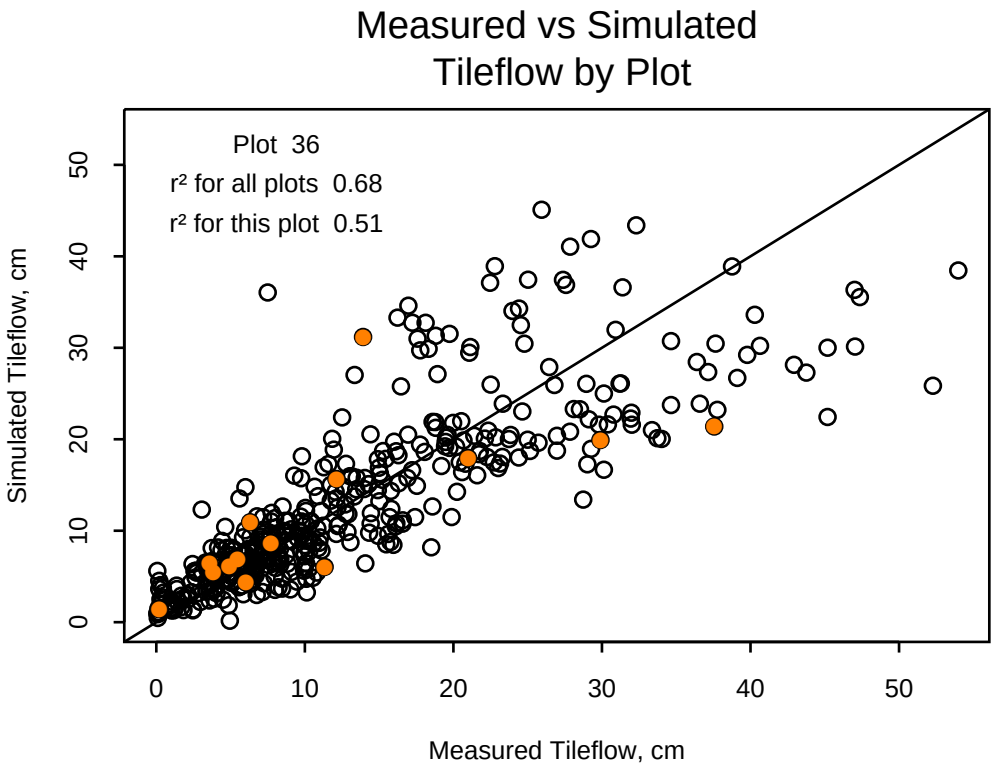

Measured vs Simulated
Tileflow by Plot
Plot 29
r² for all plots 0.68
r² for this plot 0.8
Simulated Tileflow, cm
Measured Tileflow, cm
0
10
20
30
40
50

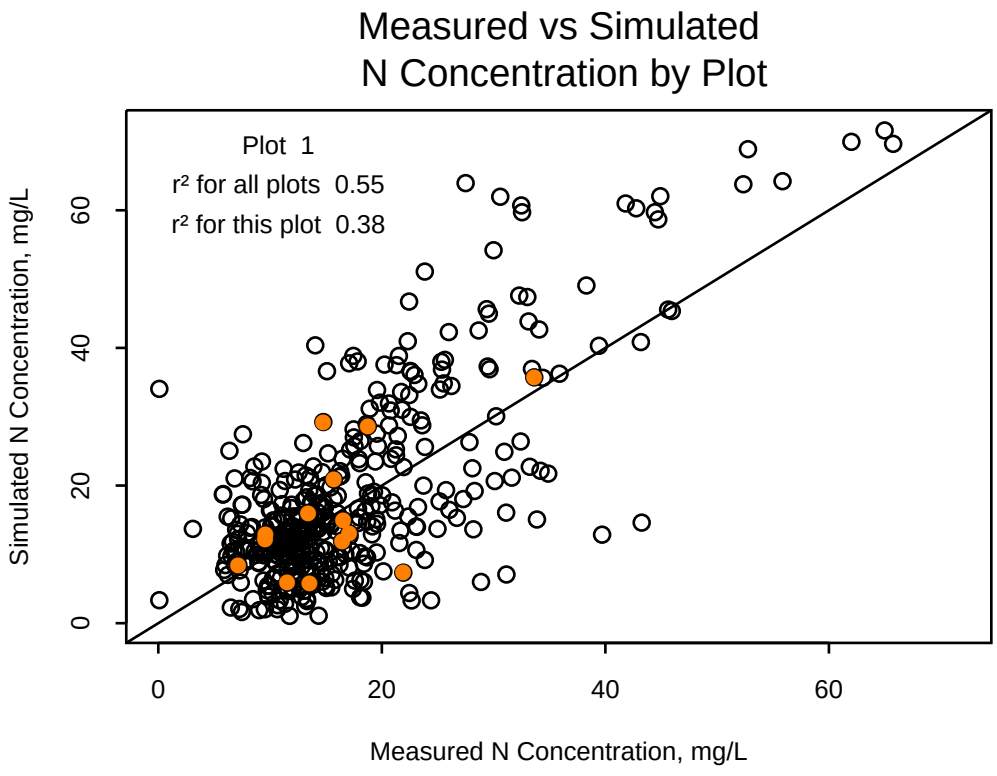

Measured vs Simulated
Tileflow by Plot
Plot 32
r² for all plots 0.68
r² for this plot 0.52
Simulated Tileflow, cm
Measured Tileflow, cm
0
10
20
30
40
50

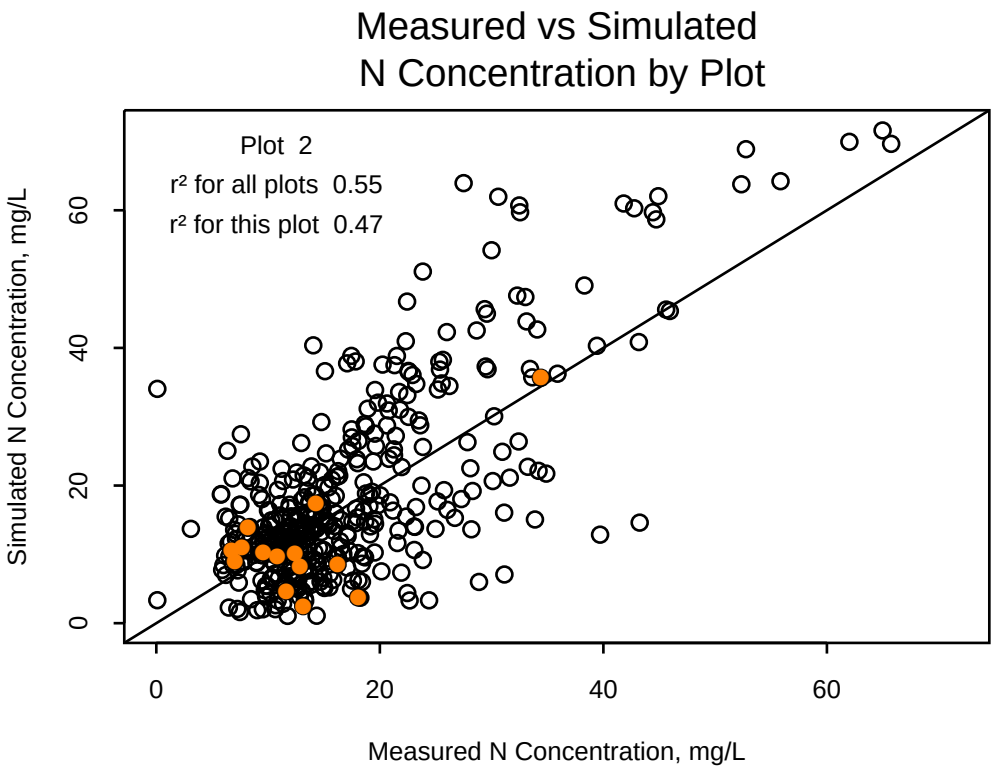

Measured vs Simulated
Tileflow by Plot
Plot 33
r² for all plots 0.68
r² for this plot 0.79
Simulated Tileflow, cm
Measured Tileflow, cm
0
10
20
30
40
50

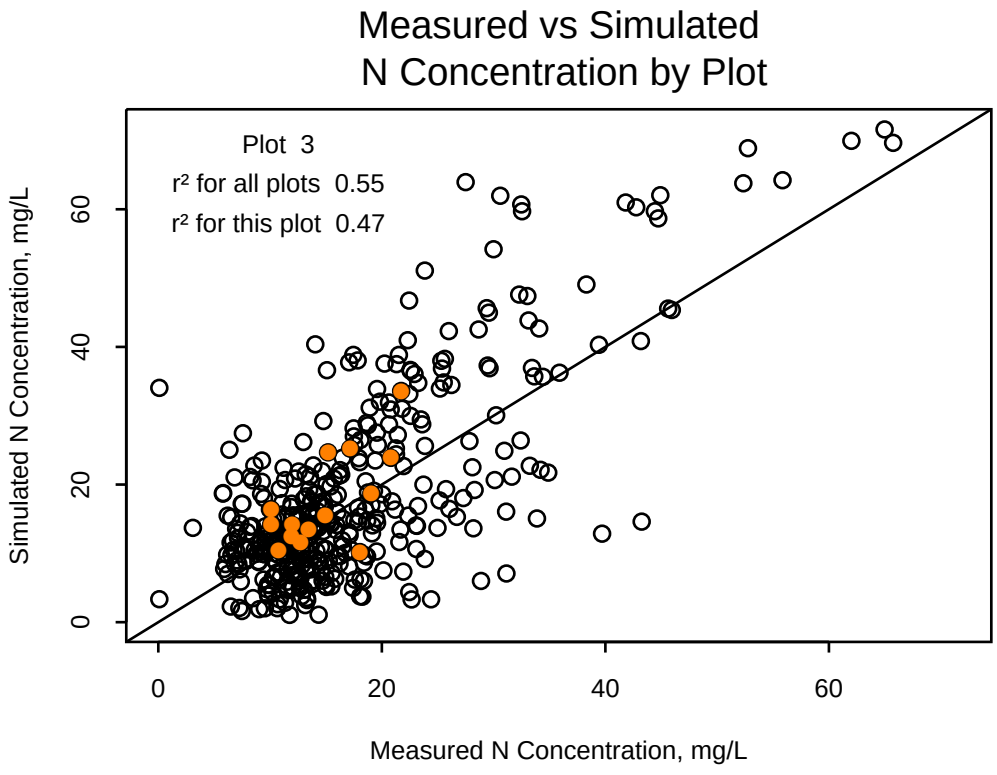

Measured vs Simulated
Tileflow by Plot
Plot 34
r² for all plots 0.68
r² for this plot 0.59
Simulated Tileflow, cm
Measured Tileflow, cm
0
10
20
30
40
50

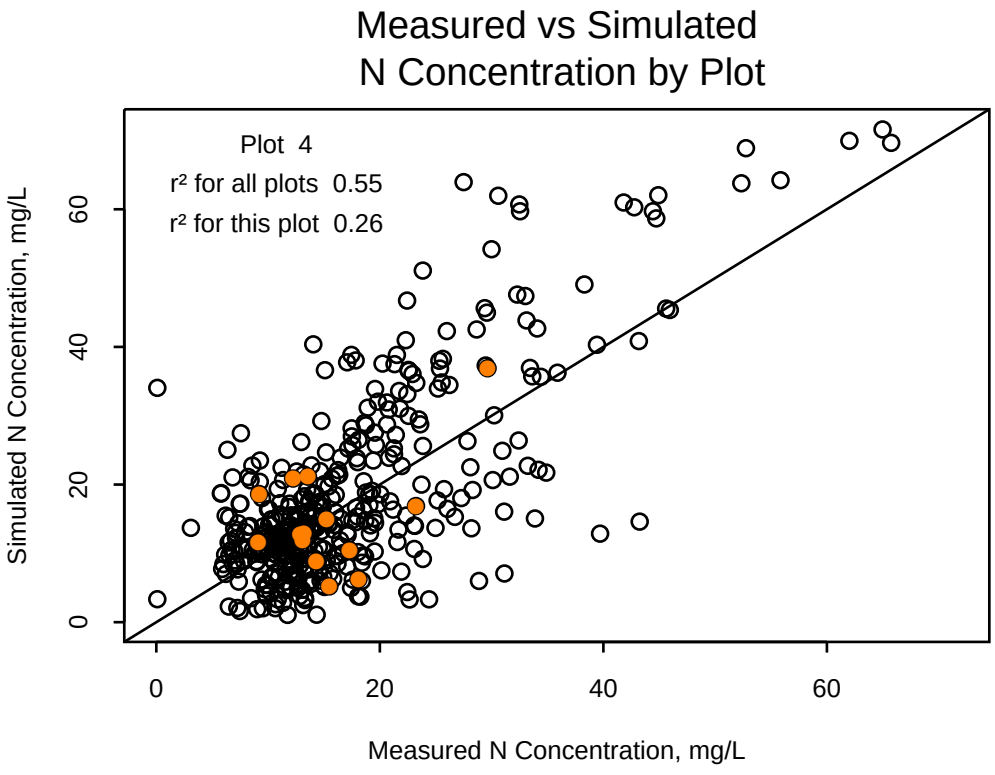

Measured vs Simulated
Tileflow by Plot
Plot 35
r² for all plots 0.68
r² for this plot 0.53
Simulated Tileflow, cm
Measured Tileflow, cm
0
10
20
30
40
50

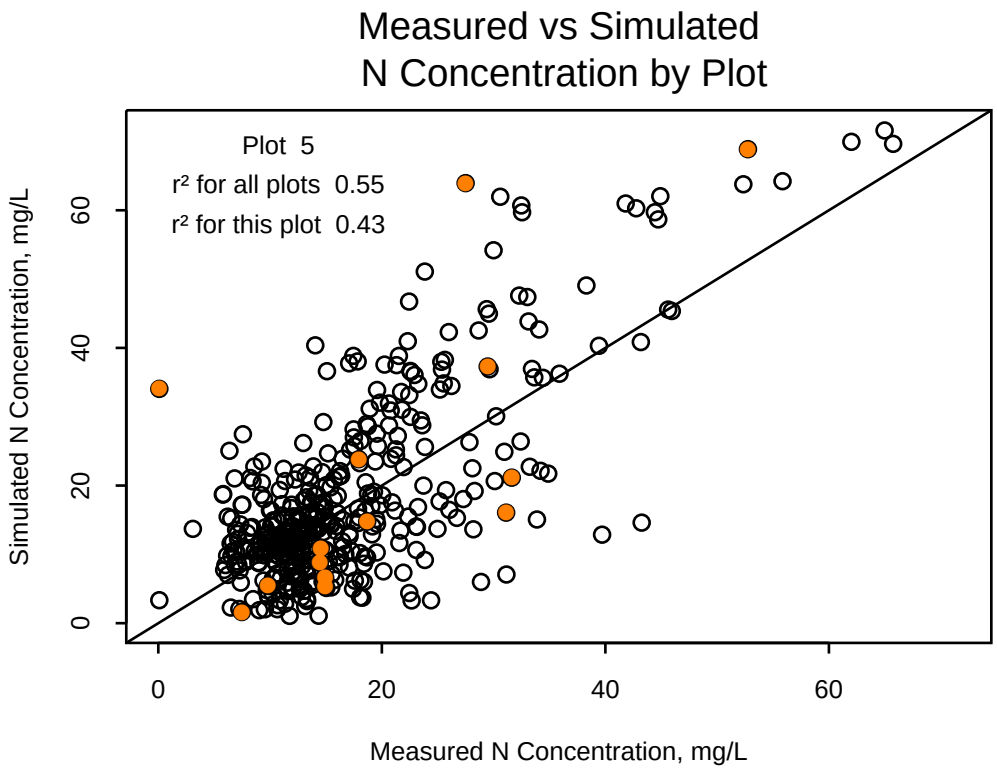

Measured vs Simulated
Tileflow by Plot
Plot 36
r² for all plots 0.68
r² for this plot 0.51
Simulated Tileflow, cm
Measured Tileflow, cm
0
10
20
30
40
50

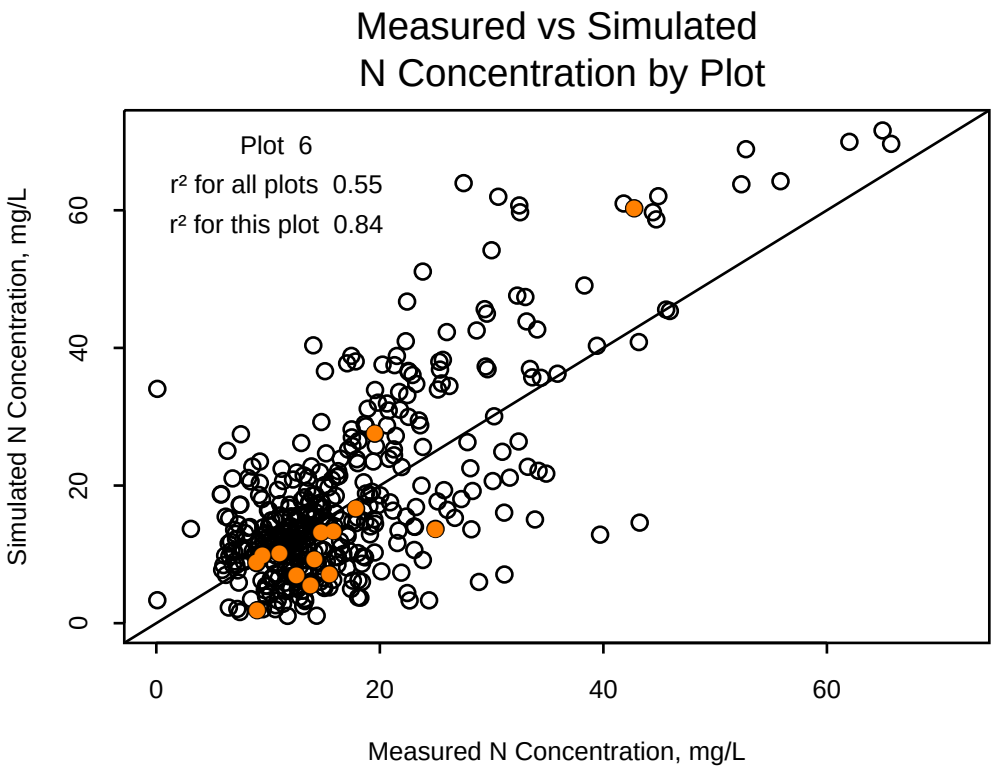

Measured vs Simulated
N Concentration by Plot
Plot 1
r² for all plots 0.55
r² for this plot 0.38
Simulated N Concentration, mg/L
Measured N Concentration, mg/L
0
20
40
60

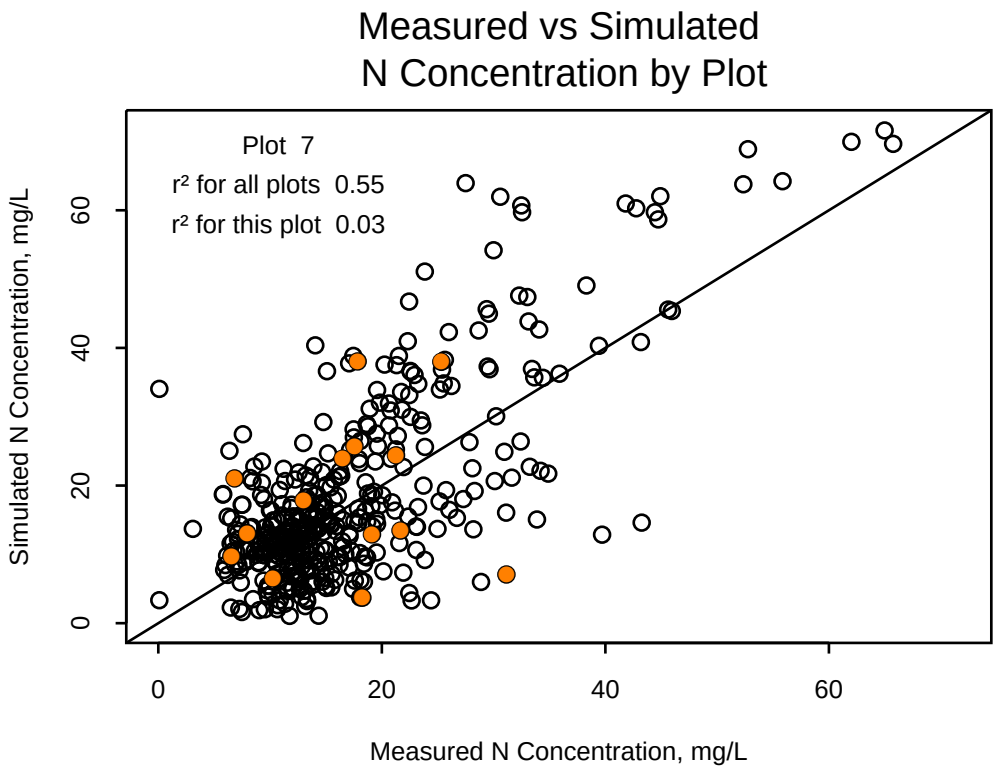

Measured vs Simulated
N Concentration by Plot
Plot 2
r² for all plots 0.55
r² for this plot 0.47
Simulated N Concentration, mg/L
Measured N Concentration, mg/L
0
20
40
60

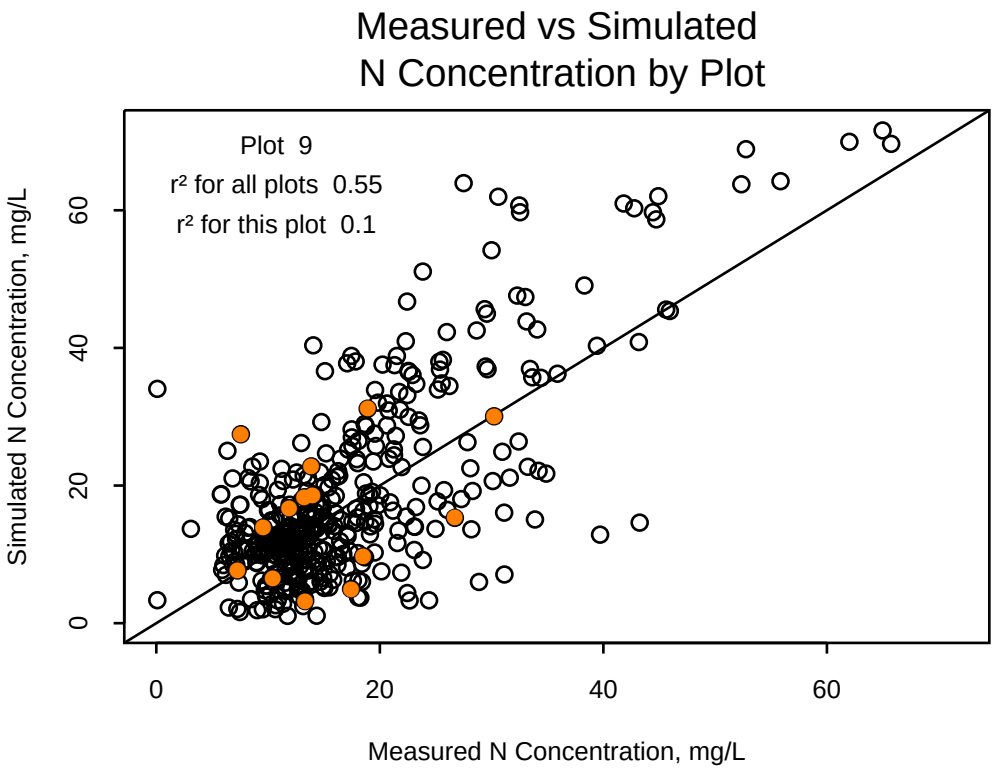

Measured vs Simulated
N Concentration by Plot
Plot 3
r² for all plots 0.55
r² for this plot 0.47
Simulated N Concentration, mg/L
Measured N Concentration, mg/L
0
20
40
60

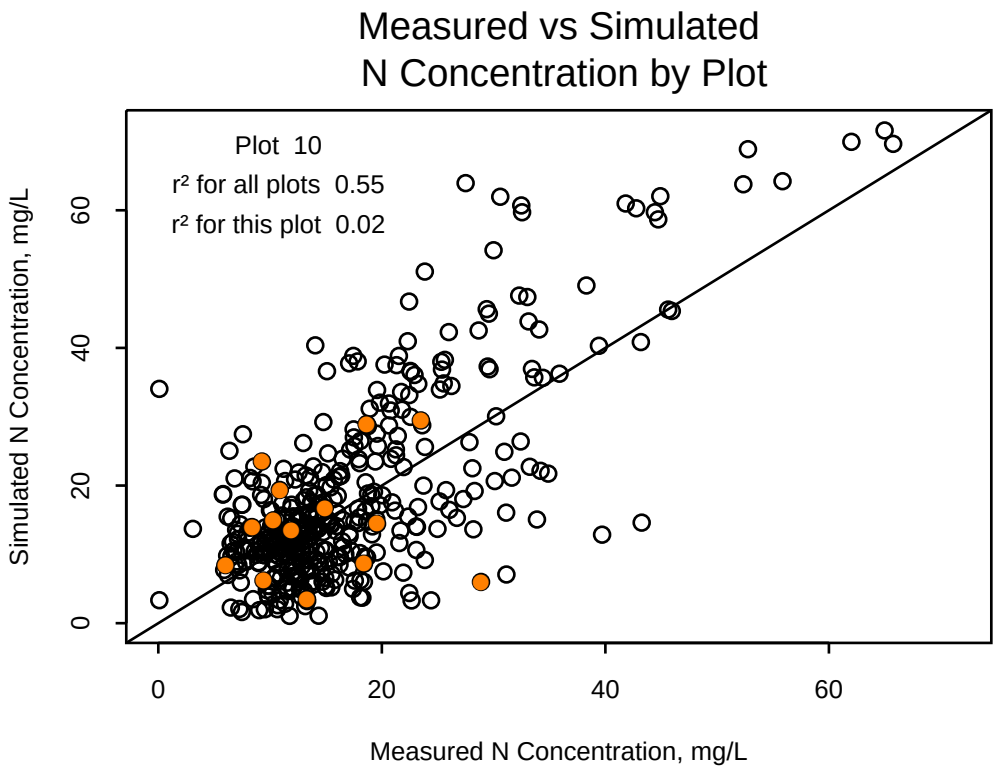

Measured vs Simulated
N Concentration by Plot
Plot 4
r² for all plots 0.55
r² for this plot 0.26
Simulated N Concentration, mg/L
Measured N Concentration, mg/L
0
20
40
60

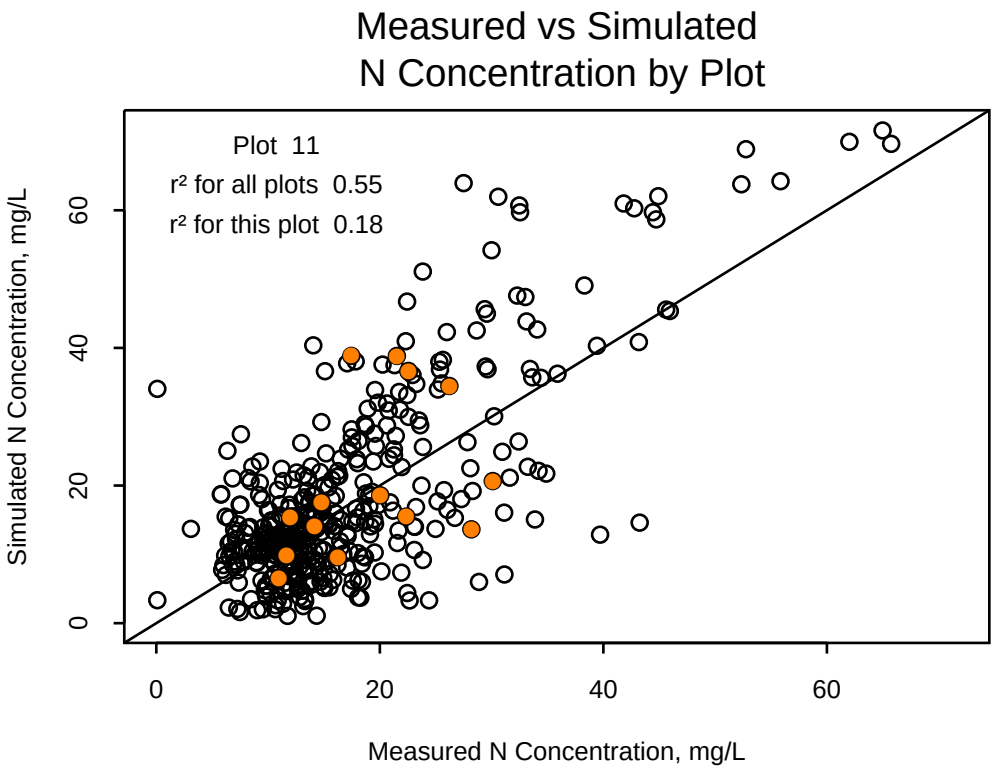

Measured vs Simulated
N Concentration by Plot
Plot 5
r² for all plots 0.55
r² for this plot 0.43
Simulated N Concentration, mg/L
Measured N Concentration, mg/L
0
20
40
60

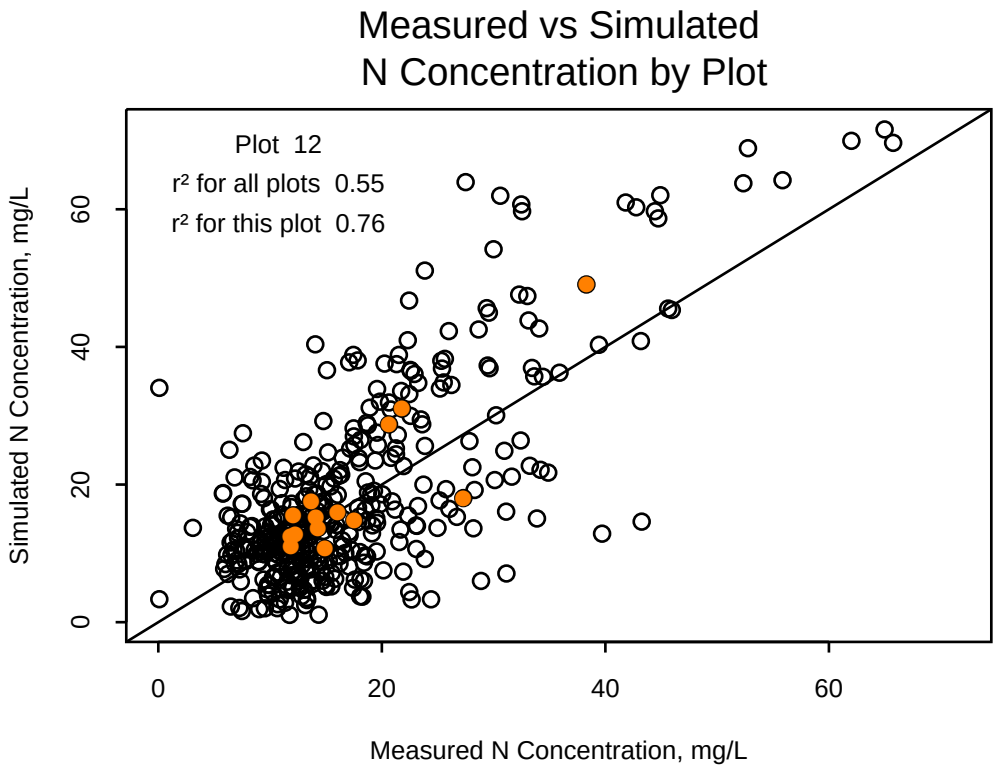

Measured vs Simulated
N Concentration by Plot
Plot 6
r² for all plots 0.55
r² for this plot 0.84
Simulated N Concentration, mg/L
Measured N Concentration, mg/L
0
20
40
60

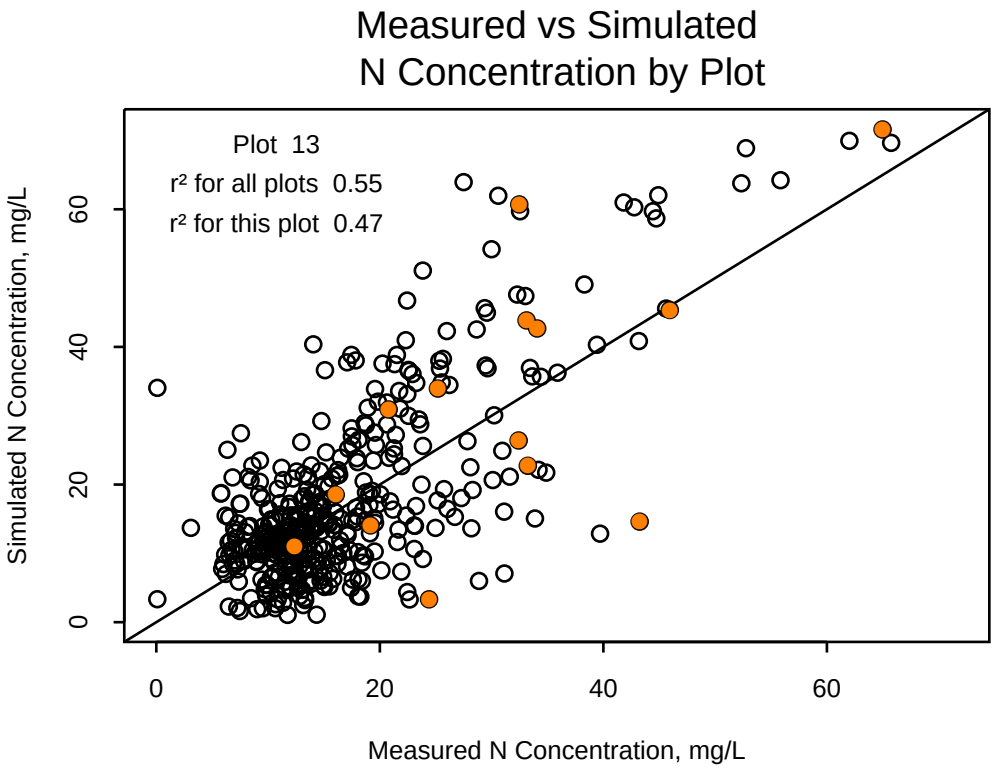

Measured vs Simulated
N Concentration by Plot
Plot 7
r² for all plots 0.55
r² for this plot 0.03
Simulated N Concentration, mg/L
Measured N Concentration, mg/L
0
20
40
60

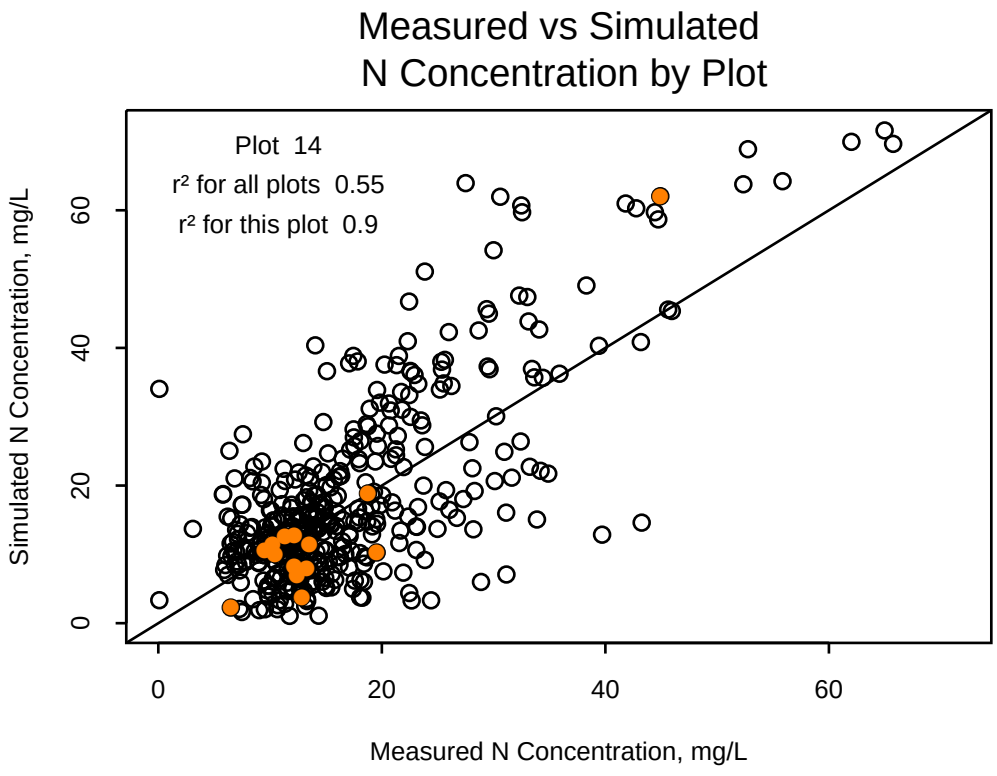

Measured vs Simulated
N Concentration by Plot
Plot 9
r² for all plots 0.55
r² for this plot 0.1
Simulated N Concentration, mg/L
Measured N Concentration, mg/L
0
20
40
60

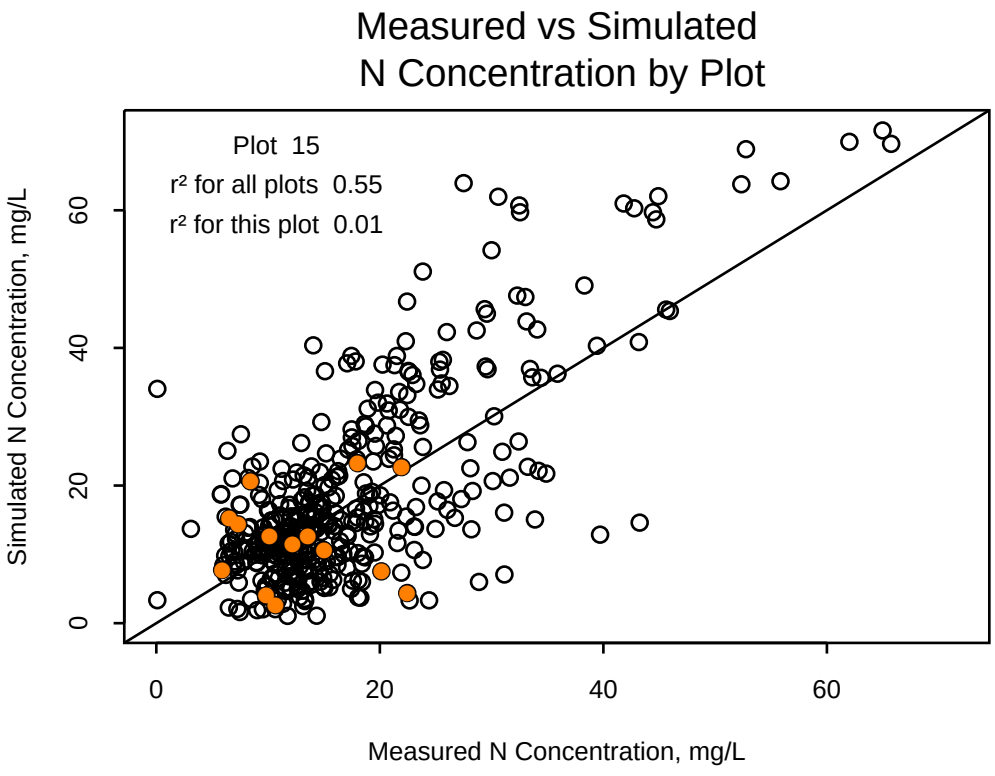

Measured vs Simulated
N Concentration by Plot
Plot 10
r² for all plots 0.55
r² for this plot 0.02
Simulated N Concentration, mg/L
Measured N Concentration, mg/L
0
20
40
60

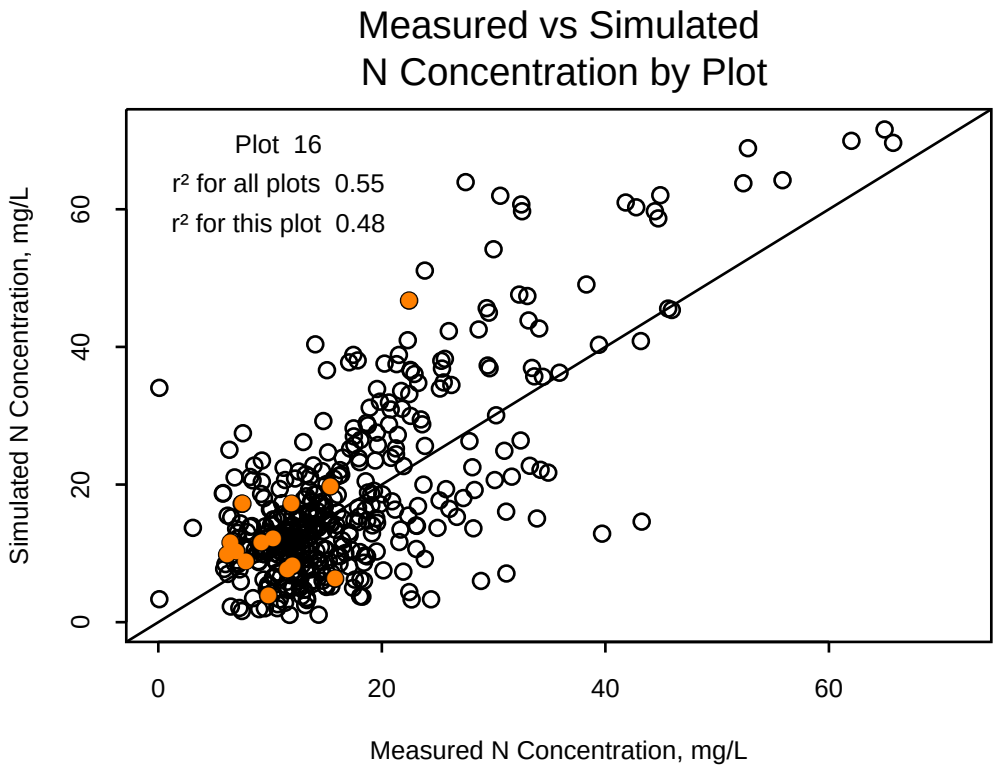

Measured vs Simulated
N Concentration by Plot
Plot 11
r² for all plots 0.55
r² for this plot 0.18
Simulated N Concentration, mg/L
Measured N Concentration, mg/L
0
20
40
60

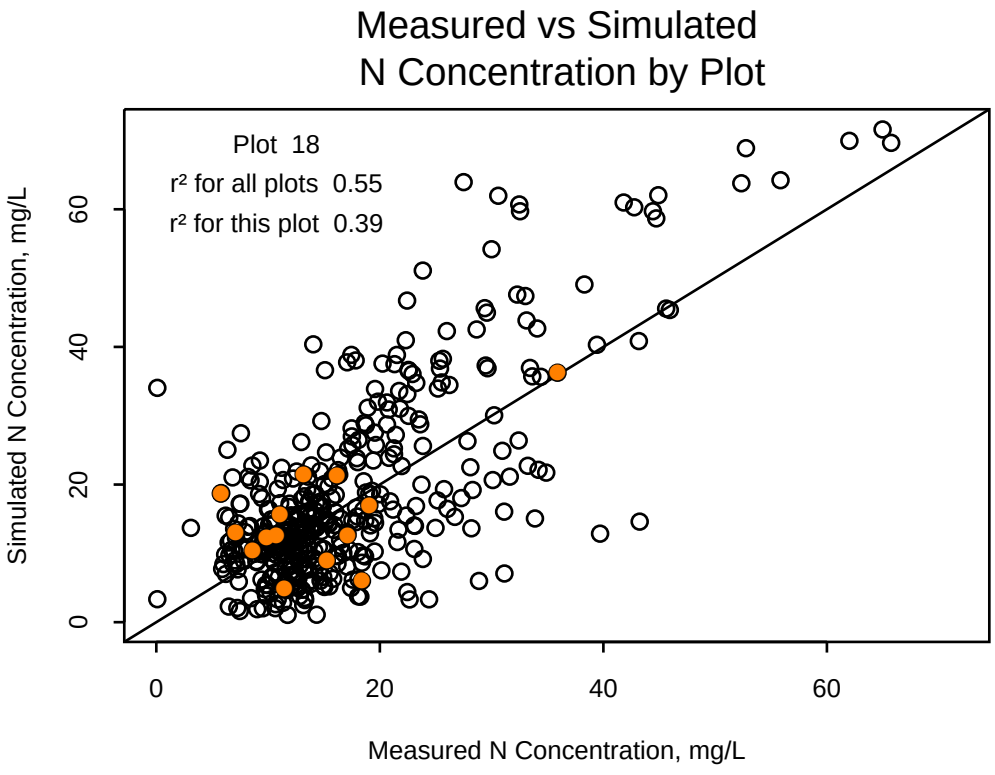

Measured vs Simulated
N Concentration by Plot
Plot 12
r² for all plots 0.55
r² for this plot 0.76
Simulated N Concentration, mg/L
Measured N Concentration, mg/L
0
20
40
60

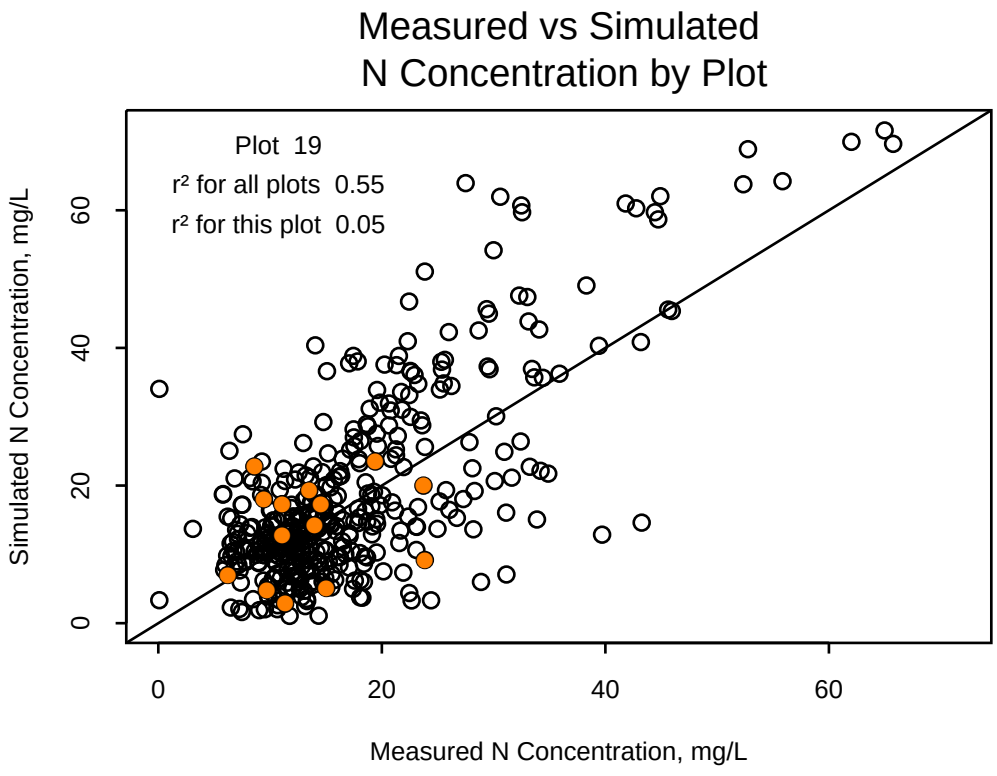

Measured vs Simulated
N Concentration by Plot
Plot 13
r² for all plots 0.55
r² for this plot 0.47
Simulated N Concentration, mg/L
Measured N Concentration, mg/L
0
20
40
60

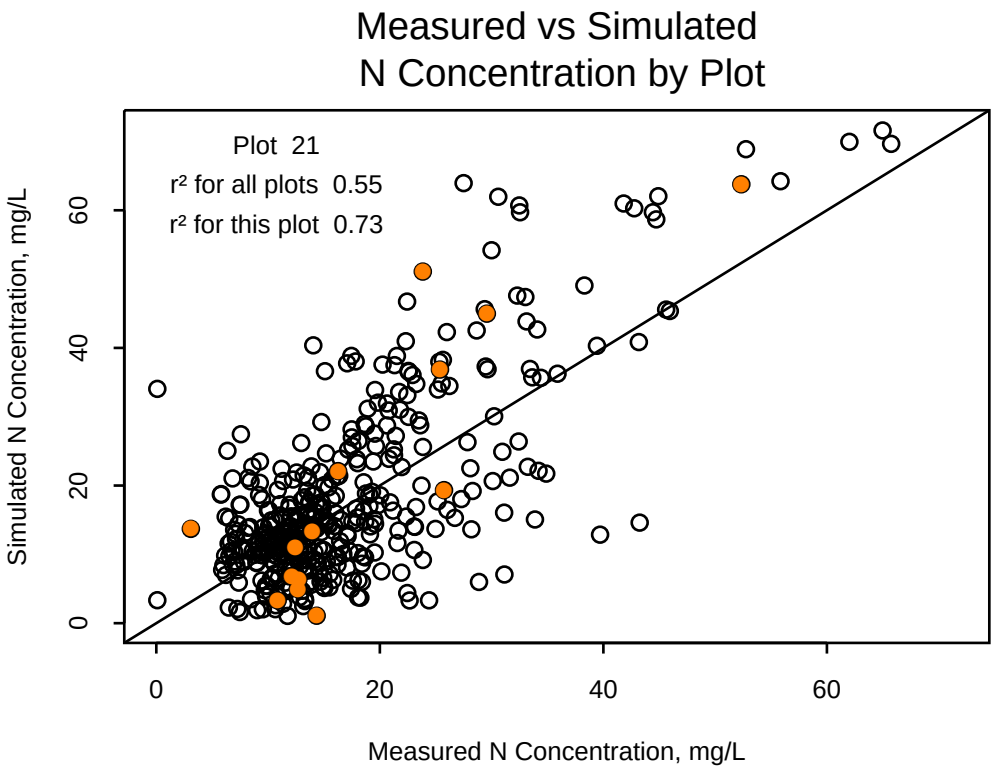

Measured vs Simulated
N Concentration by Plot
Plot 14
r² for all plots 0.55
r² for this plot 0.9
Simulated N Concentration, mg/L
Measured N Concentration, mg/L
0
20
40
60

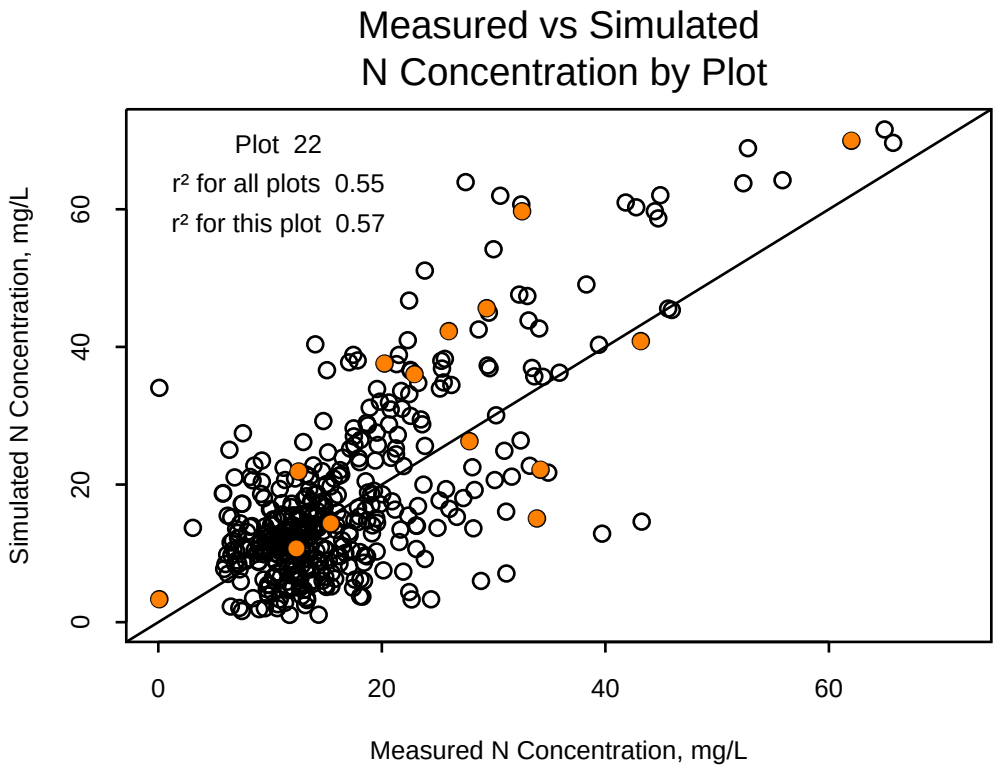

Measured vs Simulated
N Concentration by Plot
Plot 15
r² for all plots 0.55
r² for this plot 0.01
Simulated N Concentration, mg/L
Measured N Concentration, mg/L
0
20
40
60

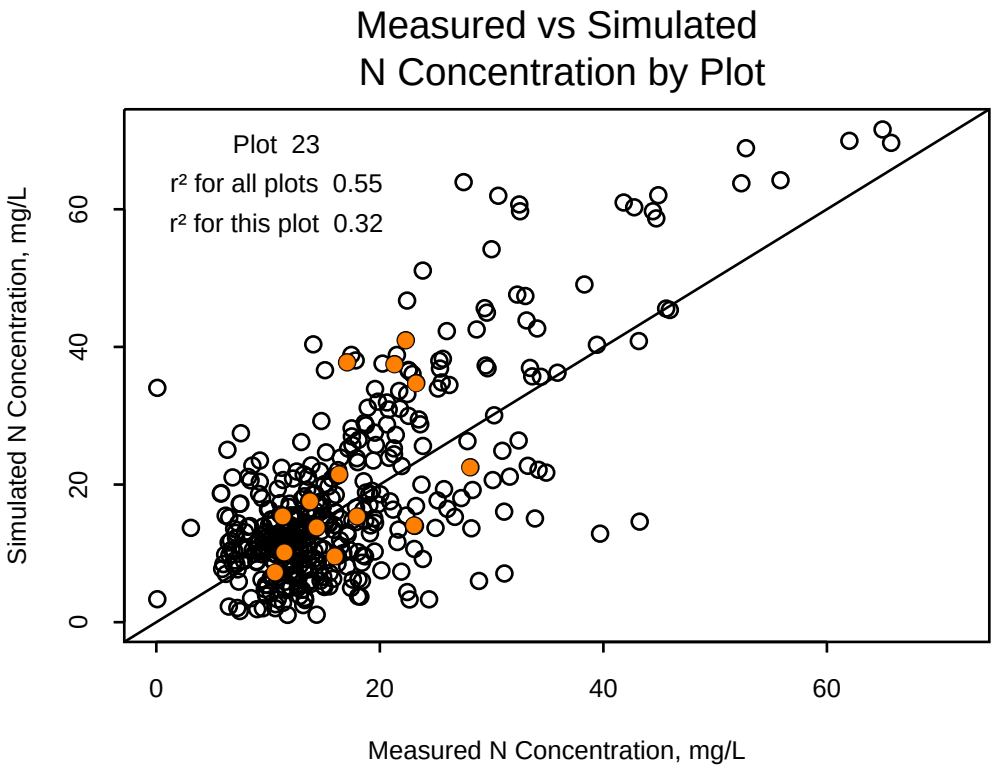

Measured vs Simulated
N Concentration by Plot
Plot 16
r² for all plots 0.55
r² for this plot 0.48
Simulated N Concentration, mg/L
Measured N Concentration, mg/L
0
20
40
60

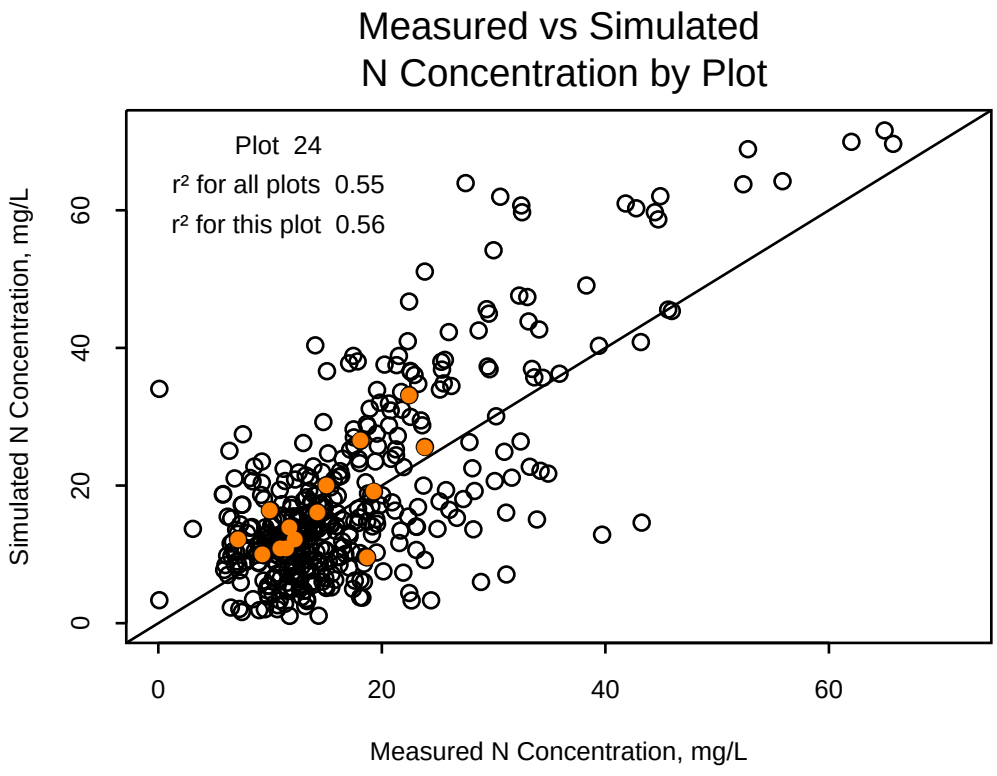

Measured vs Simulated
N Concentration by Plot
Plot 18
r² for all plots 0.55
r² for this plot 0.39
Simulated N Concentration, mg/L
Measured N Concentration, mg/L
0
20
40
60

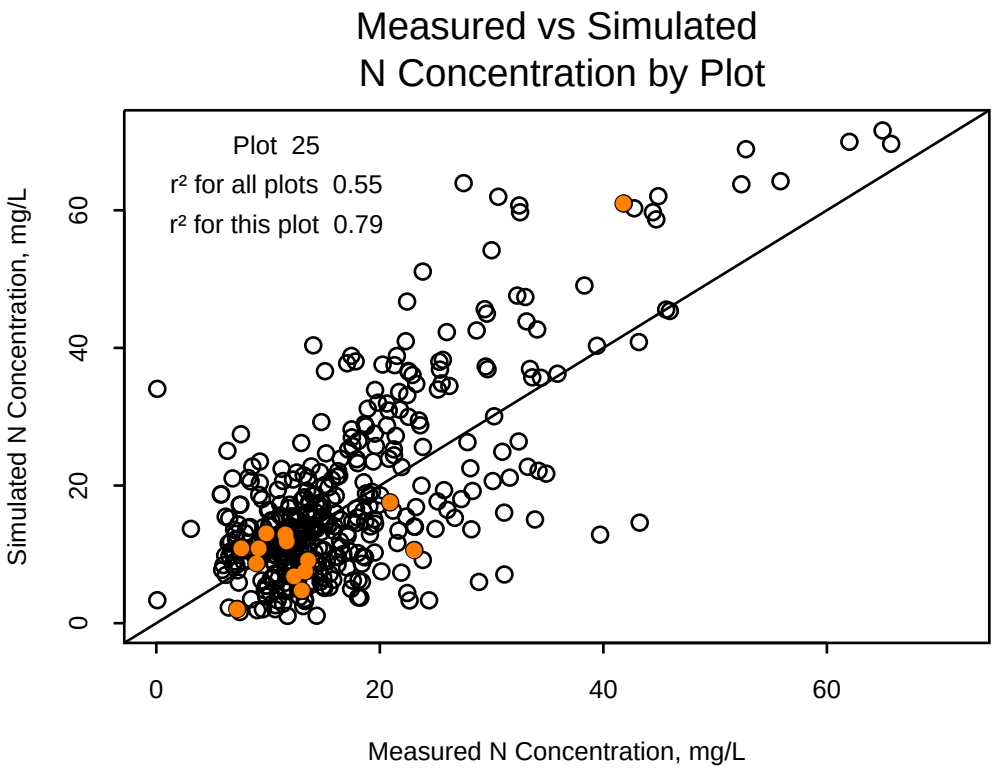

Measured vs Simulated
N Concentration by Plot
Plot 19
r² for all plots 0.55
r² for this plot 0.05
Simulated N Concentration, mg/L
Measured N Concentration, mg/L
0
20
40
60

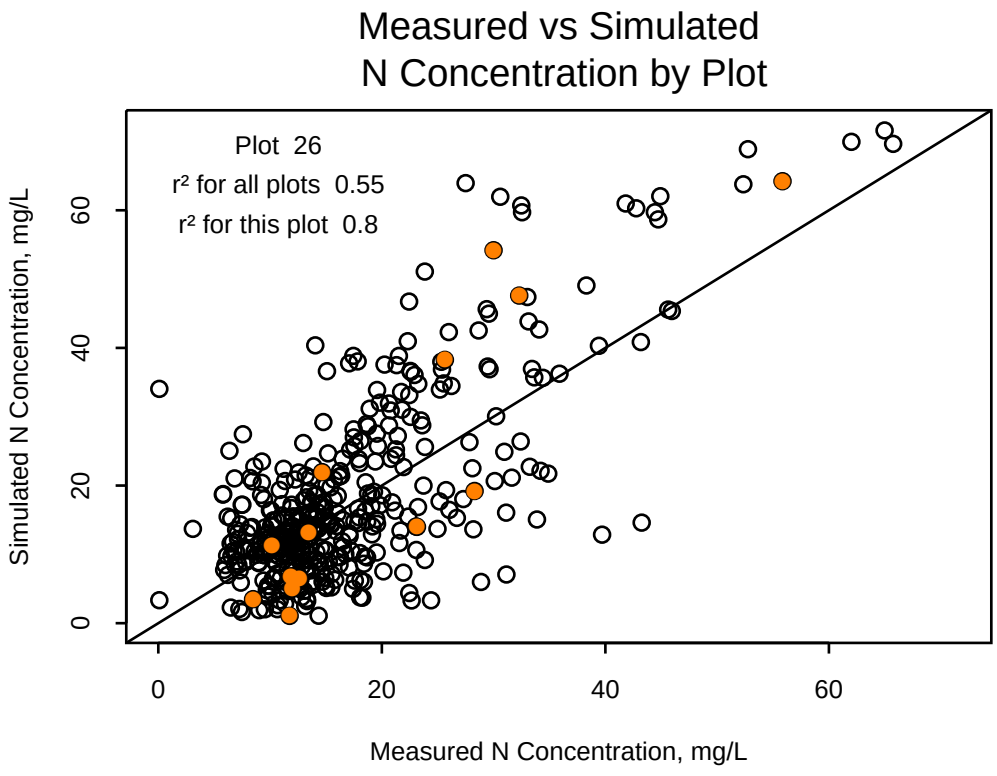

Measured vs Simulated
N Concentration by Plot
Plot 21
r² for all plots 0.55
r² for this plot 0.73
Simulated N Concentration, mg/L
Measured N Concentration, mg/L
0
20
40
60

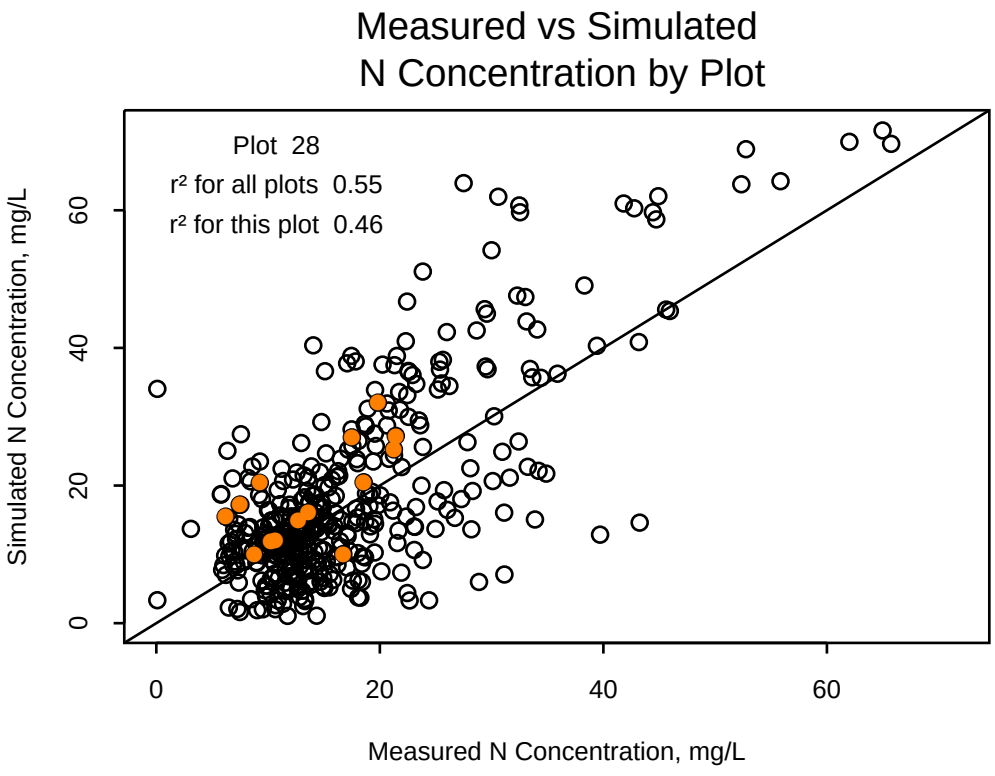

Measured vs Simulated
N Concentration by Plot
Plot 22
r² for all plots 0.55
r² for this plot 0.57
Simulated N Concentration, mg/L
Measured N Concentration, mg/L
0
20
40
60

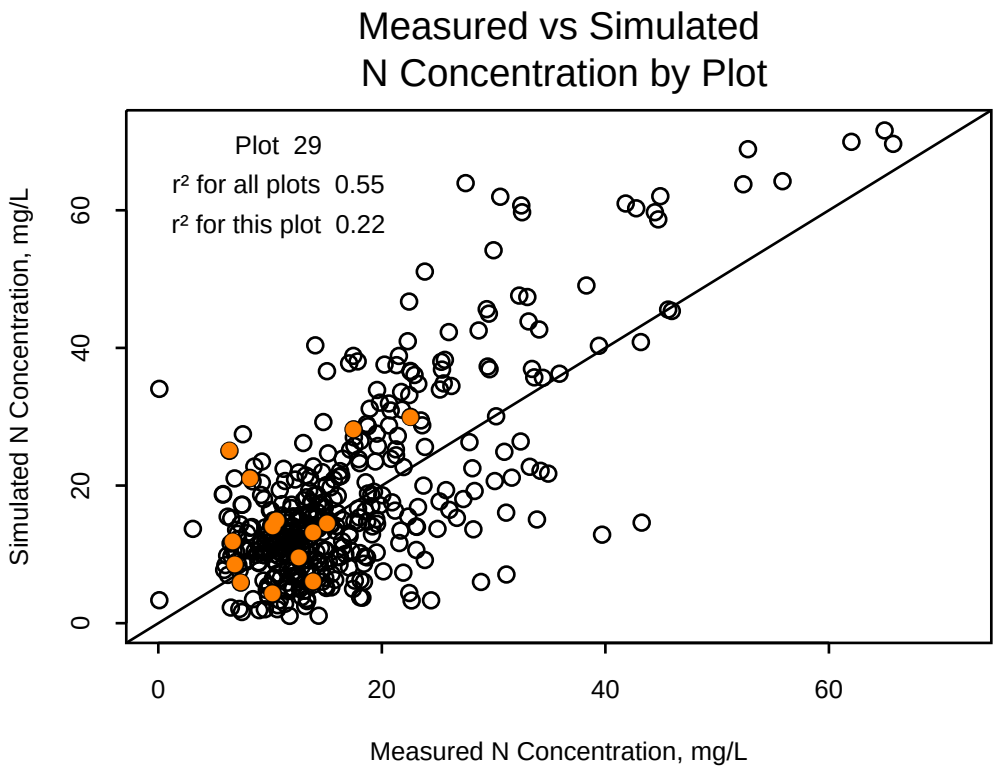

Measured vs Simulated
N Concentration by Plot
Plot 23
r² for all plots 0.55
r² for this plot 0.32
Simulated N Concentration, mg/L
Measured N Concentration, mg/L
0
20
40
60

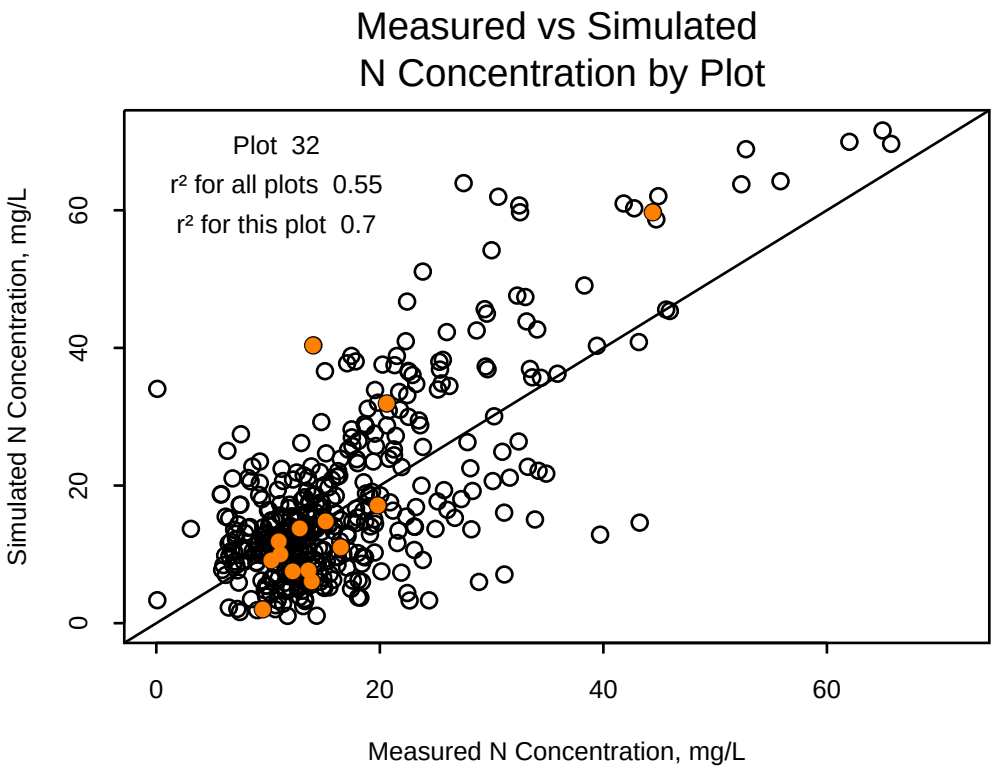

Measured vs Simulated
N Concentration by Plot
Plot 24
r² for all plots 0.55
r² for this plot 0.56
Simulated N Concentration, mg/L
Measured N Concentration, mg/L
0
20
40
60

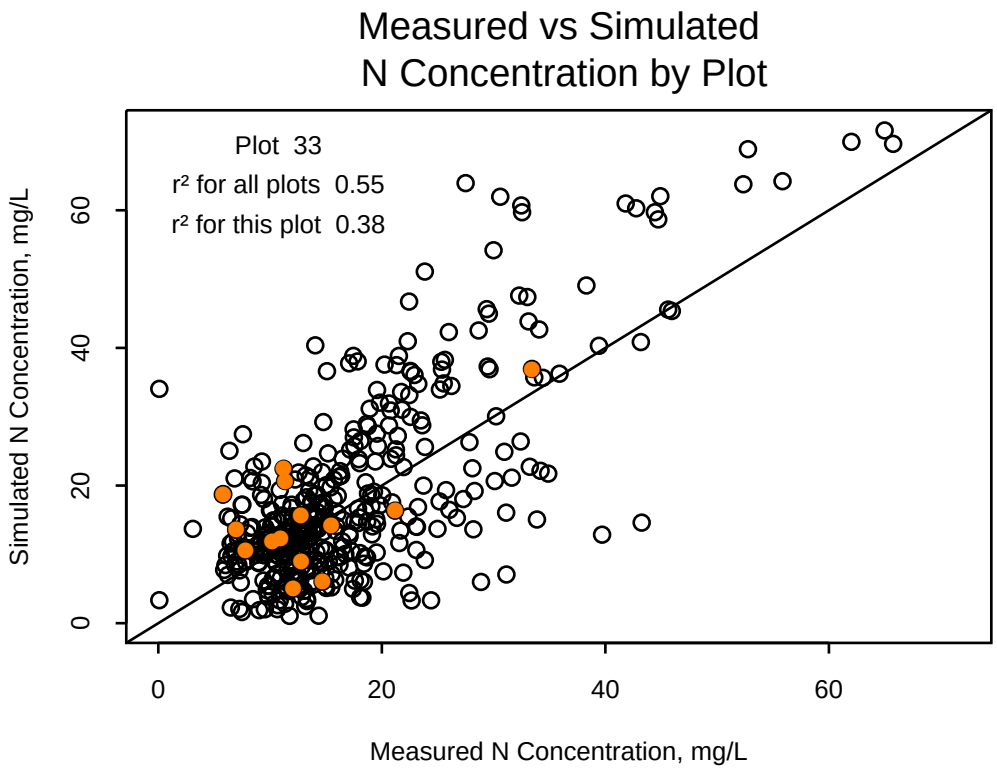

Measured vs Simulated
N Concentration by Plot
Plot 25
r² for all plots 0.55
r² for this plot 0.79
Simulated N Concentration, mg/L
Measured N Concentration, mg/L
0
20
40
60

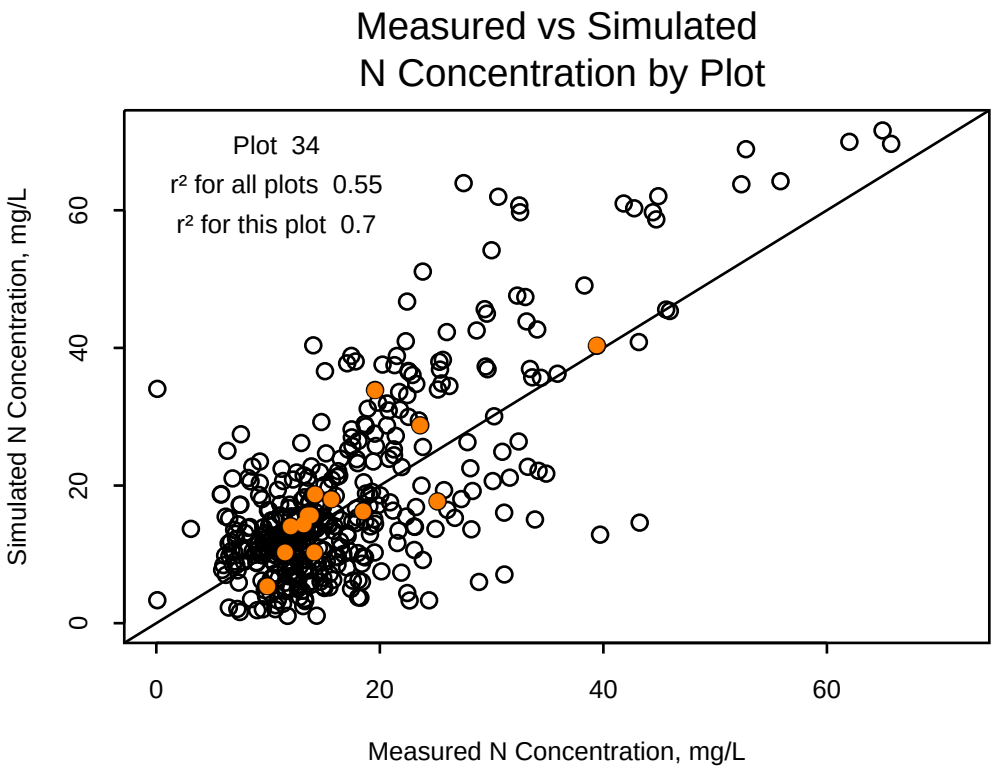

Measured vs Simulated
N Concentration by Plot
Plot 26
r² for all plots 0.55
r² for this plot 0.8
Simulated N Concentration, mg/L
Measured N Concentration, mg/L
0
20
40
60

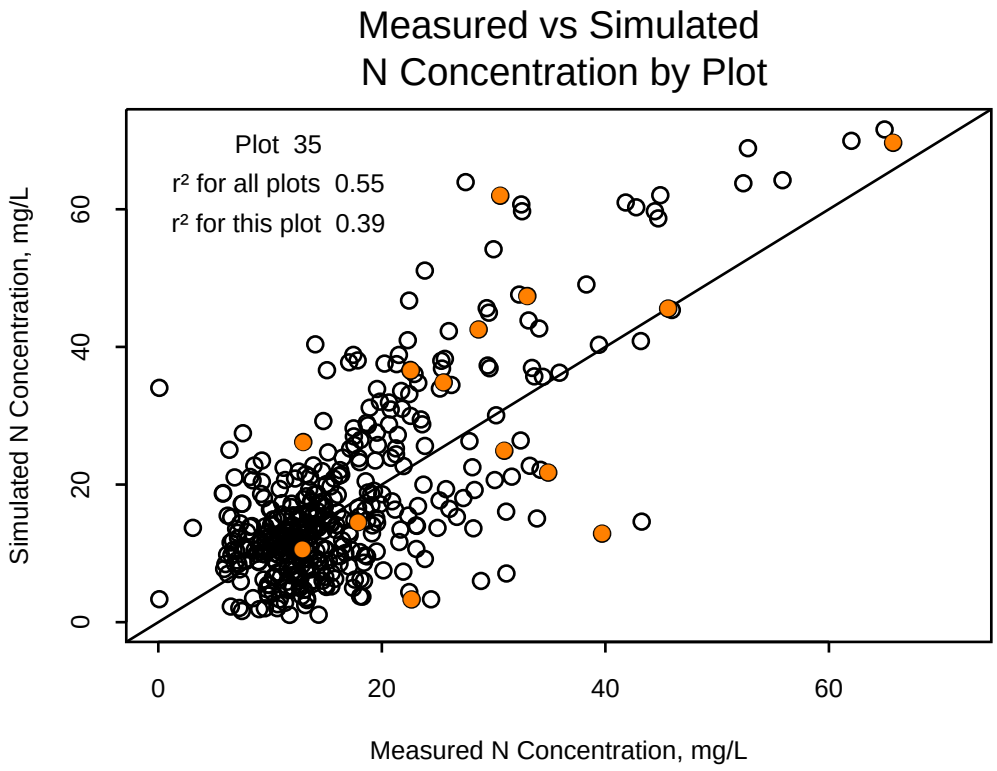

Measured vs Simulated
N Concentration by Plot
Plot 28
r² for all plots 0.55
r² for this plot 0.46
Simulated N Concentration, mg/L
Measured N Concentration, mg/L
0
20
40
60

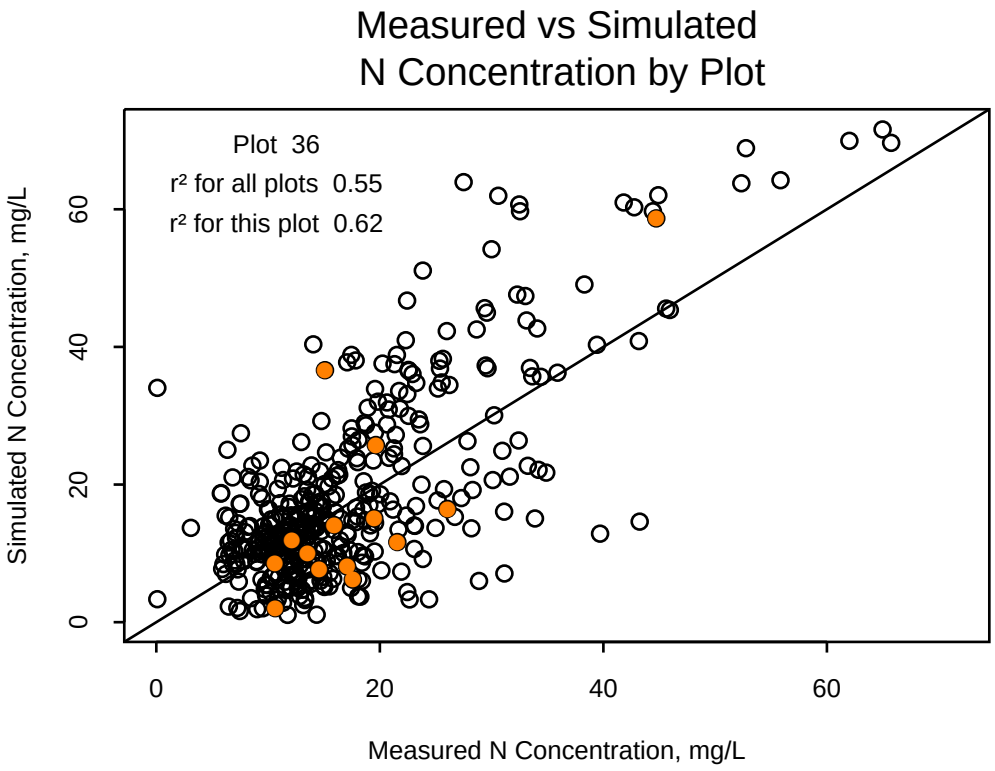

Measured vs Simulated
N Concentration by Plot
Plot 29
r² for all plots 0.55
r² for this plot 0.22
Simulated N Concentration, mg/L
Measured N Concentration, mg/L
0
20
40
60

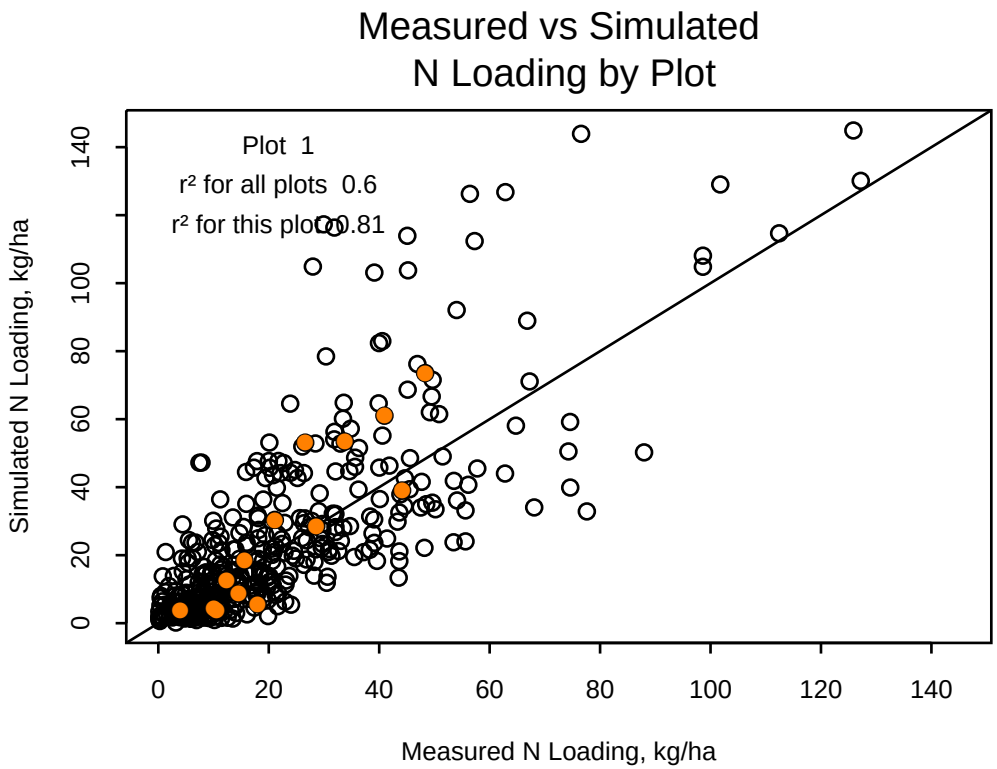

Measured vs Simulated
N Concentration by Plot
Plot 32
r² for all plots 0.55
r² for this plot 0.7
Simulated N Concentration, mg/L
Measured N Concentration, mg/L
0
20
40
60

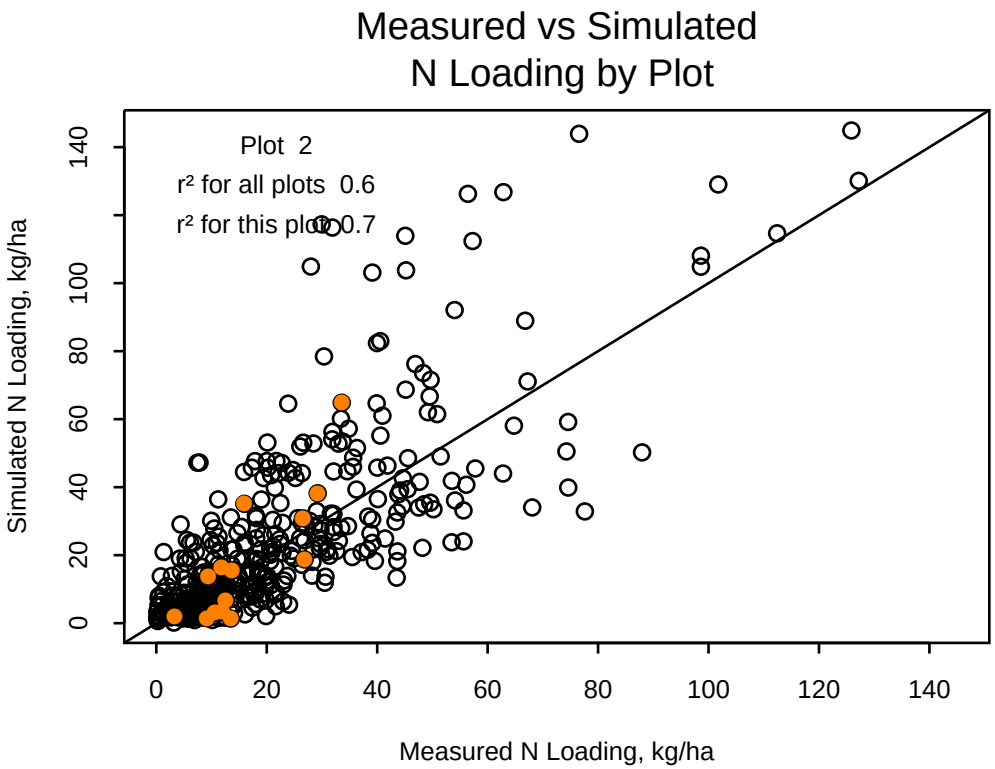

Measured vs Simulated
N Concentration by Plot
Plot 33
r² for all plots 0.55
r² for this plot 0.38
Simulated N Concentration, mg/L
Measured N Concentration, mg/L
0
20
40
60

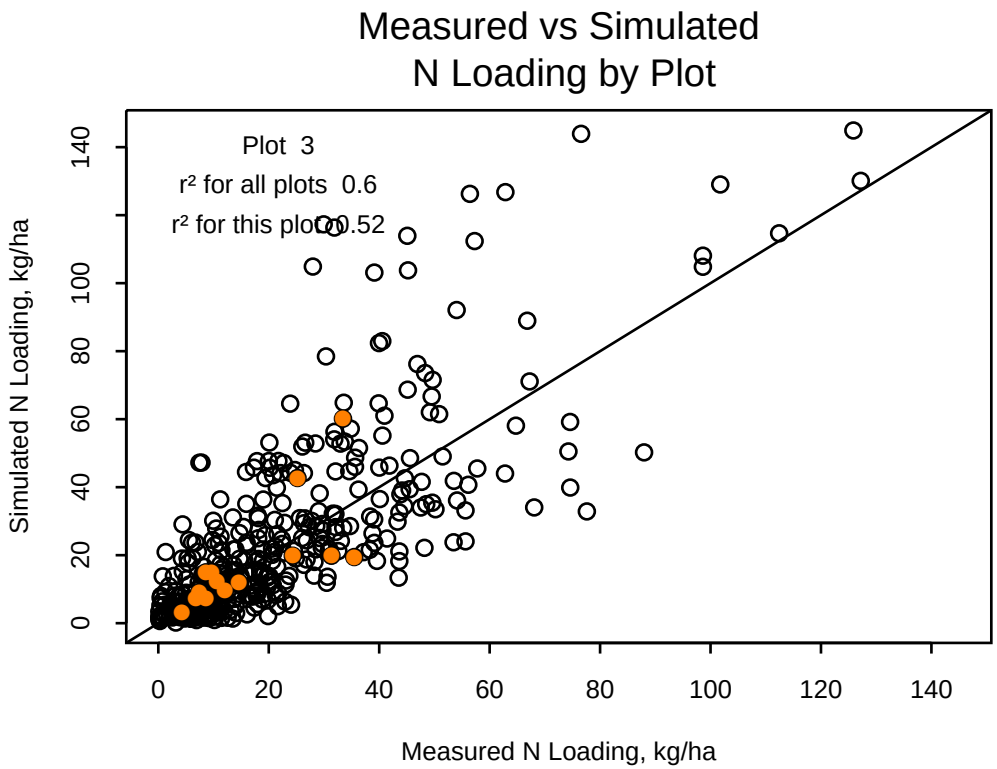

Measured vs Simulated
N Concentration by Plot
Plot 34
r² for all plots 0.55
r² for this plot 0.7
Simulated N Concentration, mg/L
Measured N Concentration, mg/L
0
20
40
60

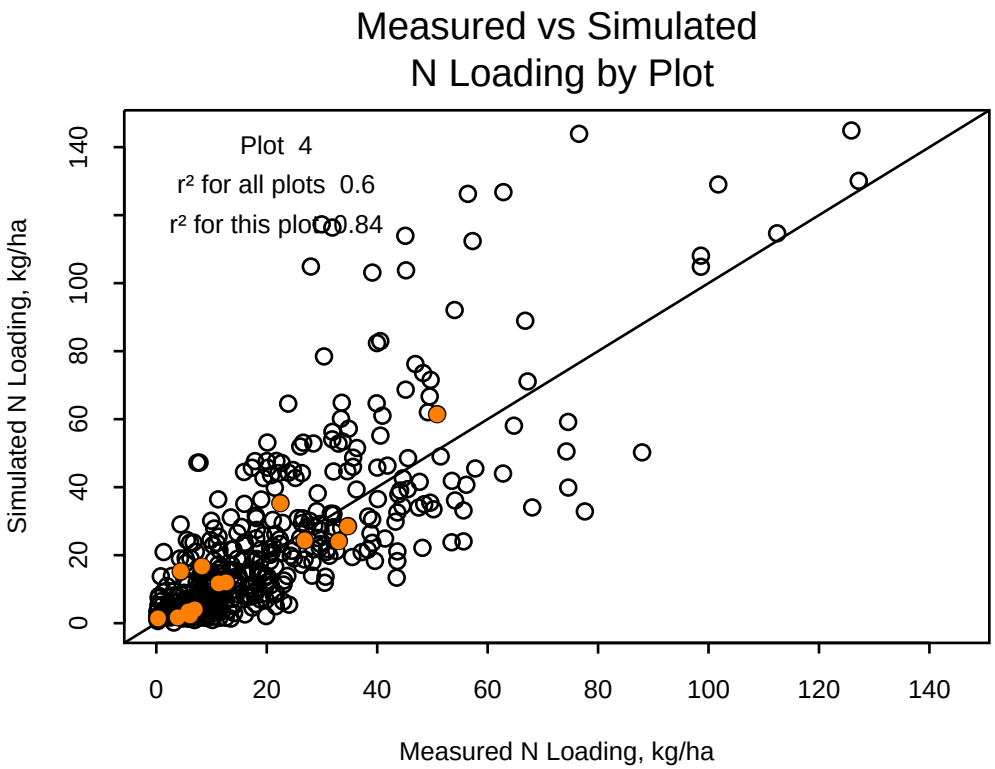

Measured vs Simulated
N Concentration by Plot
Plot 35
r² for all plots 0.55
r² for this plot 0.39
Simulated N Concentration, mg/L
Measured N Concentration, mg/L
0
20
40
60

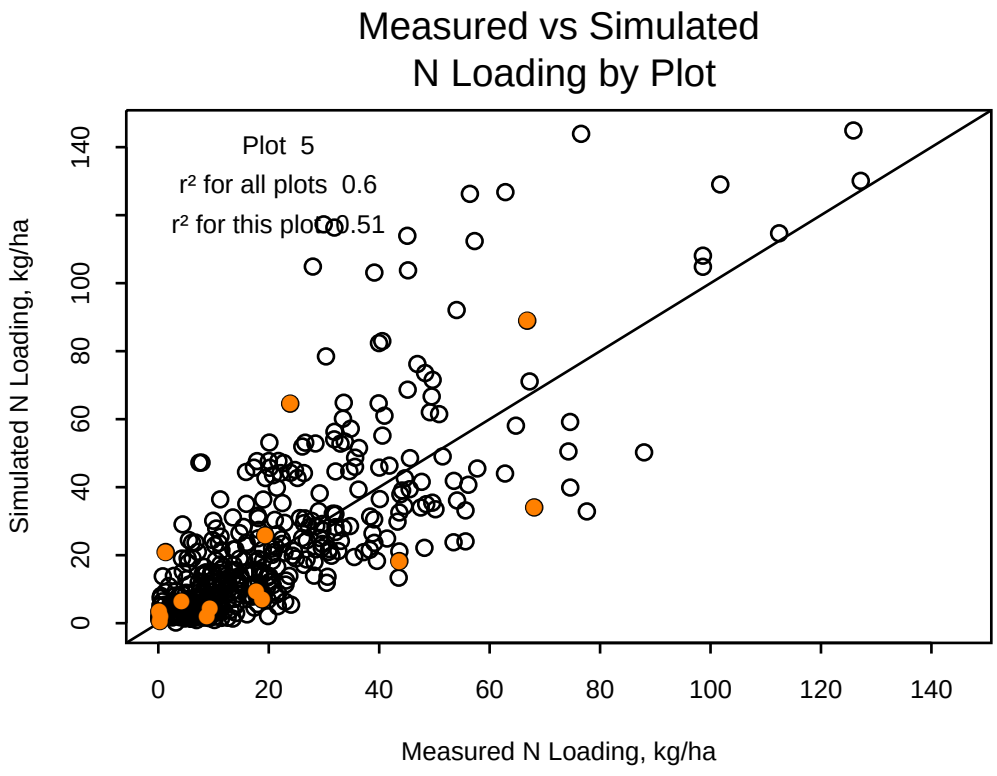

Measured vs Simulated
N Concentration by Plot
Plot 36
r² for all plots 0.55
r² for this plot 0.62
Simulated N Concentration, mg/L
Measured N Concentration, mg/L
0
20
40
60

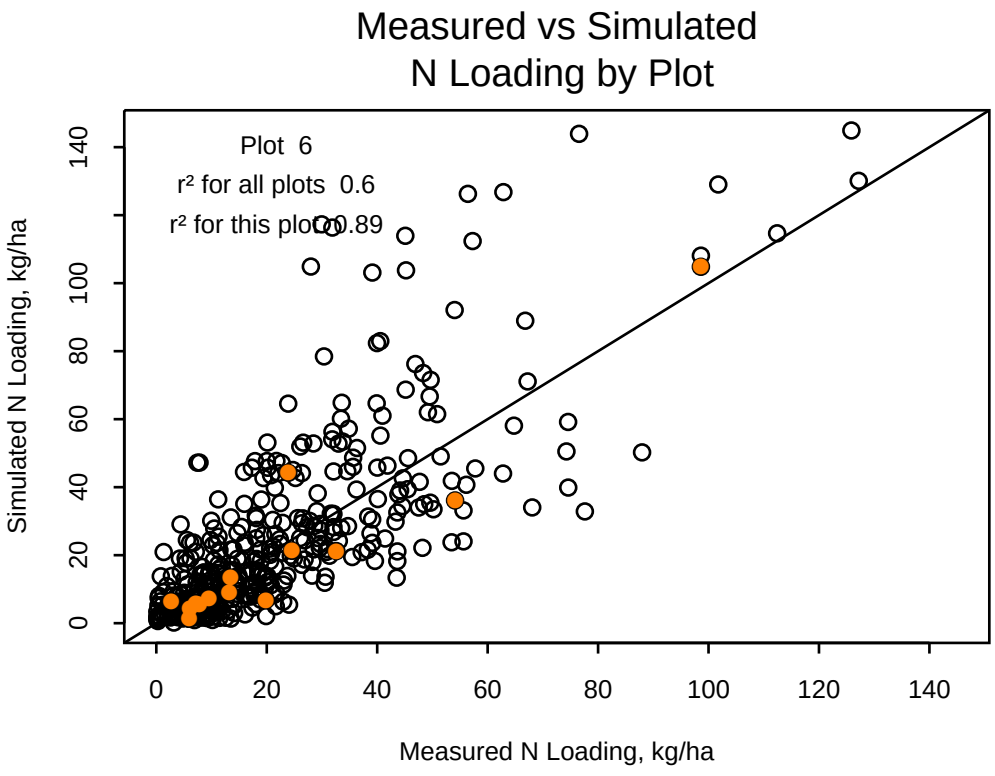

Measured vs Simulated
N Loading by Plot
Plot 1
r² for all plots 0.6
r² for this plot 0.81
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
0
20
40
60
80
100
120
140

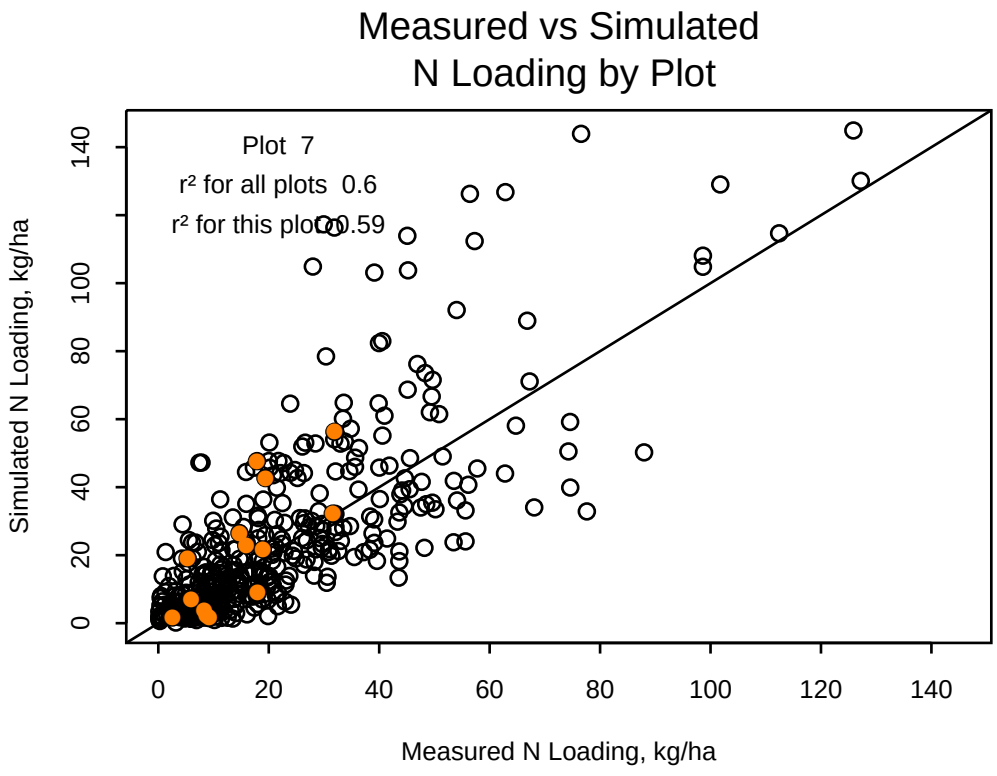

Measured vs Simulated
N Loading by Plot
Plot 2
r² for all plots 0.6
r² for this plot 0.7
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
0
20
40
60
80
100
120
140

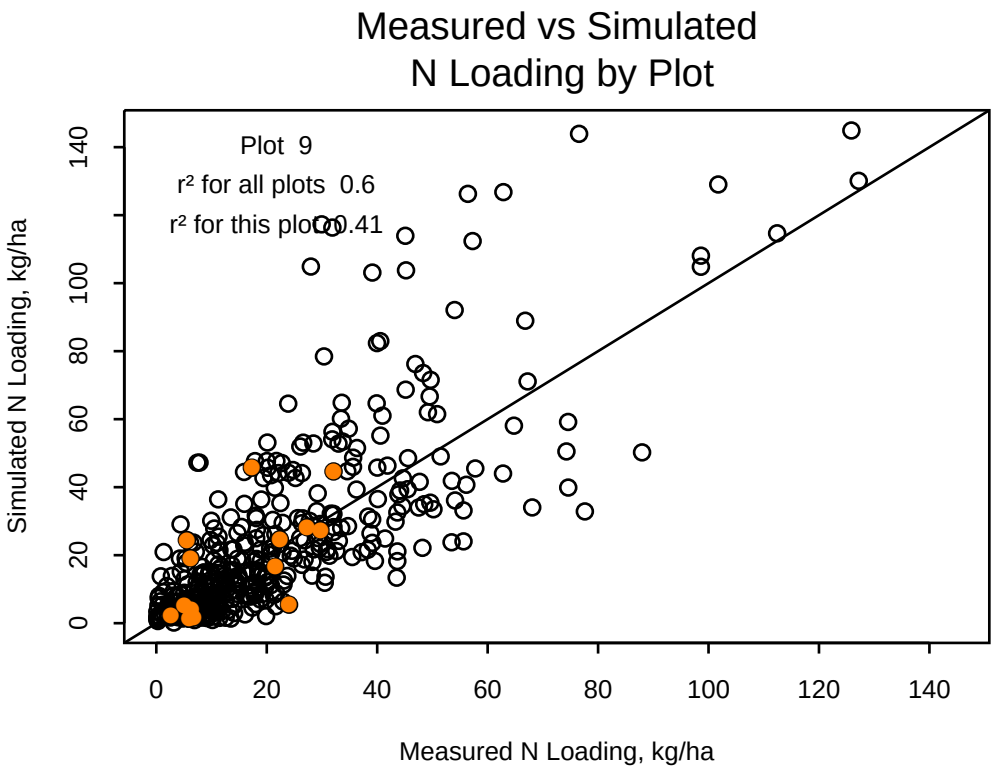

Measured vs Simulated
N Loading by Plot
Plot 3
r² for all plots 0.6
r² for this plot 0.52
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
0
20
40
60
80
100
120
140

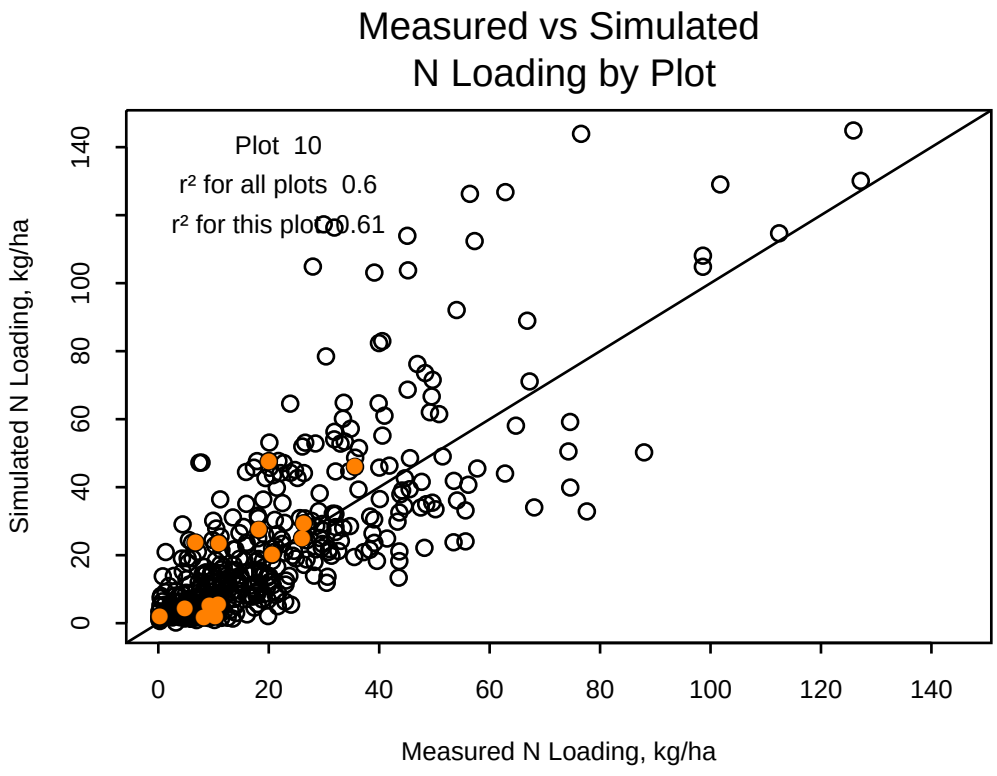

Measured vs Simulated
N Loading by Plot
Plot 4
r² for all plots 0.6
r² for this plot 0.84
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
0
20
40
60
80
100
120
140

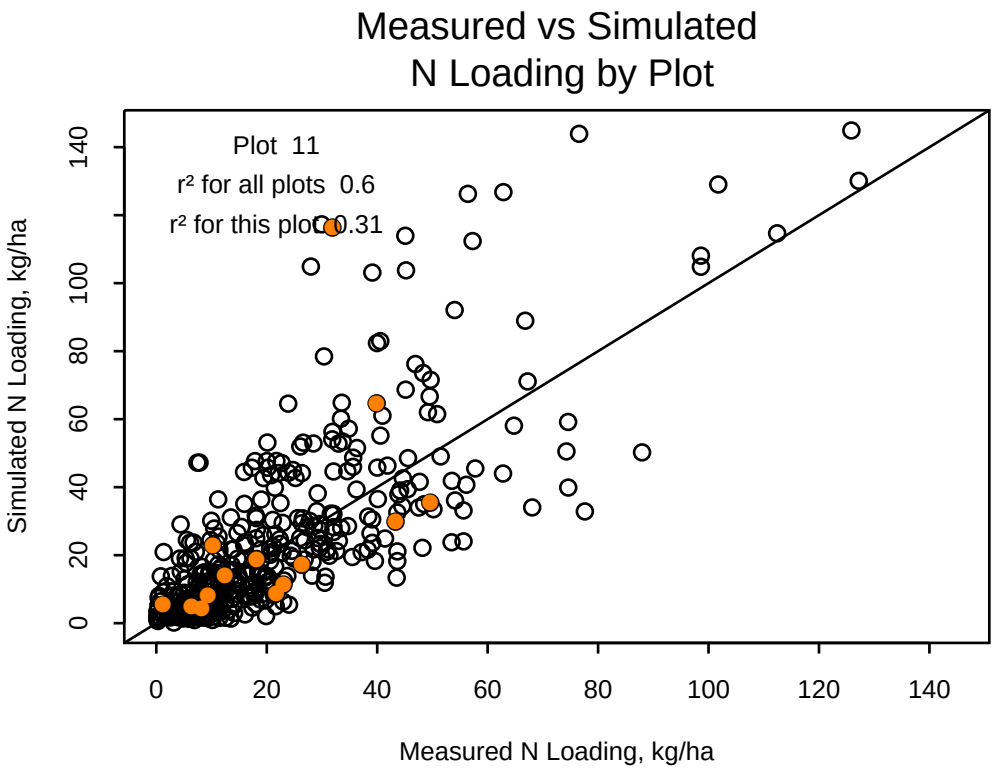

Measured vs Simulated
N Loading by Plot
Plot 5
r² for all plots 0.6
r² for this plot 0.51
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
0
20
40
60
80
100
120
140

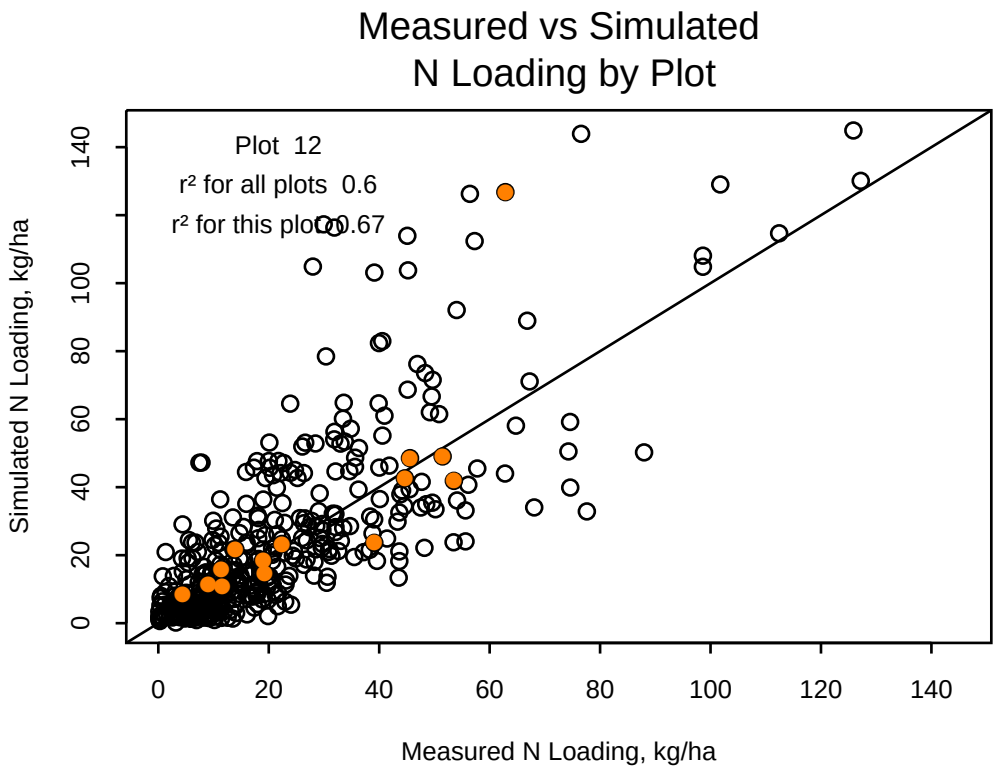

Measured vs Simulated
N Loading by Plot
Plot 6
r² for all plots 0.6
r² for this plot 0.89
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
0
20
40
60
80
100
120
140

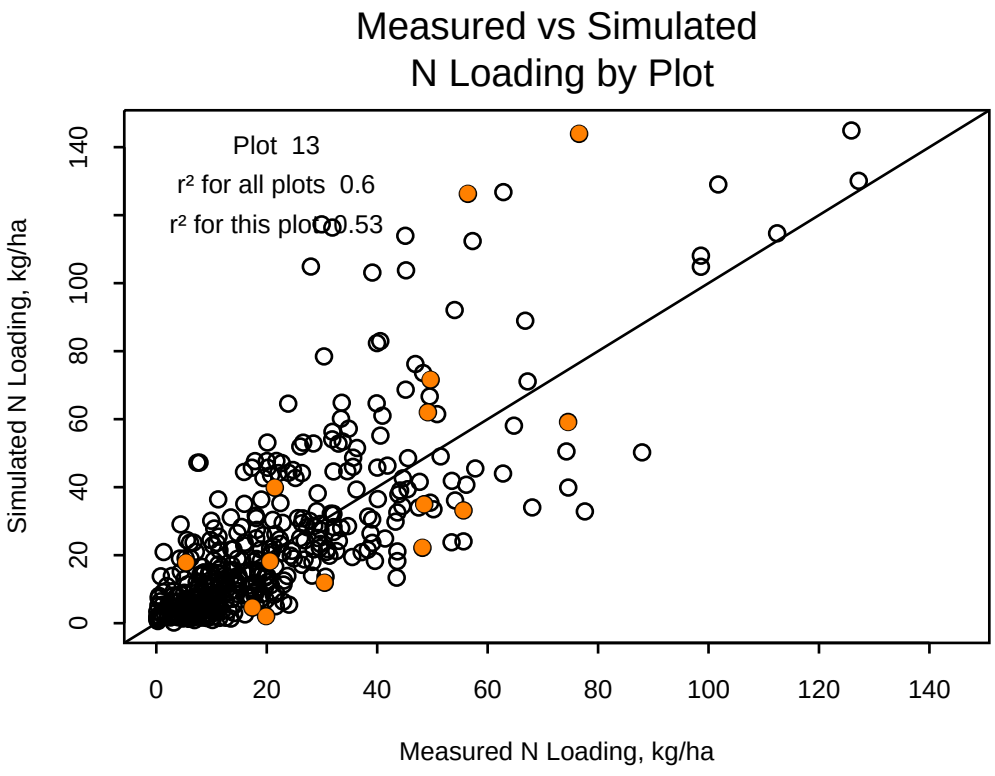

Measured vs Simulated
N Loading by Plot
Plot 7
r² for all plots 0.6
r² for this plot 0.59
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
0
20
40
60
80
100
120
140

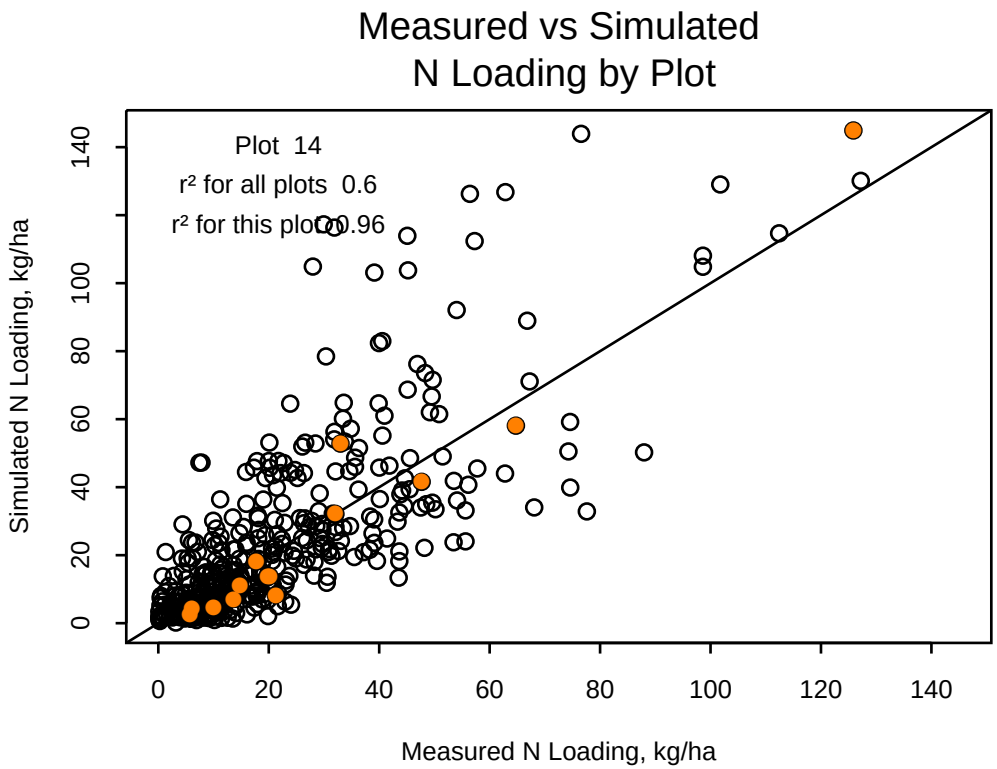

Measured vs Simulated
N Loading by Plot
Plot 9
r² for all plots 0.6
r² for this plot 0.41
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
0
20
40
60
80
100
120
140

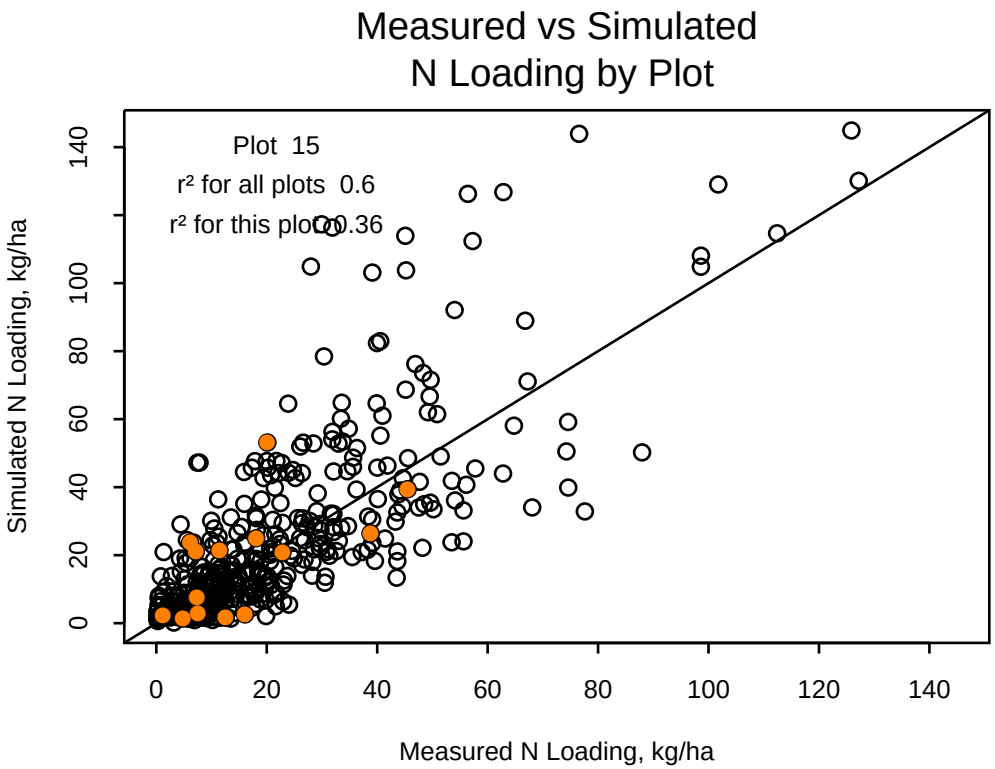

Measured vs Simulated
N Loading by Plot
Plot 10
r² for all plots 0.6
r² for this plot 0.61
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
0
20
40
60
80
100
120
140

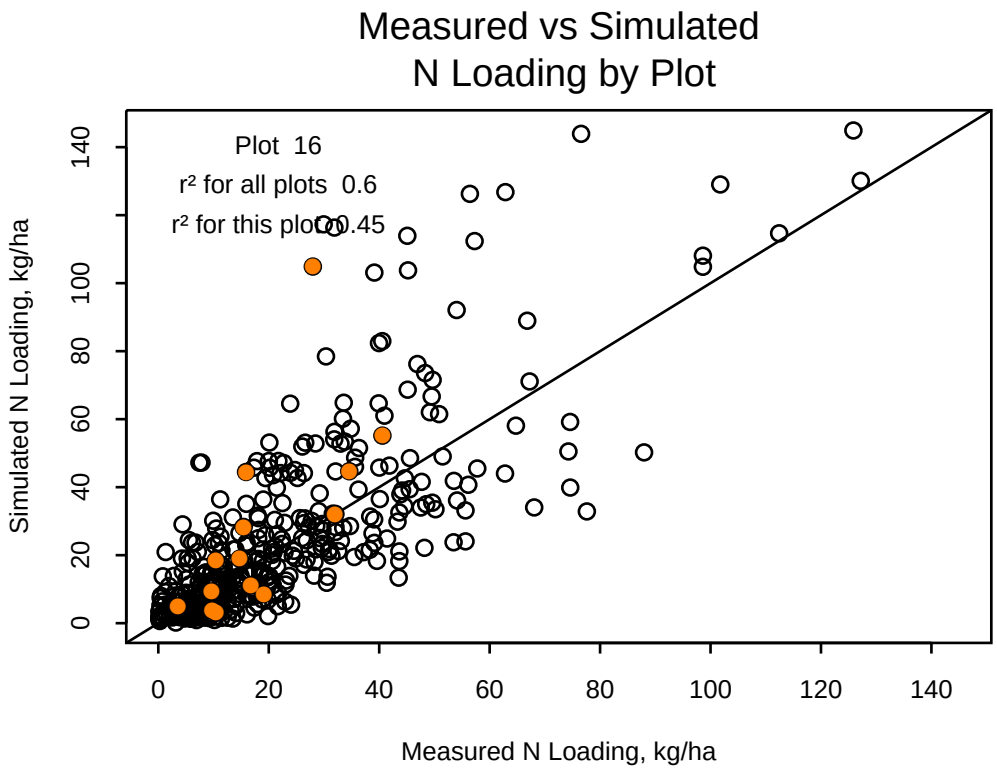

Measured vs Simulated
N Loading by Plot
Plot 11
r² for all plots 0.6
r² for this plot 0.31
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
0
20
40
60
80
100
120
140

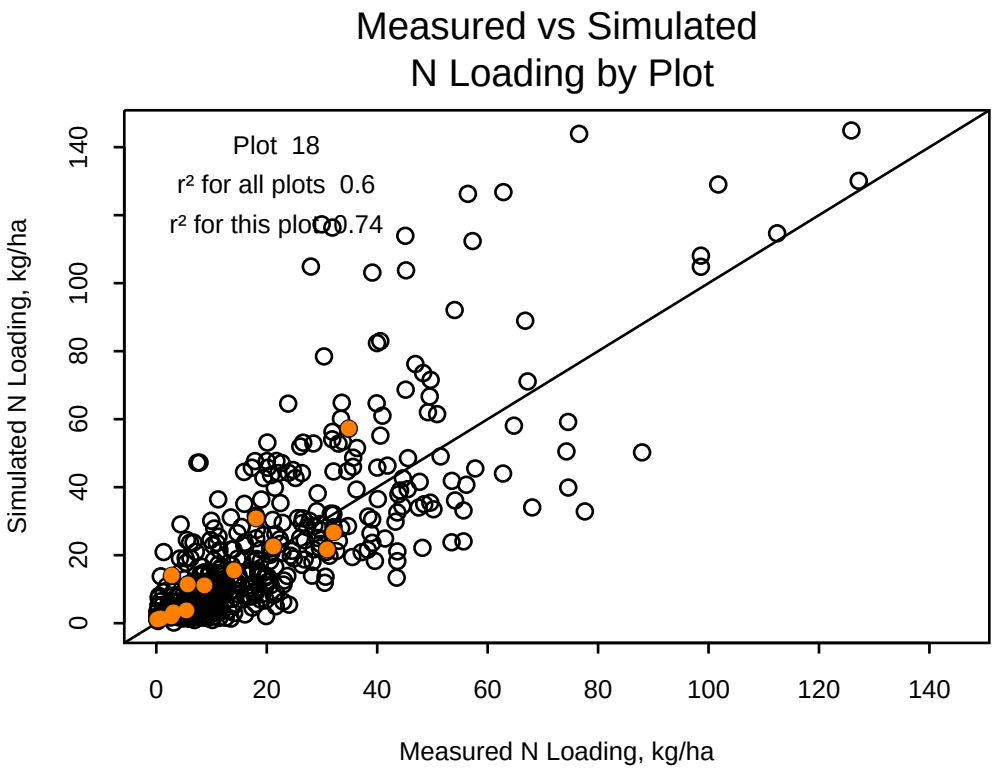

Measured vs Simulated
N Loading by Plot
Plot 12
r² for all plots 0.6
r² for this plot 0.67
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
0
20
40
60
80
100
120
140

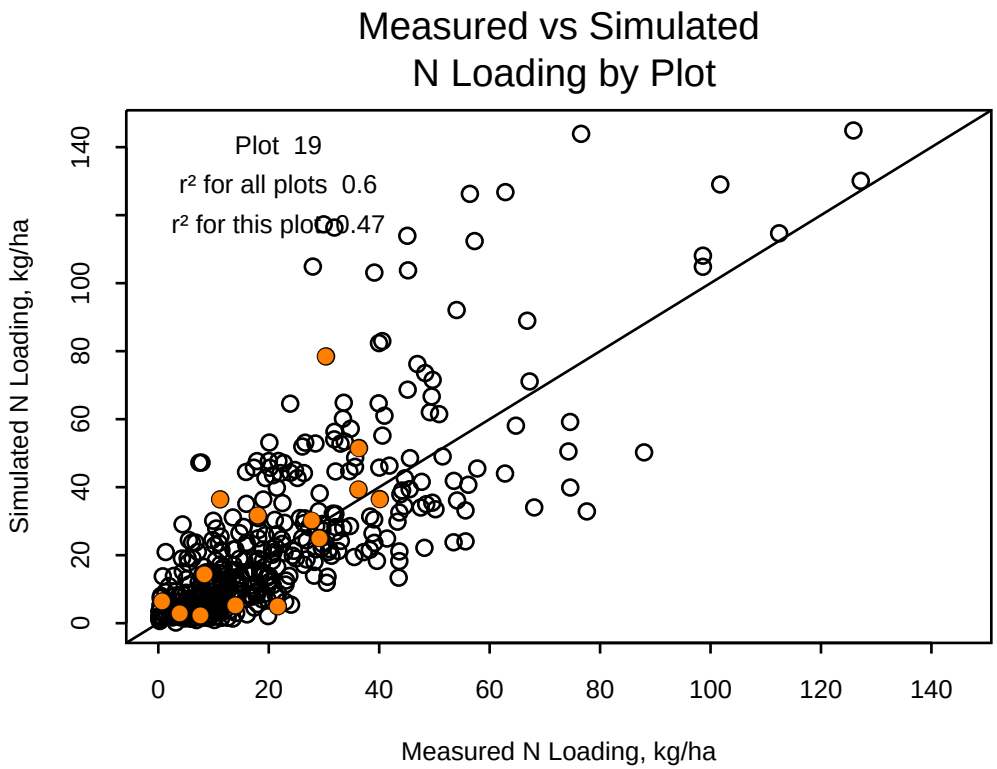

Measured vs Simulated
N Loading by Plot
Plot 13
r² for all plots 0.6
r² for this plot 0.53
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
0
20
40
60
80
100
120
140

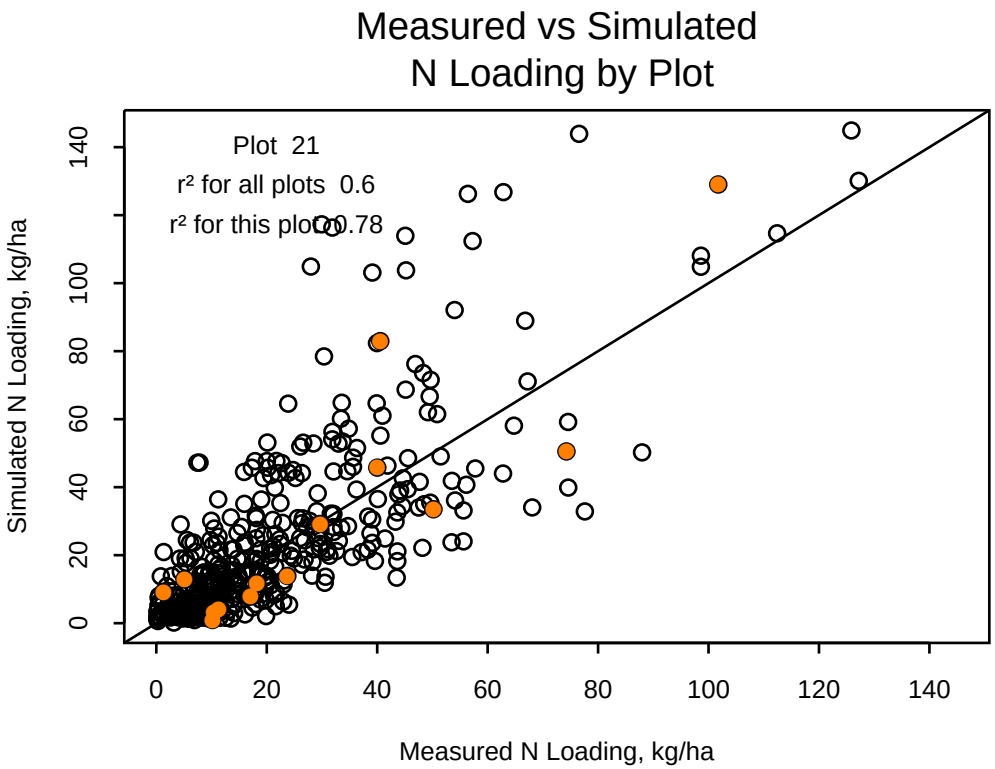

Measured vs Simulated
N Loading by Plot
Plot 14
r² for all plots 0.6
r² for this plot 0.96
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
0
20
40
60
80
100
120
140

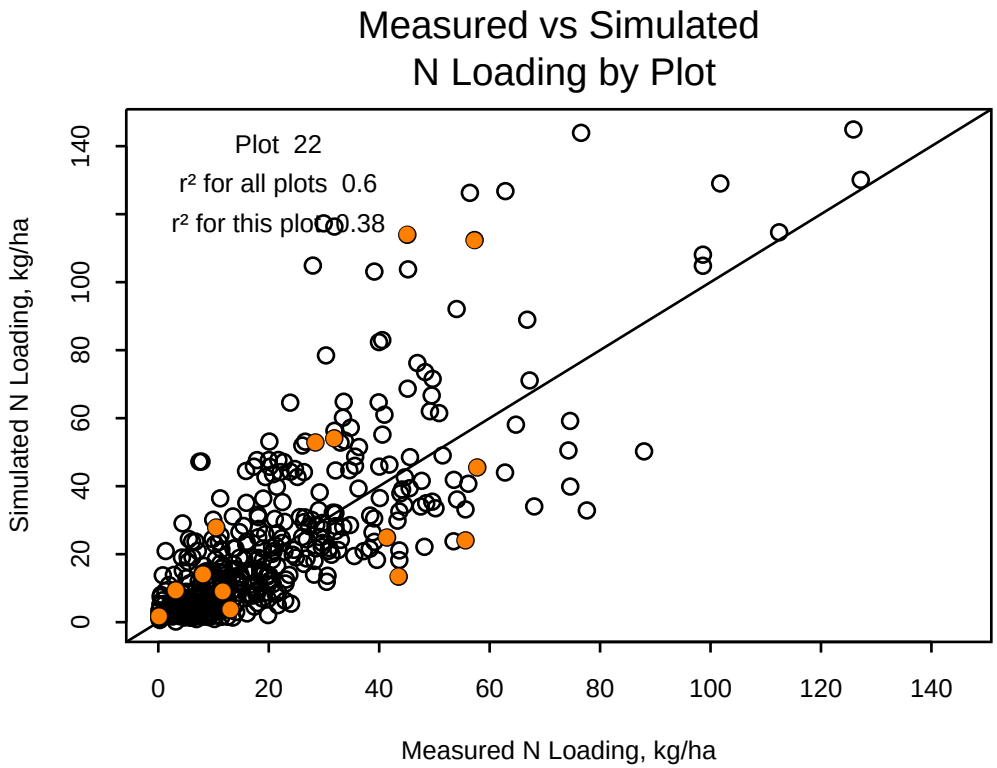

Measured vs Simulated
N Loading by Plot
Plot 15
r² for all plots 0.6
r² for this plot 0.36
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
0
20
40
60
80
100
120
140

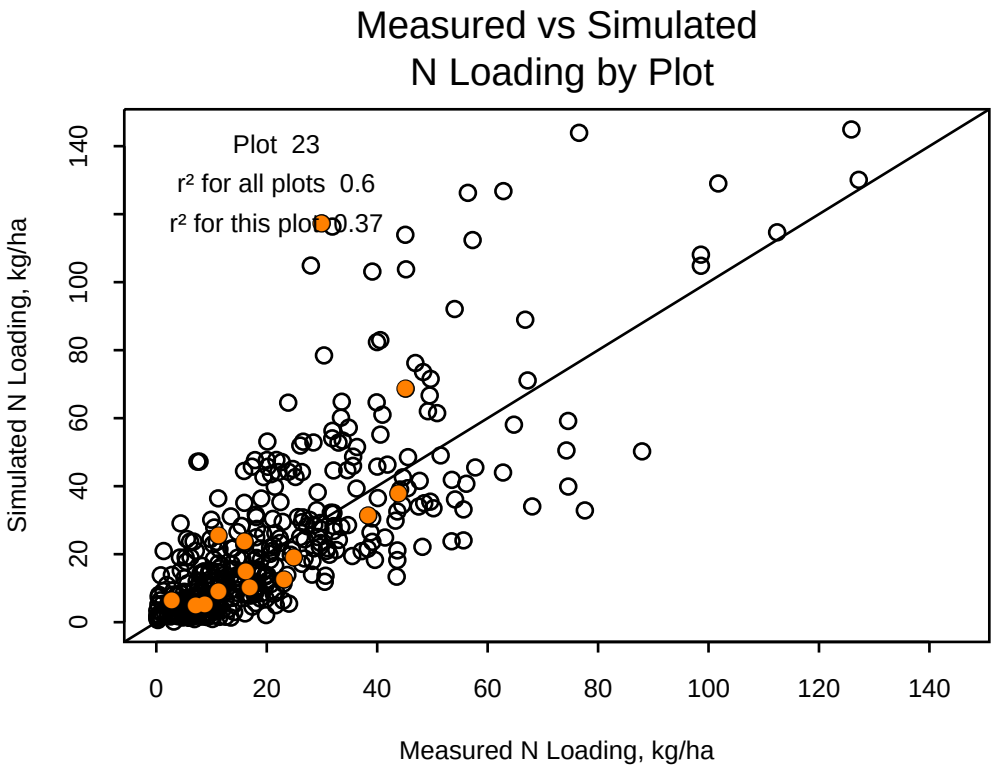

Measured vs Simulated
N Loading by Plot
Plot 16
r² for all plots 0.6
r² for this plot 0.45
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
0
20
40
60
80
100
120
140

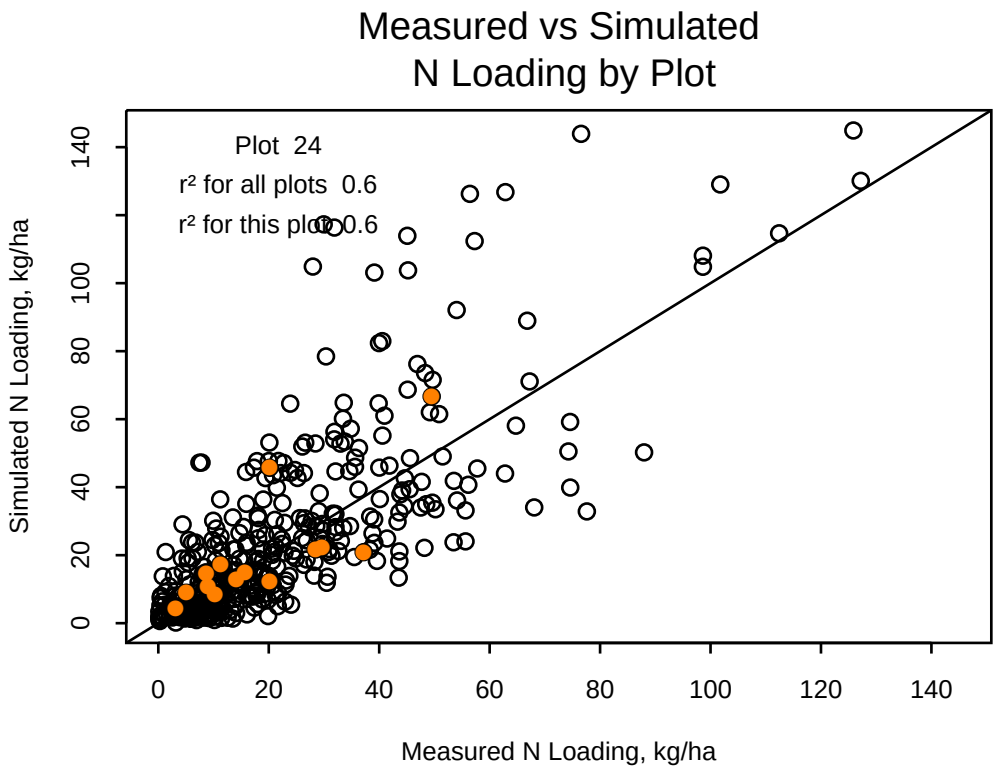

Measured vs Simulated
N Loading by Plot
Plot 18
r² for all plots 0.6
r² for this plot 0.74
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
0
20
40
60
80
100
120
140

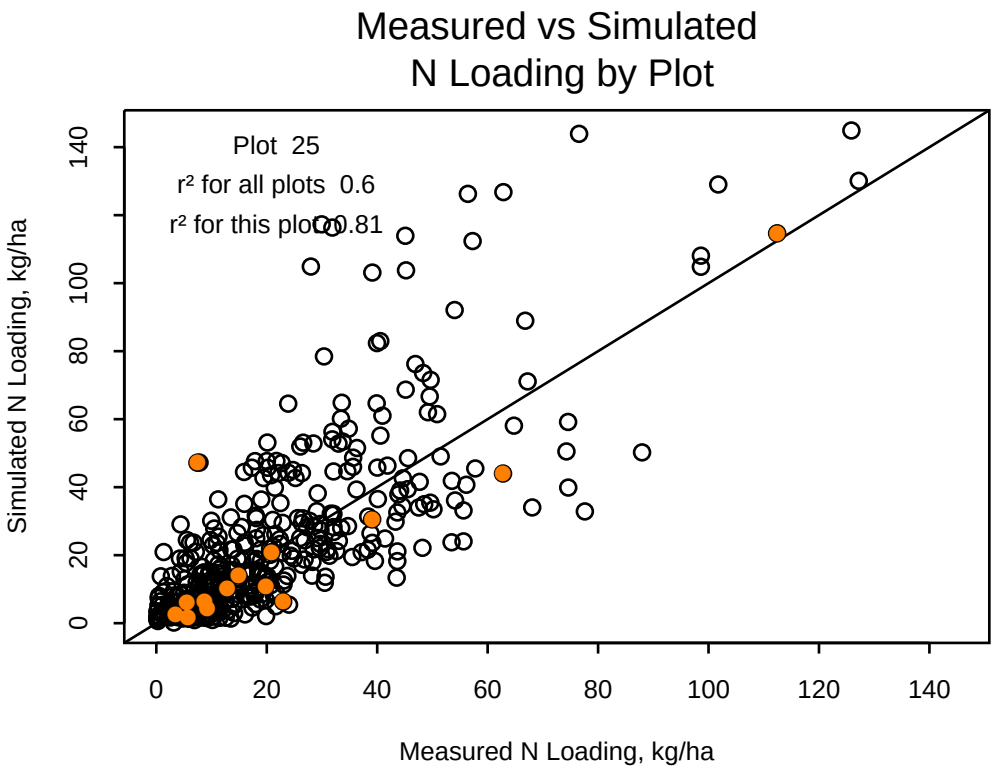

Measured vs Simulated
N Loading by Plot
Plot 19
r² for all plots 0.6
r² for this plot 0.47
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
0
20
40
60
80
100
120
140

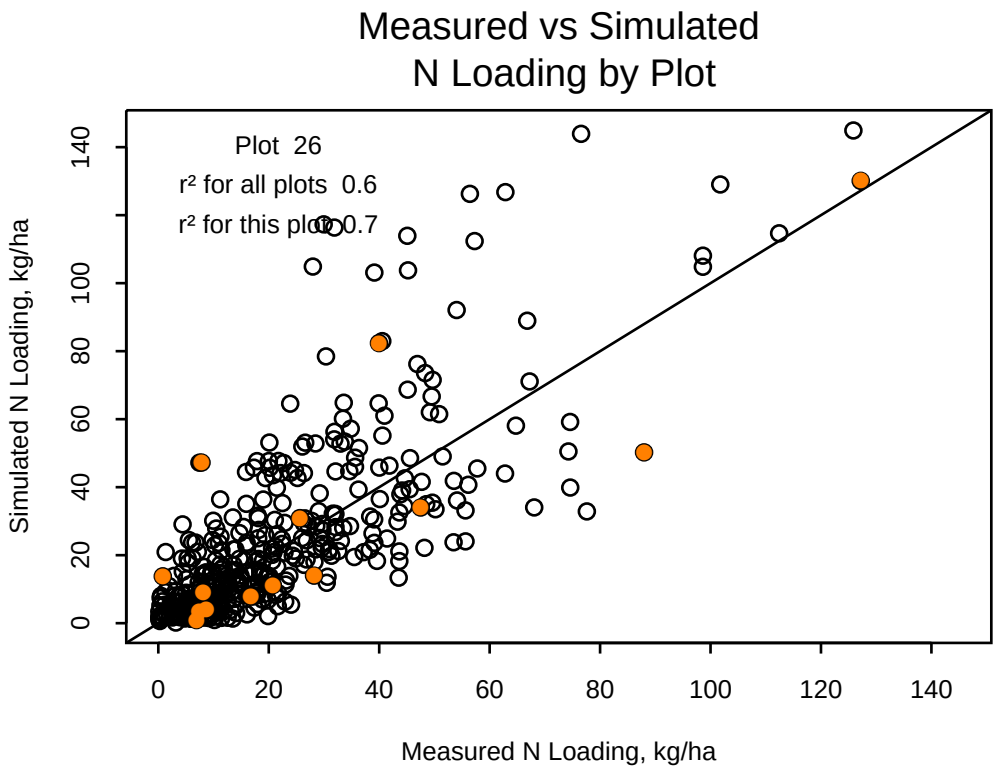

Measured vs Simulated
N Loading by Plot
Plot 21
r² for all plots 0.6
r² for this plot 0.78
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
0
20
40
60
80
100
120
140

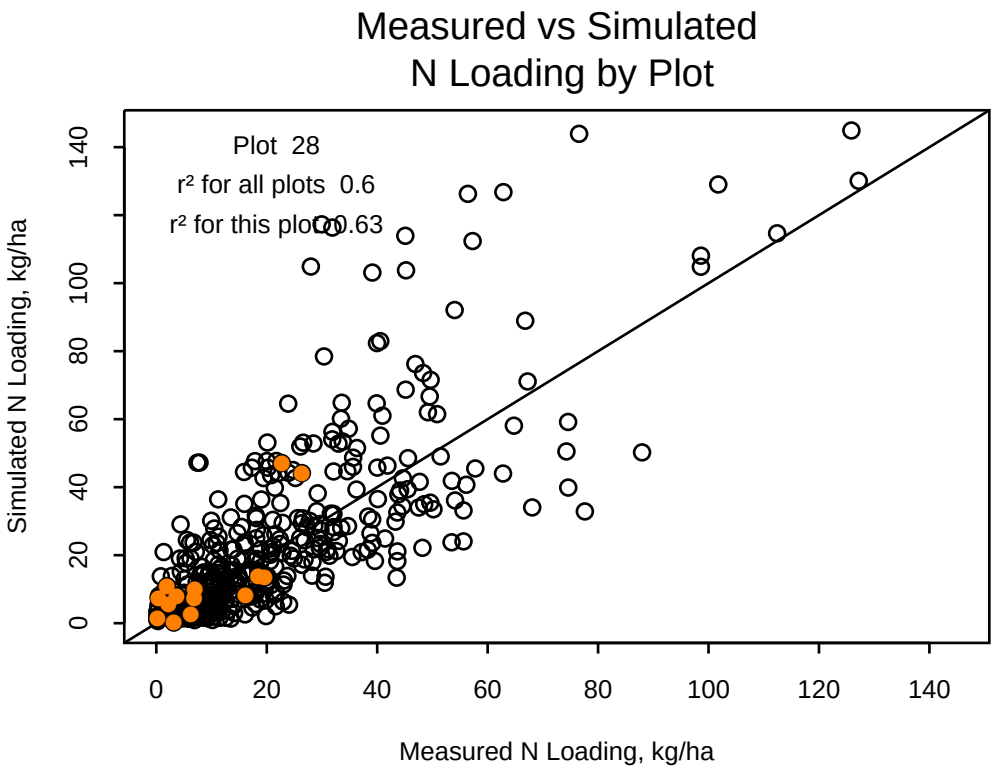

Measured vs Simulated
N Loading by Plot
Plot 22
r² for all plots 0.6
r² for this plot 0.38
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
0
20
40
60
80
100
120
140

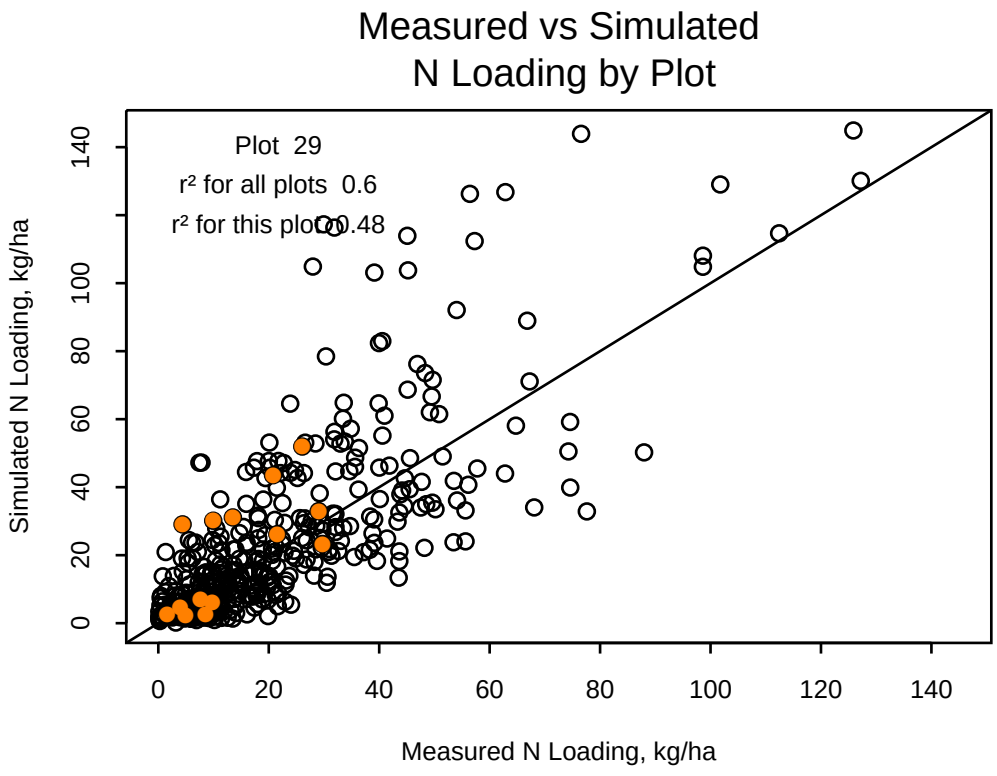

Measured vs Simulated
N Loading by Plot
Plot 23
r² for all plots 0.6
r² for this plot 0.37
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
0
20
40
60
80
100
120
140

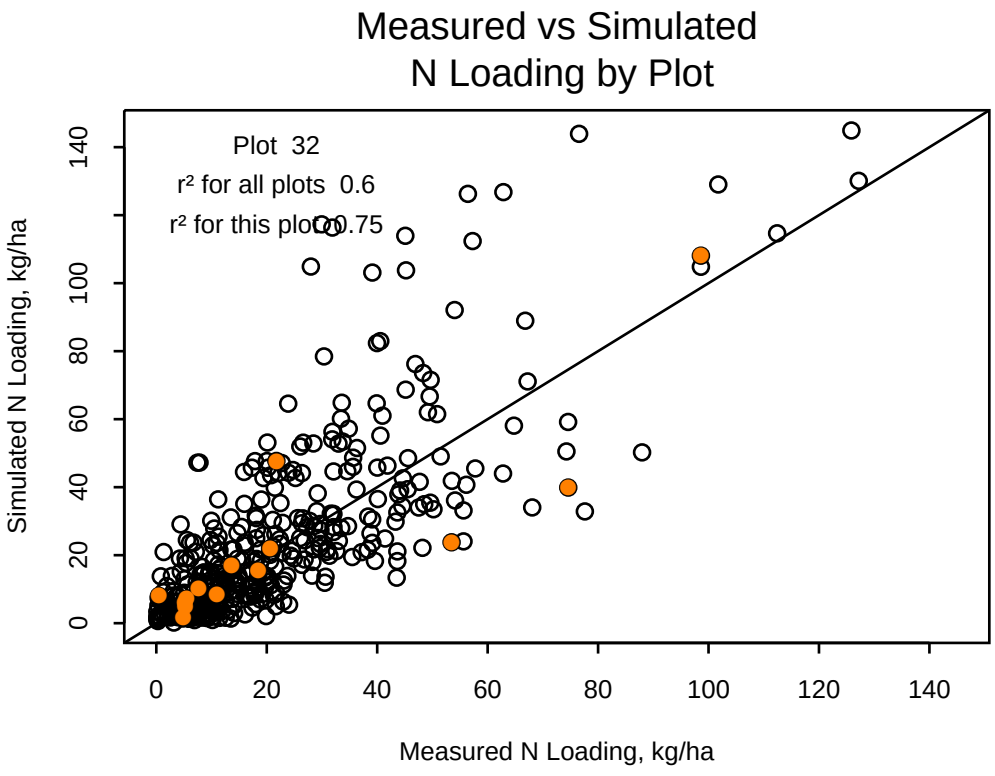

Measured vs Simulated
N Loading by Plot
Plot 24
r² for all plots 0.6
r² for this plot 0.6
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
0
20
40
60
80
100
120
140

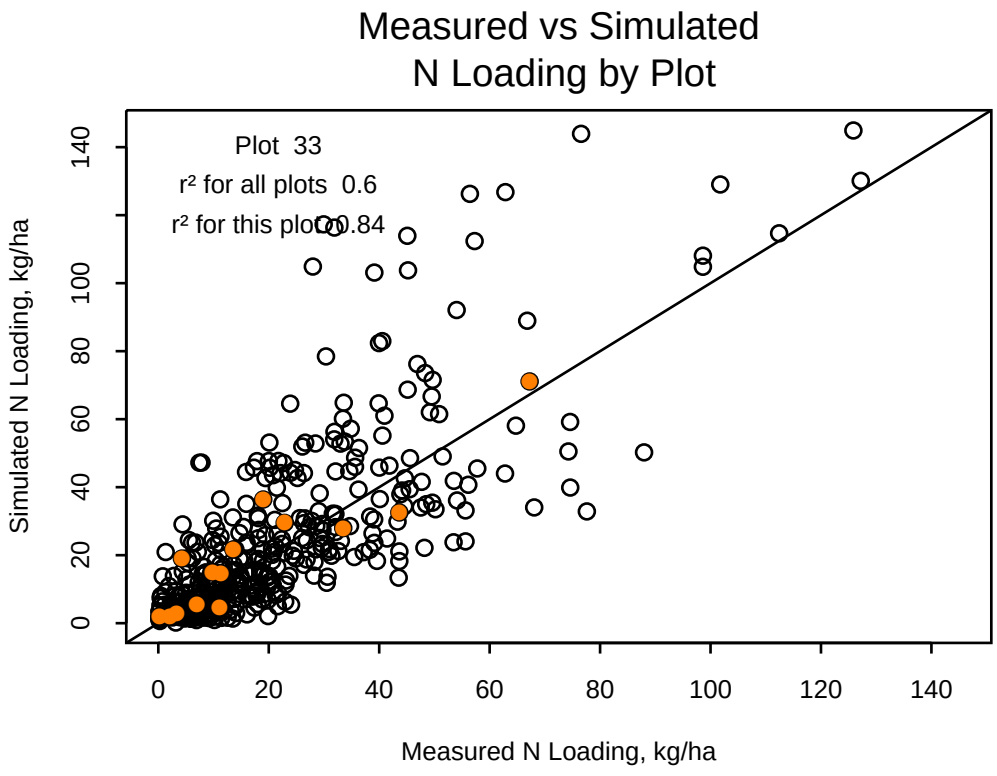

Measured vs Simulated
N Loading by Plot
Plot 25
r² for all plots 0.6
r² for this plot 0.81
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
0
20
40
60
80
100
120
140

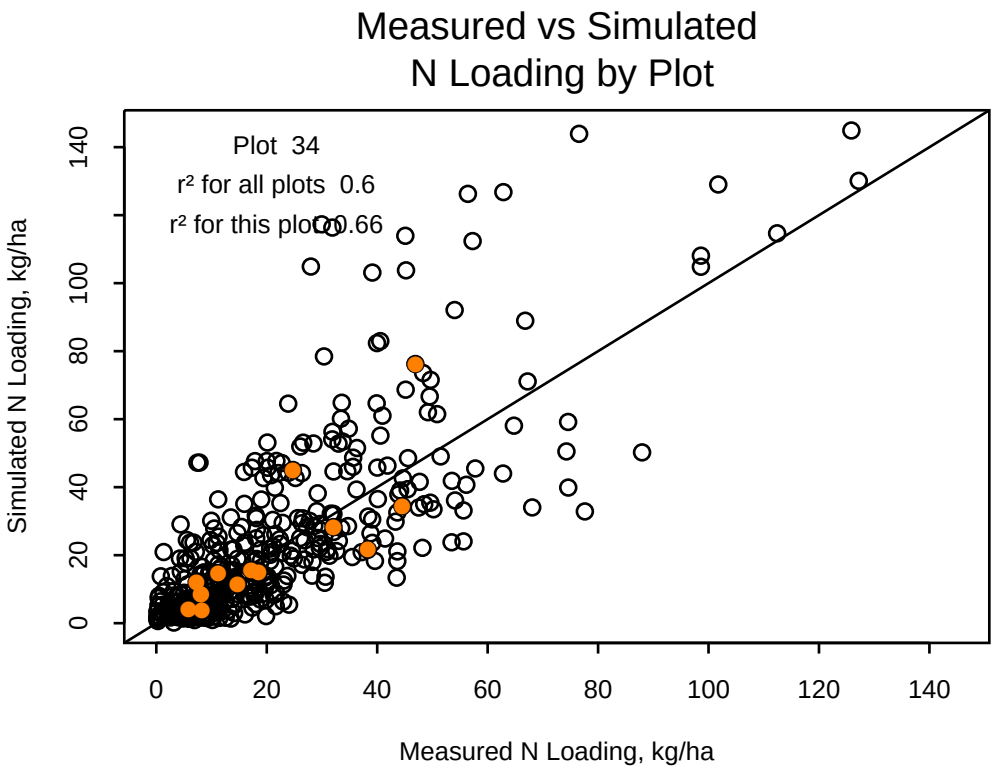

Measured vs Simulated
N Loading by Plot
Plot 26
r² for all plots 0.6
r² for this plot 0.7
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
0
20
40
60
80
100
120
140

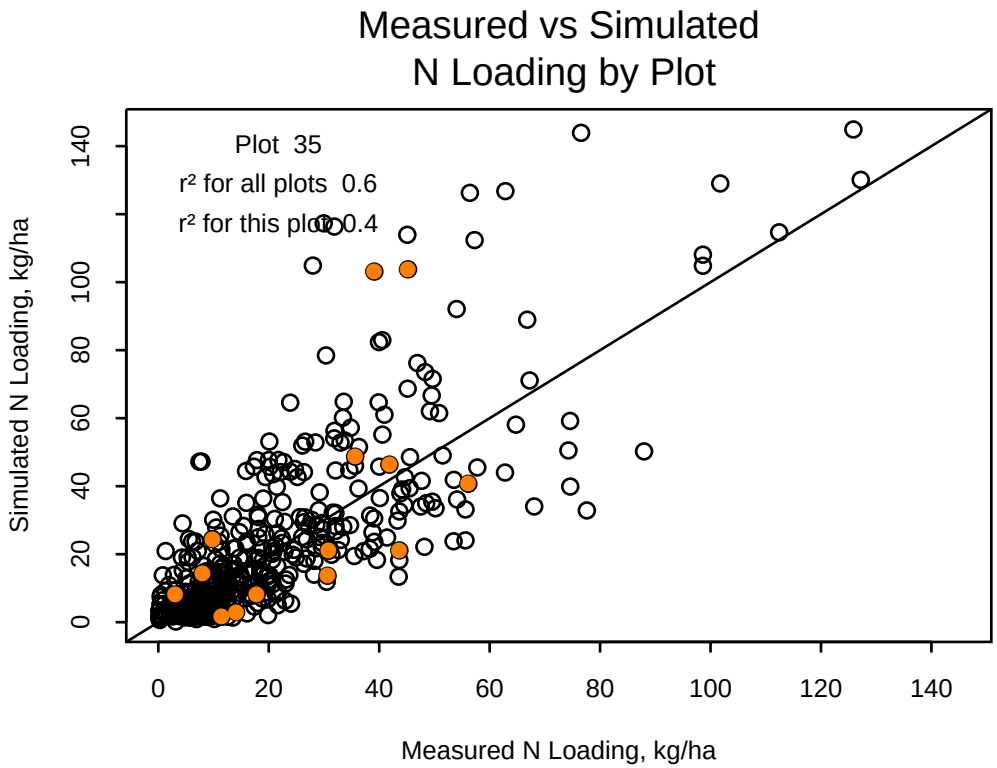

Measured vs Simulated
N Loading by Plot
Plot 28
r² for all plots 0.6
r² for this plot 0.63
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
0
20
40
60
80
100
120
140

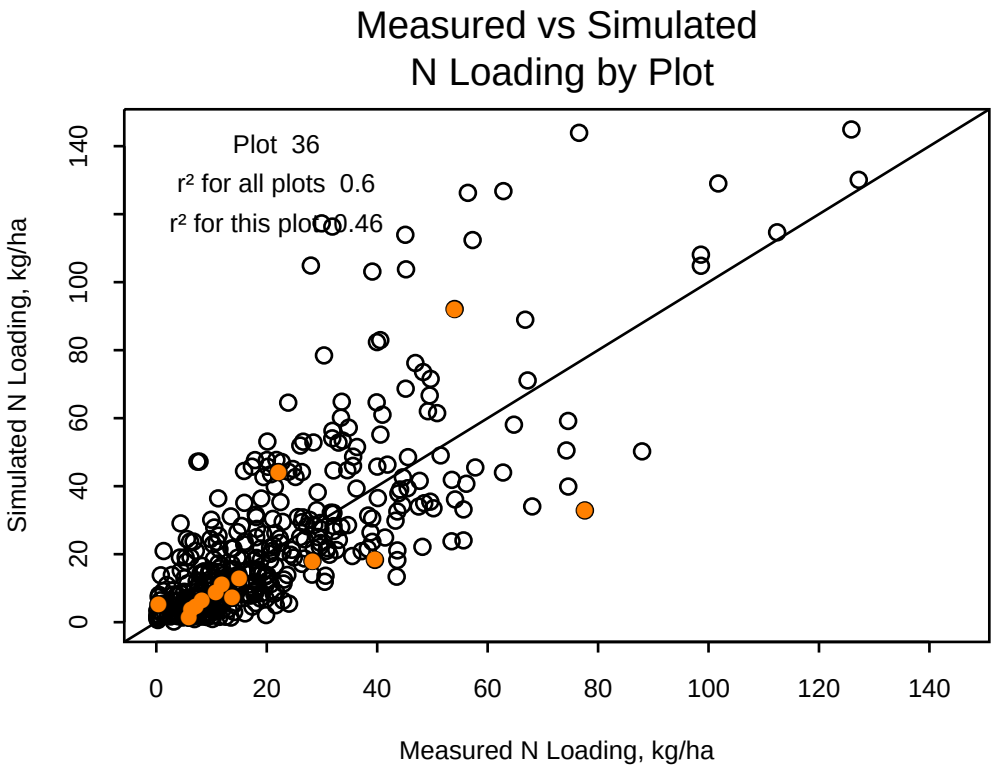

Measured vs Simulated
N Loading by Plot
Plot 29
r² for all plots 0.6
r² for this plot 0.48
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
0
20
40
60
80
100
120
140

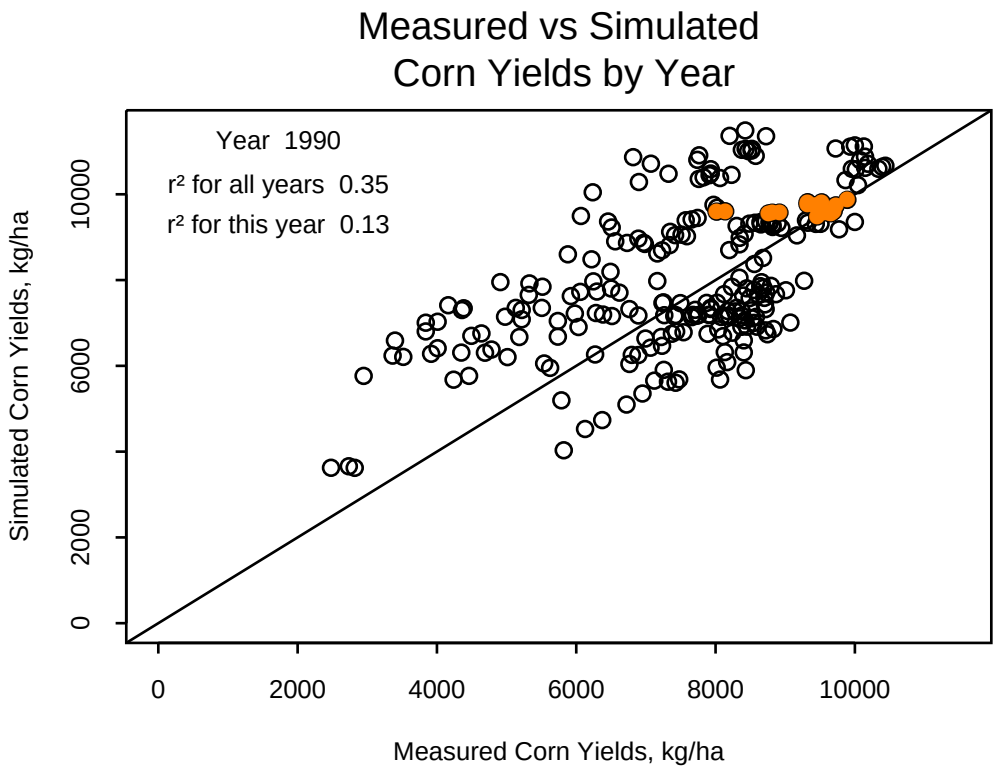

Measured vs Simulated
N Loading by Plot
Plot 32
r² for all plots 0.6
r² for this plot 0.75
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
0
20
40
60
80
100
120
140

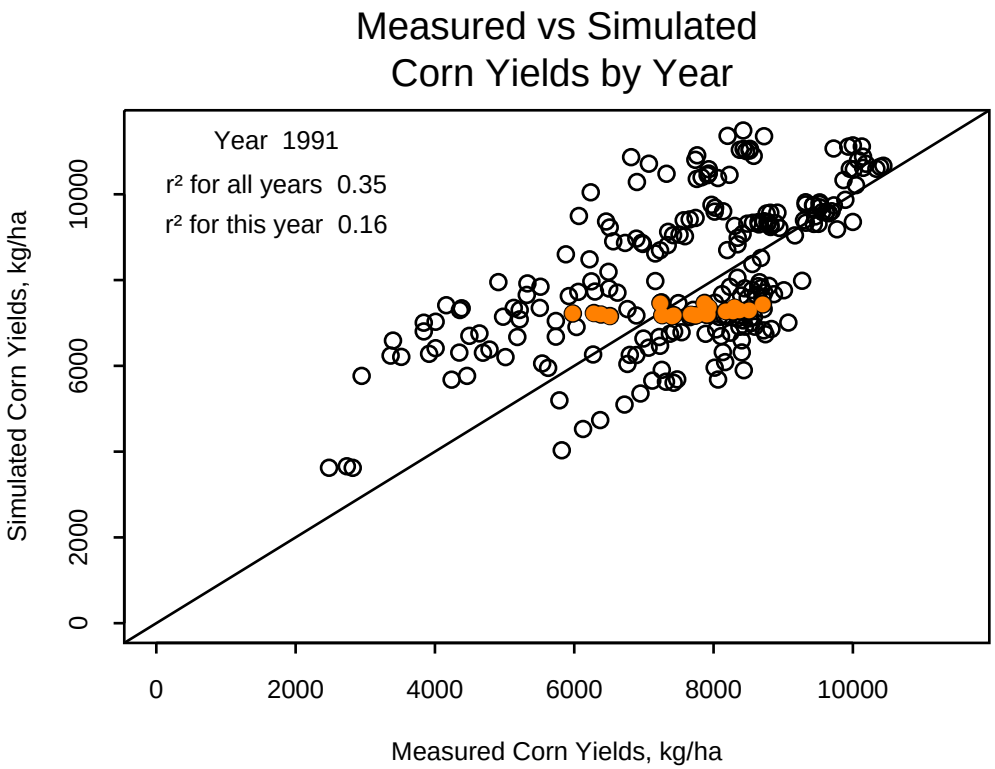

Measured vs Simulated
N Loading by Plot
Plot 33
r² for all plots 0.6
r² for this plot 0.84
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
0
20
40
60
80
100
120
140

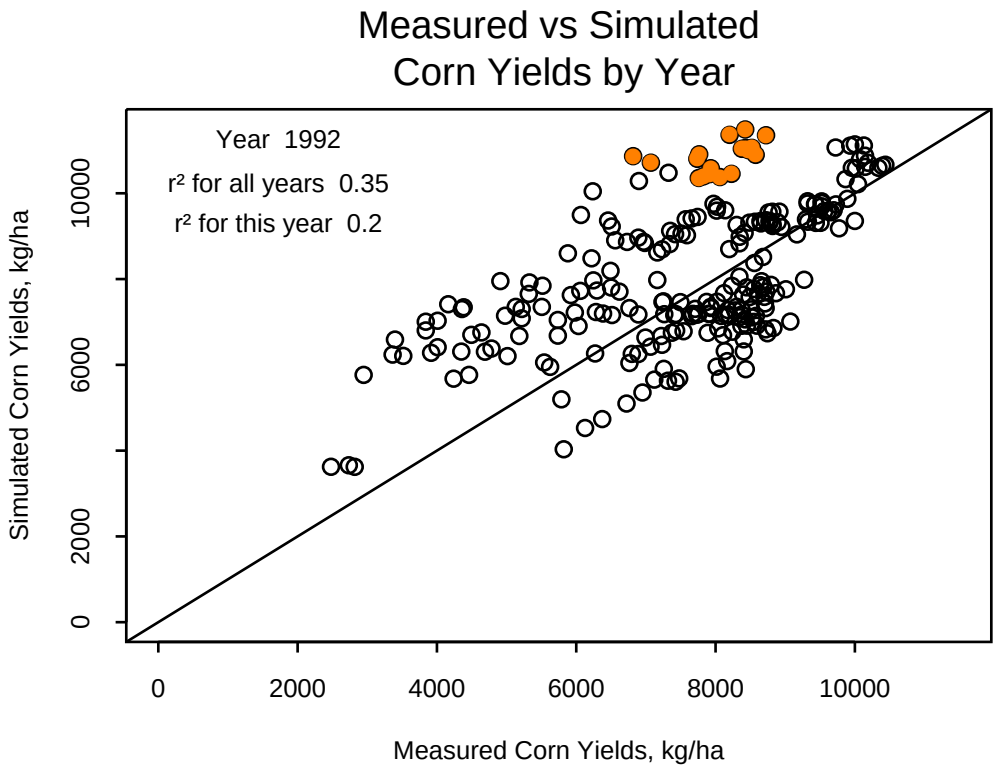

Measured vs Simulated
N Loading by Plot
Plot 34
r² for all plots 0.6
r² for this plot 0.66
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
0
20
40
60
80
100
120
140

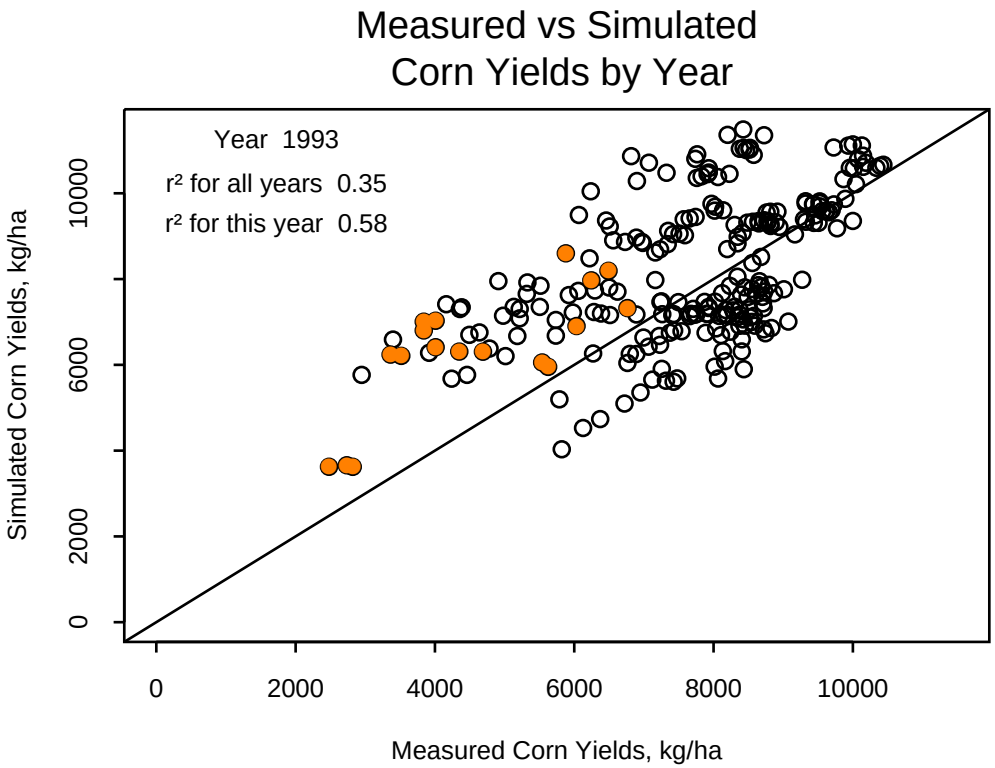

Measured vs Simulated
N Loading by Plot
Plot 35
r² for all plots 0.6
r² for this plot 0.4
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
0
20
40
60
80
100
120
140

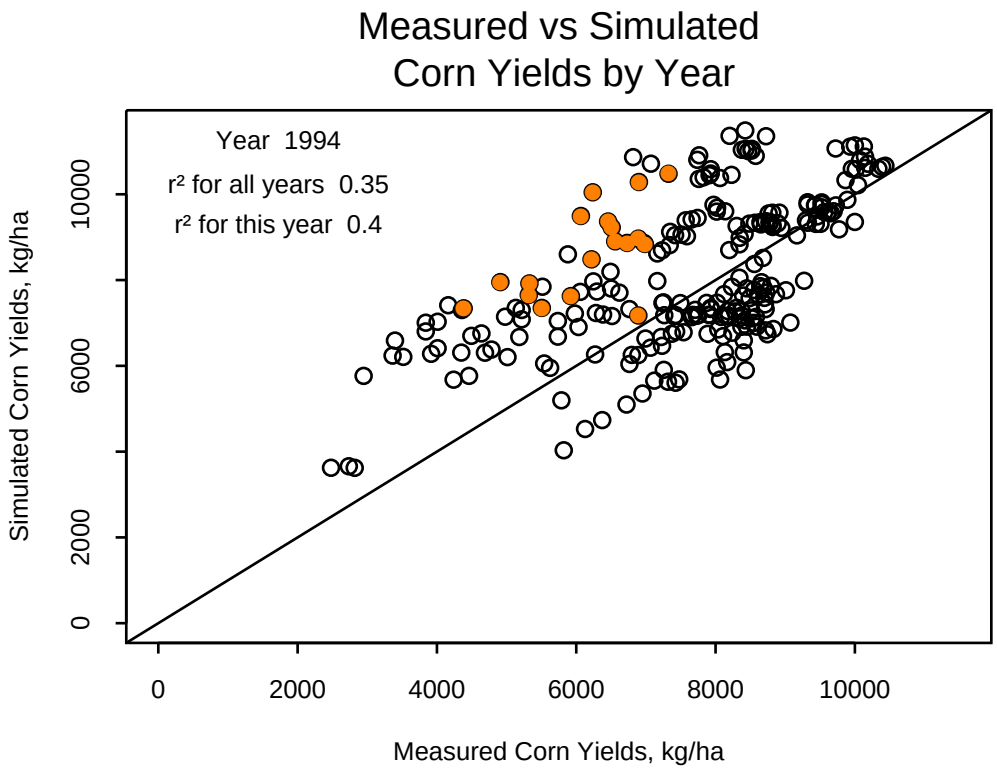

Measured vs Simulated
N Loading by Plot
Plot 36
r² for all plots 0.6
r² for this plot 0.46
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
0
20
40
60
80
100
120
140

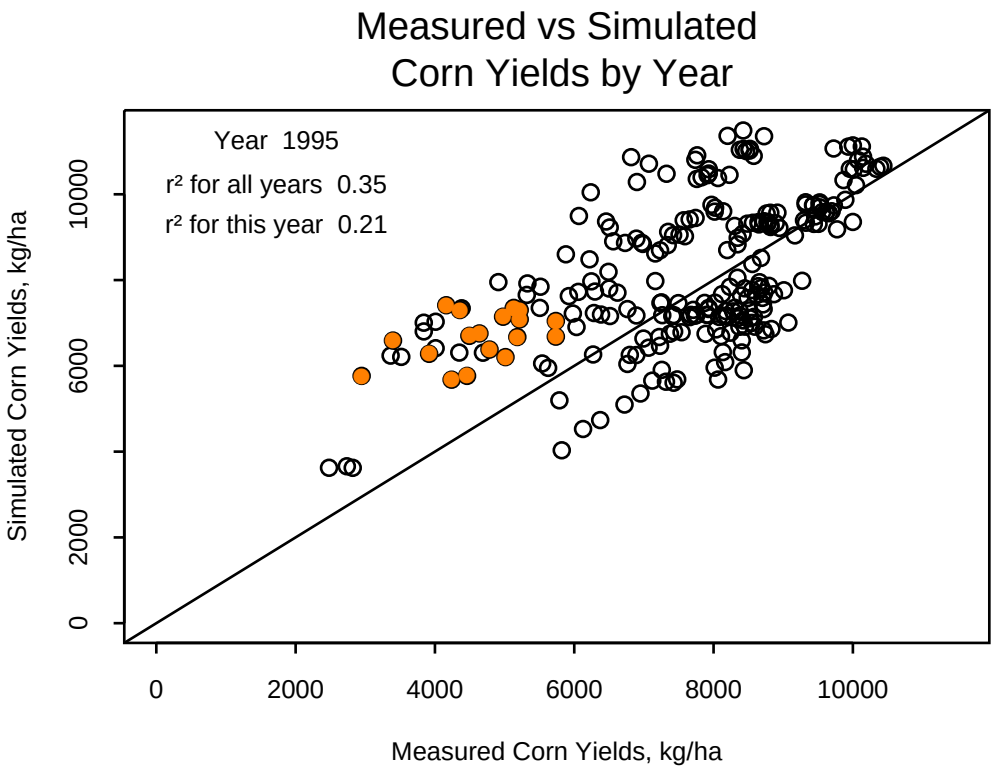

Measured vs Simulated
Corn Yields by Year
Year 1990
r² for all years 0.35
r² for this year 0.13
Simulated Corn Yields, kg/ha
Measured Corn Yields, kg/ha
0
2000
4000
6000
8000
10000

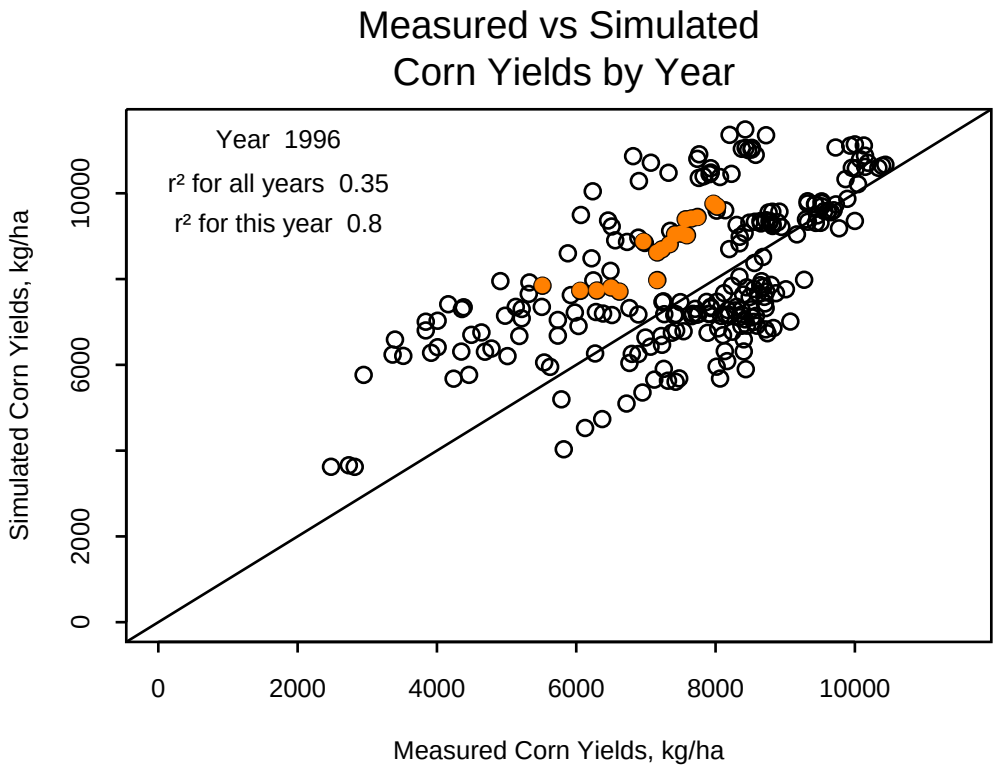

Measured vs Simulated
Corn Yields by Year
Year 1991
r² for all years 0.35
r² for this year 0.16
Simulated Corn Yields, kg/ha
Measured Corn Yields, kg/ha
0
2000
4000
6000
8000
10000

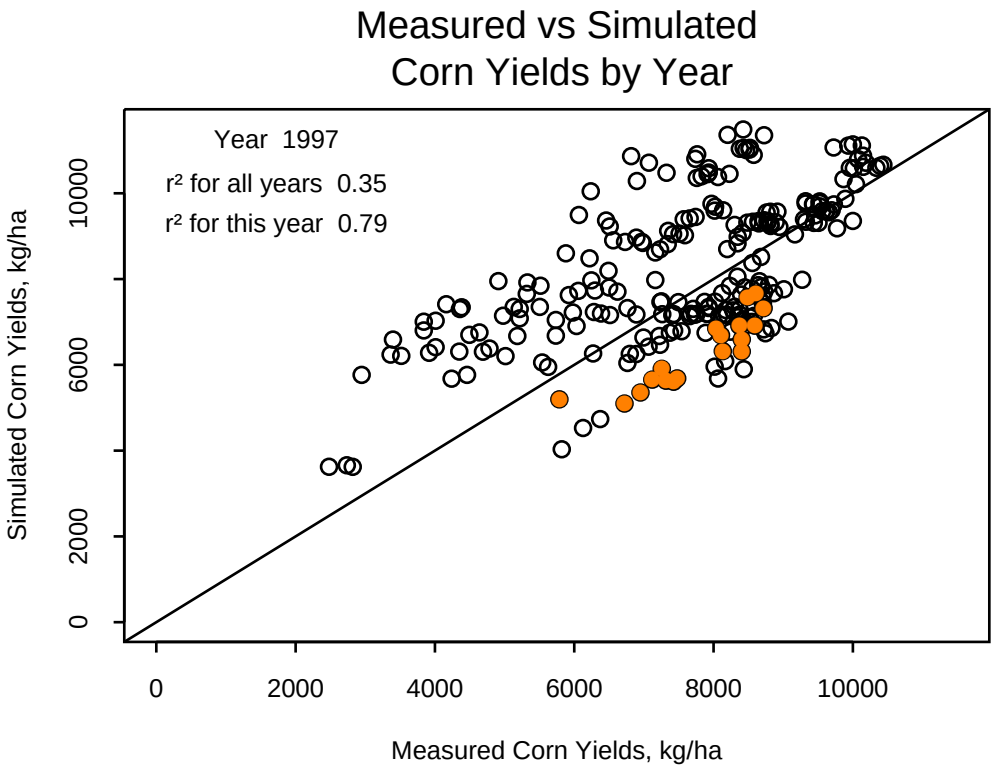

Measured vs Simulated
Corn Yields by Year
Year 1992
r² for all years 0.35
r² for this year 0.2
Simulated Corn Yields, kg/ha
Measured Corn Yields, kg/ha
0
2000
4000
6000
8000
10000

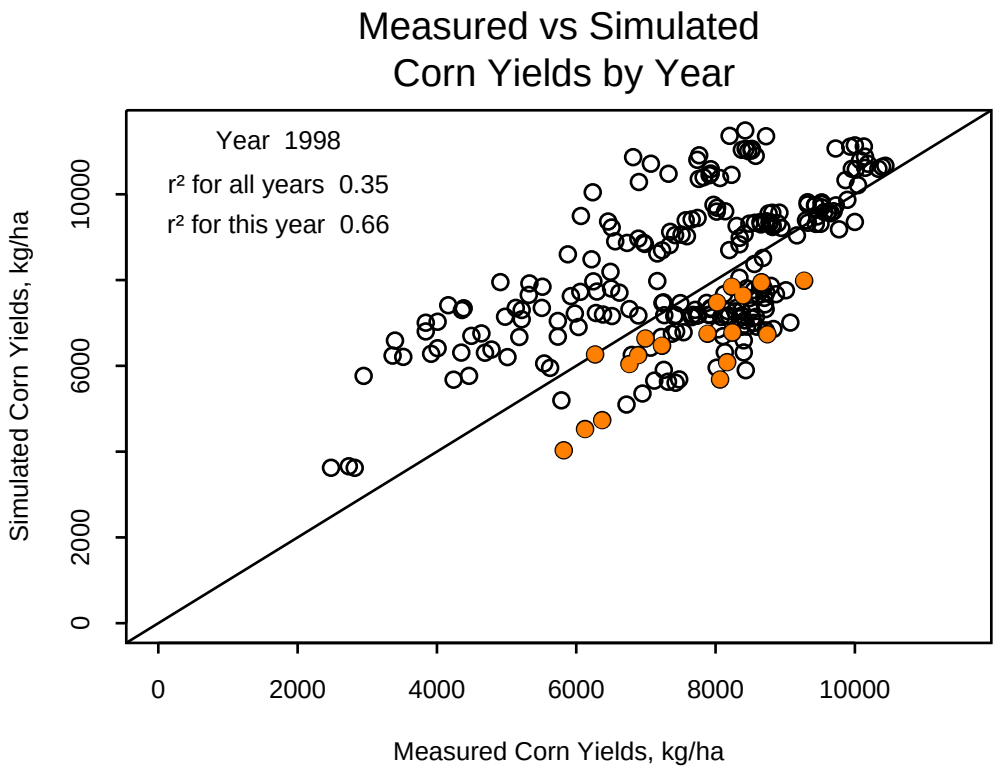

Measured vs Simulated
Corn Yields by Year
Year 1993
r² for all years 0.35
r² for this year 0.58
Simulated Corn Yields, kg/ha
Measured Corn Yields, kg/ha
0
2000
4000
6000
8000
10000

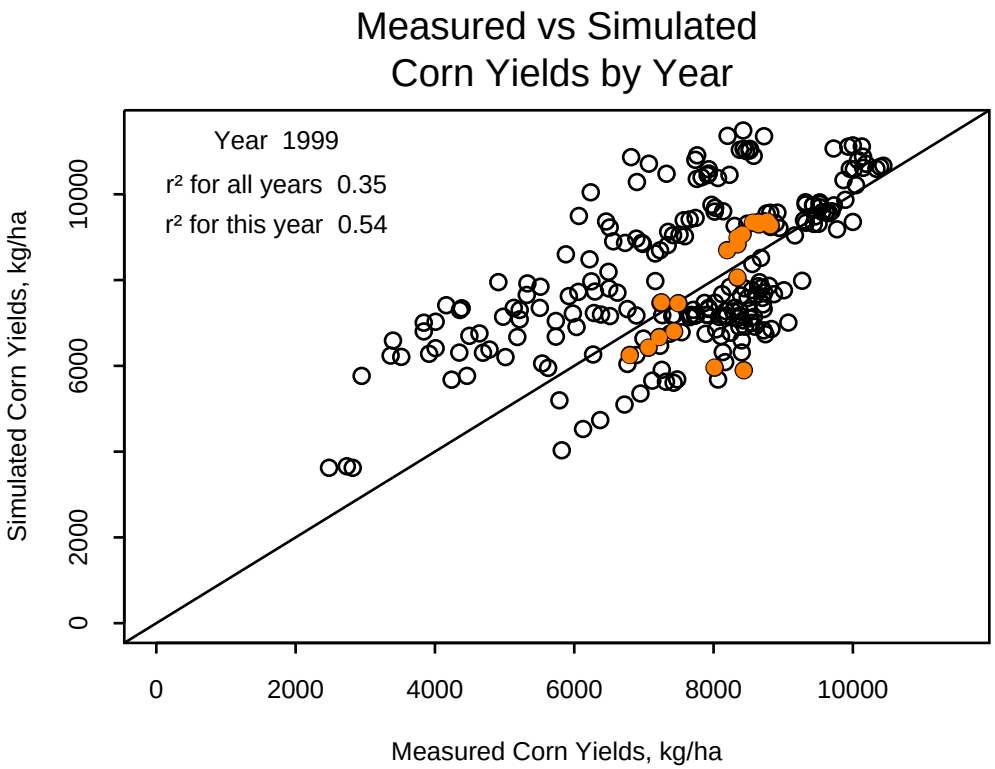

Measured vs Simulated
Corn Yields by Year
Year 1994
r² for all years 0.35
r² for this year 0.4
Simulated Corn Yields, kg/ha
Measured Corn Yields, kg/ha
0
2000
4000
6000
8000
10000

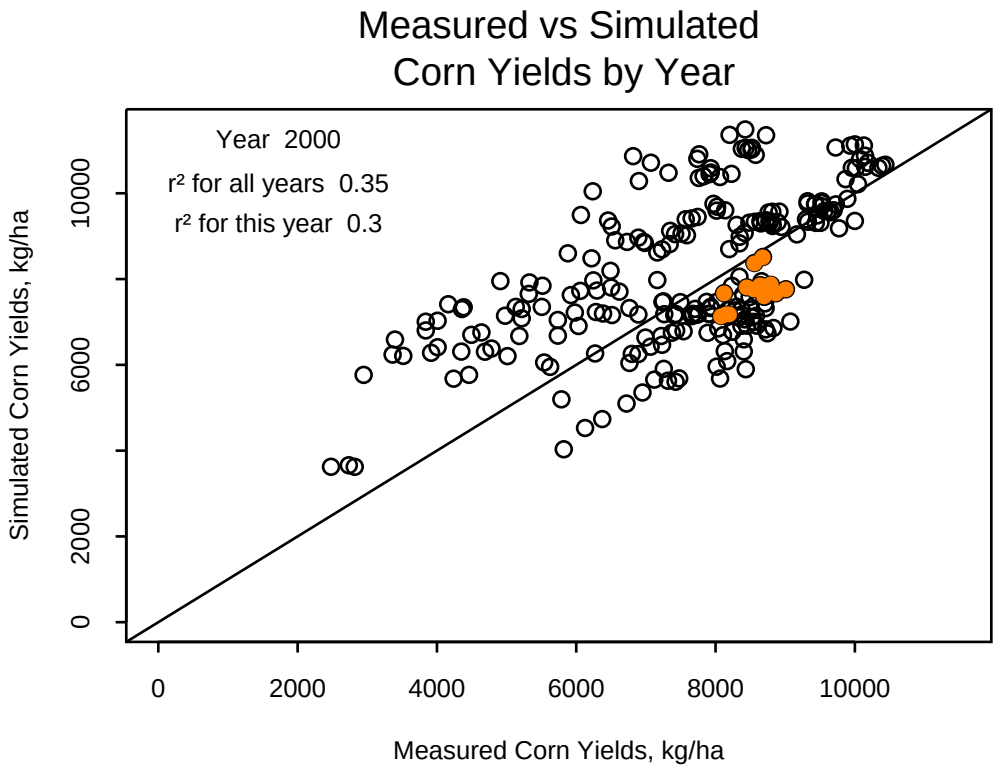

Measured vs Simulated
Corn Yields by Year
Year 1995
r² for all years 0.35
r² for this year 0.21
Simulated Corn Yields, kg/ha
Measured Corn Yields, kg/ha
0
2000
4000
6000
8000
10000

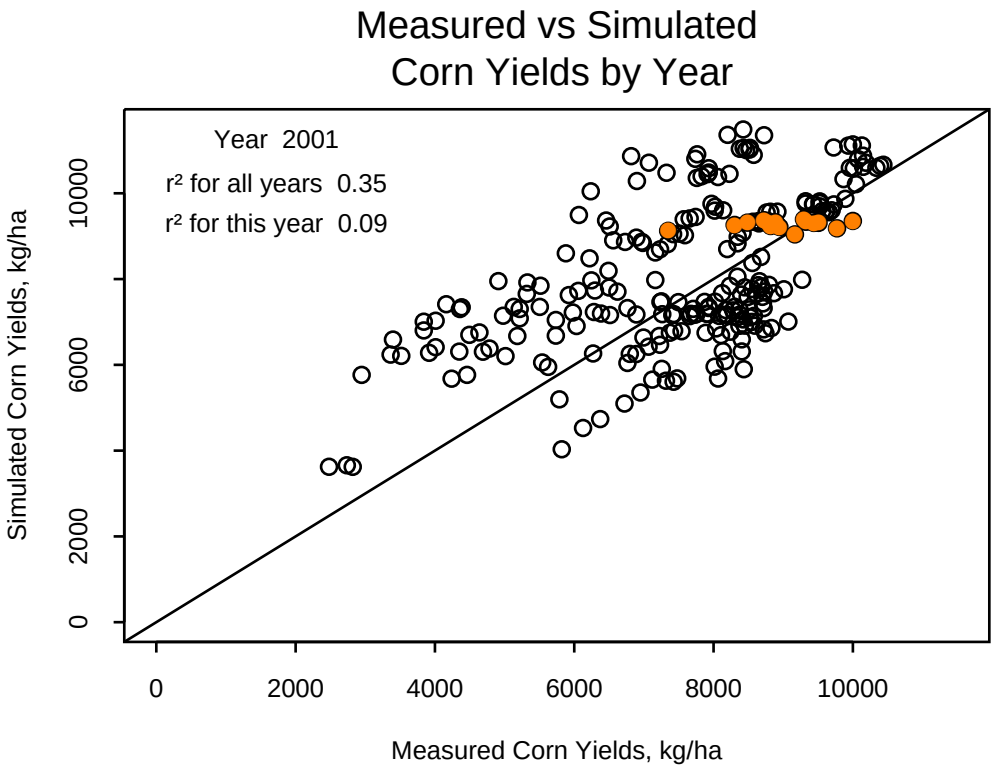

Measured vs Simulated
Corn Yields by Year
Year 1996
r² for all years 0.35
r² for this year 0.8
Simulated Corn Yields, kg/ha
Measured Corn Yields, kg/ha
0
2000
4000
6000
8000
10000

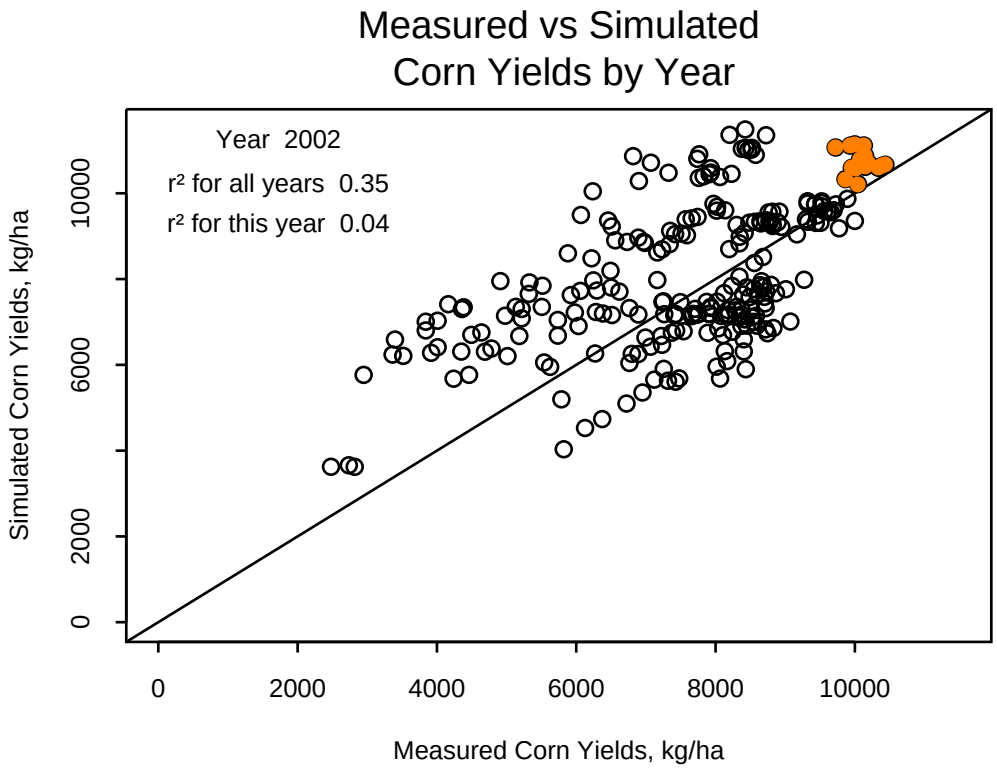

Measured vs Simulated
Corn Yields by Year
Year 1997
r² for all years 0.35
r² for this year 0.79
Simulated Corn Yields, kg/ha
Measured Corn Yields, kg/ha
0
2000
4000
6000
8000
10000

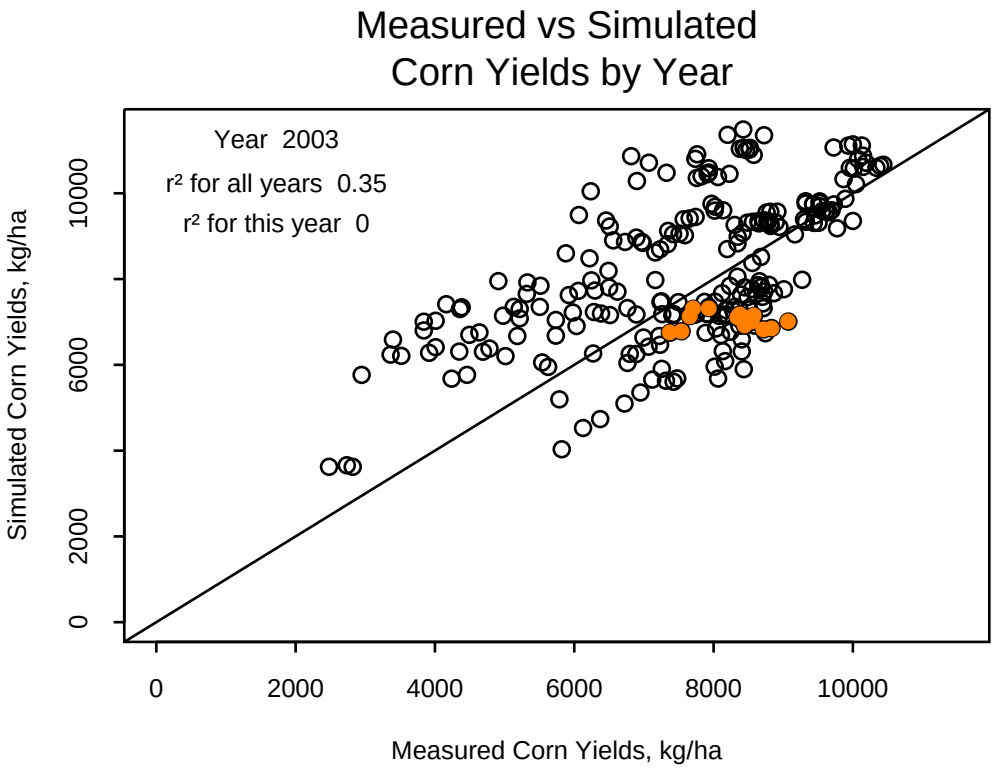

Measured vs Simulated
Corn Yields by Year
Year 1998
r² for all years 0.35
r² for this year 0.66
Simulated Corn Yields, kg/ha
Measured Corn Yields, kg/ha
0
2000
4000
6000
8000
10000

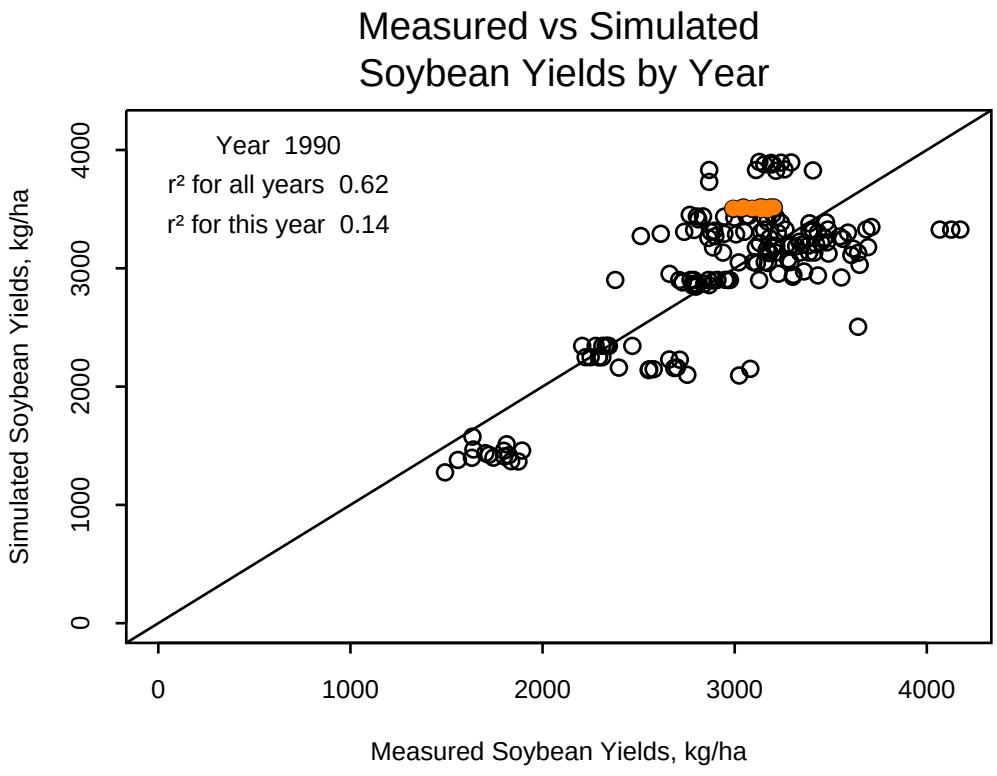

Measured vs Simulated
Corn Yields by Year
Year 1999
r² for all years 0.35
r² for this year 0.54
Simulated Corn Yields, kg/ha
Measured Corn Yields, kg/ha
0
2000
4000
6000
8000
10000

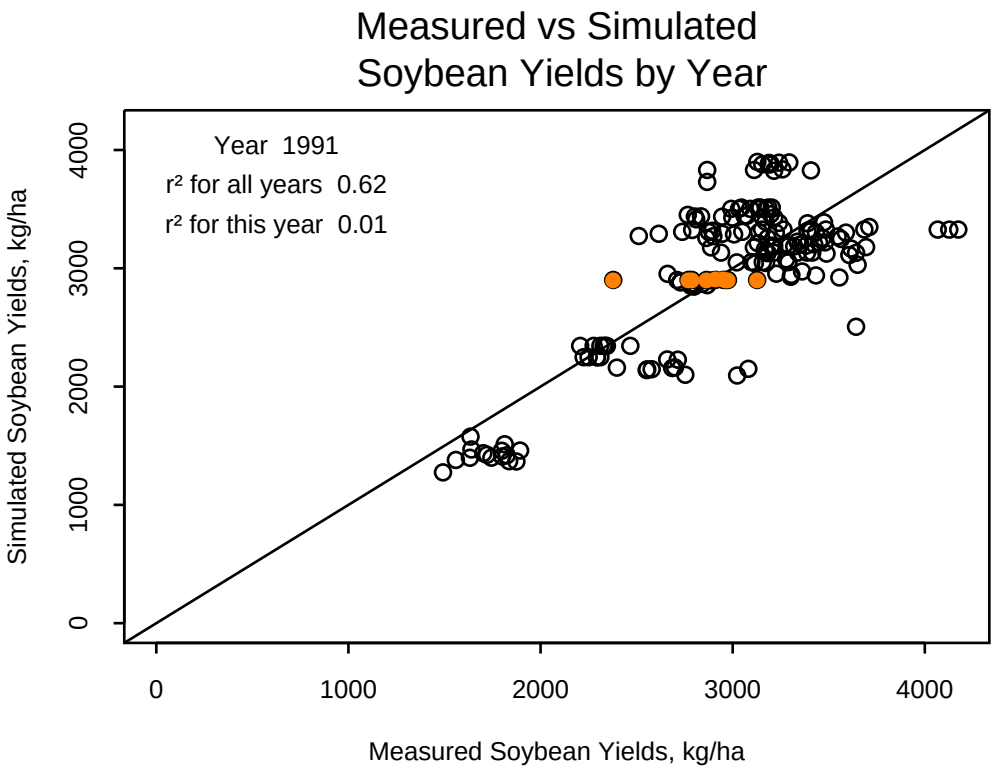

Measured vs Simulated
Corn Yields by Year
Year 2000
r² for all years 0.35
r² for this year 0.3
Simulated Corn Yields, kg/ha
Measured Corn Yields, kg/ha
0
2000
4000
6000
8000
10000

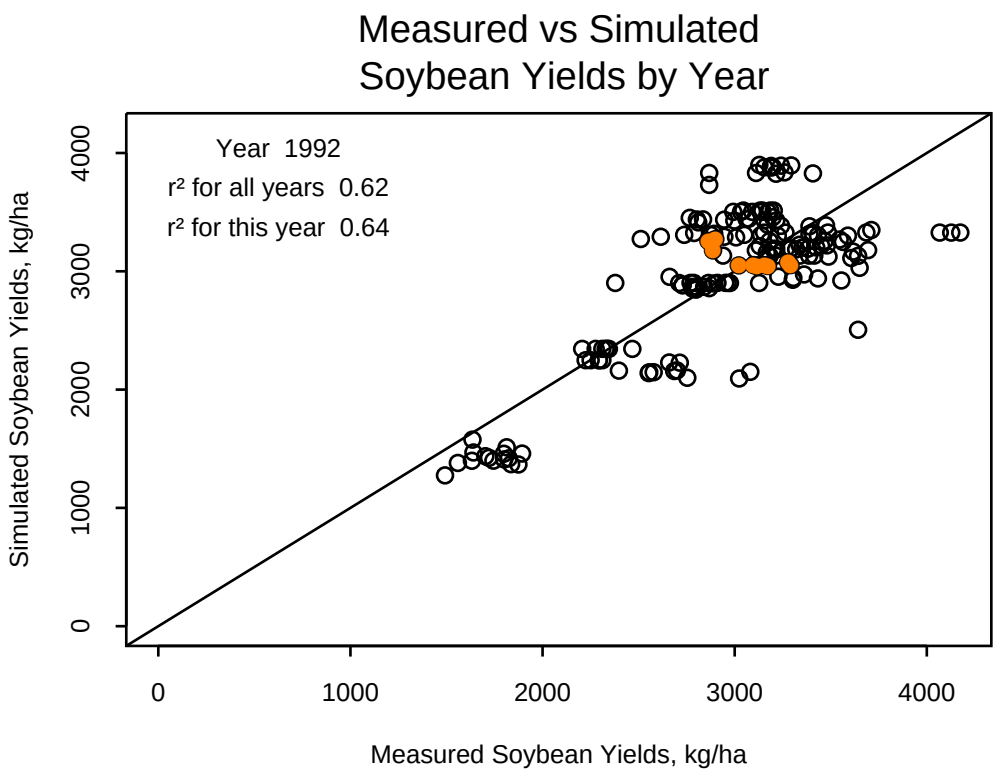

Measured vs Simulated
Corn Yields by Year
Year 2001
r² for all years 0.35
r² for this year 0.09
Simulated Corn Yields, kg/ha
Measured Corn Yields, kg/ha
0
2000
4000
6000
8000
10000

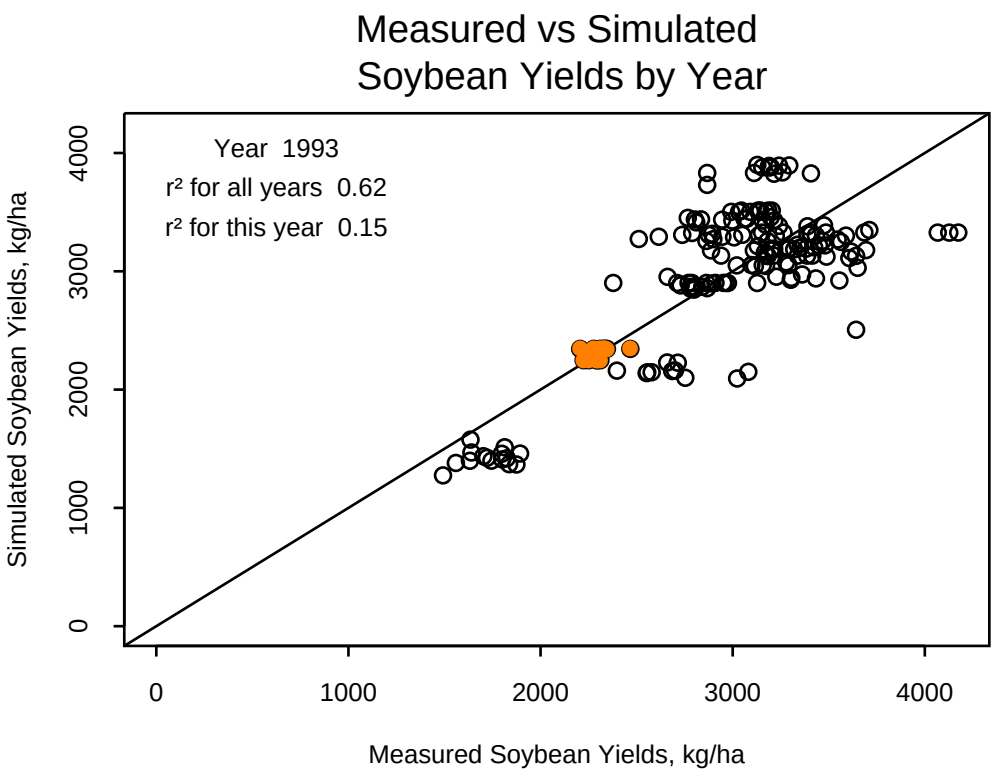

Measured vs Simulated
Corn Yields by Year
Year 2002
r² for all years 0.35
r² for this year 0.04
Simulated Corn Yields, kg/ha
Measured Corn Yields, kg/ha
0
2000
4000
6000
8000
10000

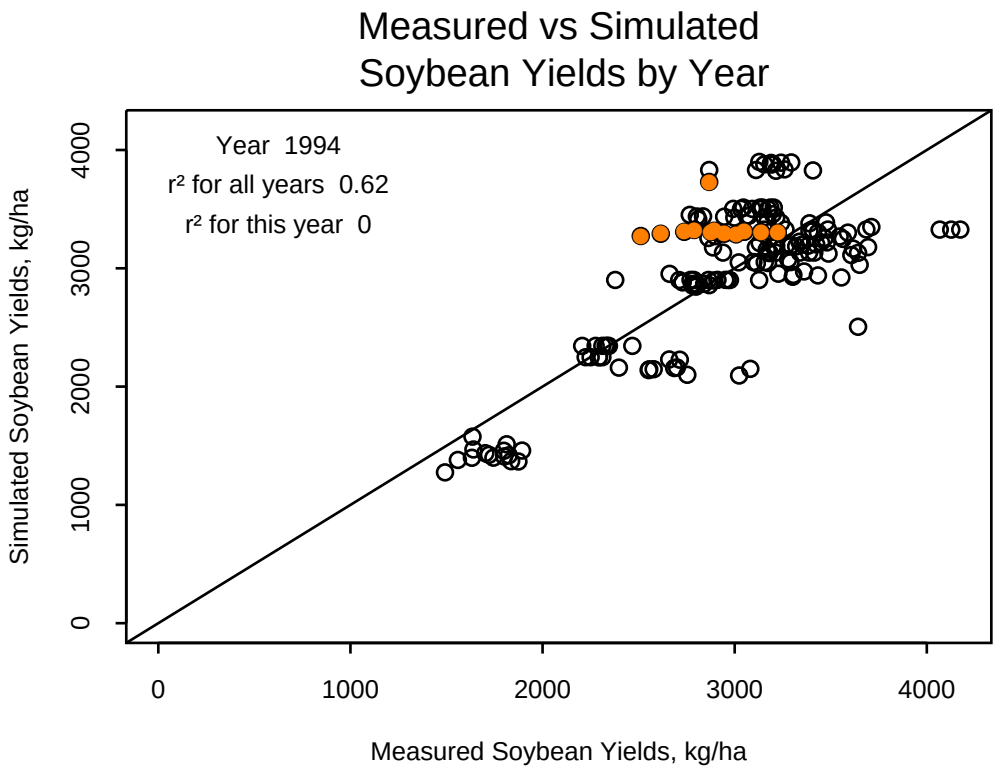

Measured vs Simulated
Corn Yields by Year
Year 2003
r² for all years 0.35
r² for this year 0
Simulated Corn Yields, kg/ha
Measured Corn Yields, kg/ha
0
2000
4000
6000
8000
10000

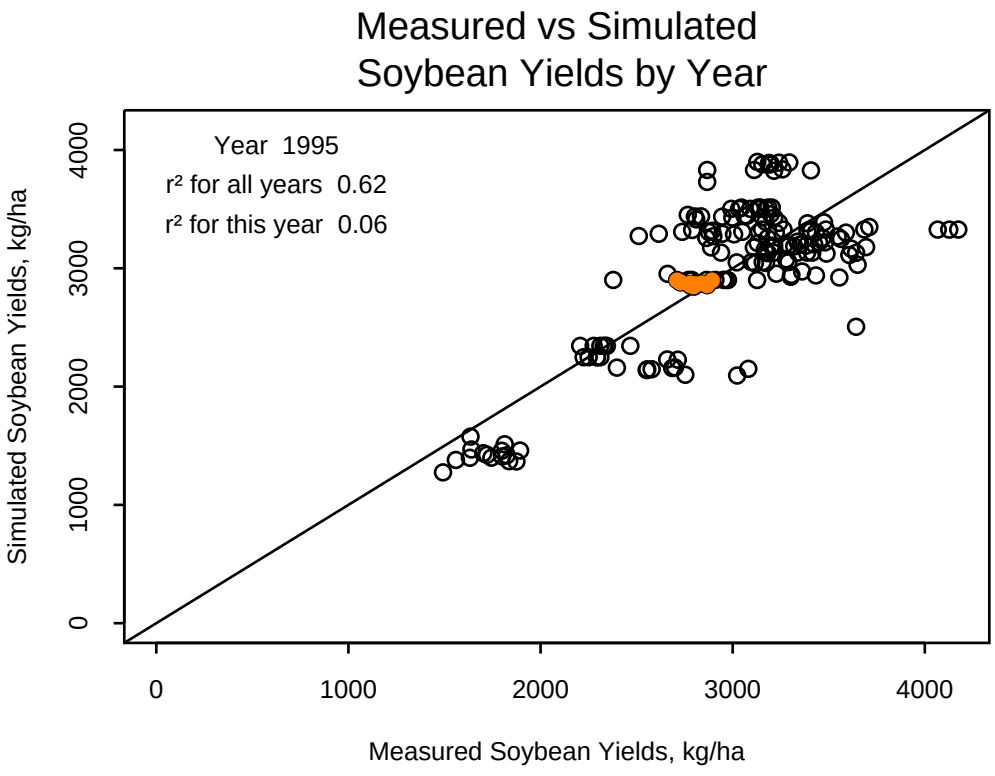

Measured vs Simulated
Soybean Yields by Year
Year 1990
r² for all years 0.62
r² for this year 0.14
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
0
1000
2000
3000
4000

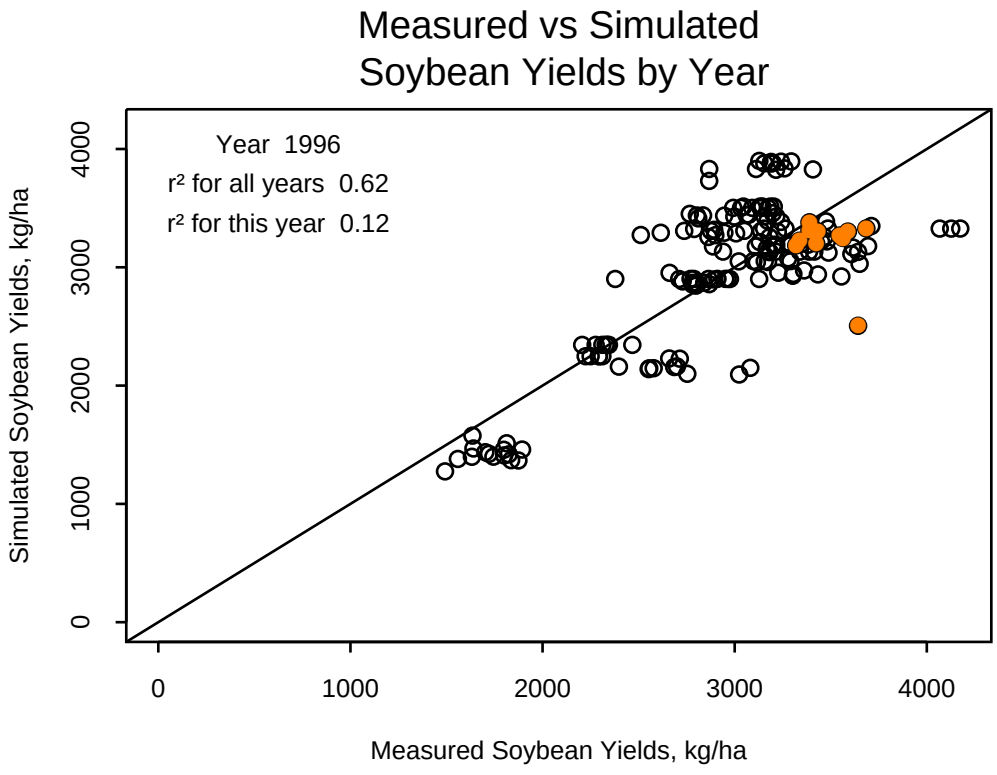

Measured vs Simulated
Soybean Yields by Year
Year 1991
r² for all years 0.62
r² for this year 0.01
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
0
1000
2000
3000
4000

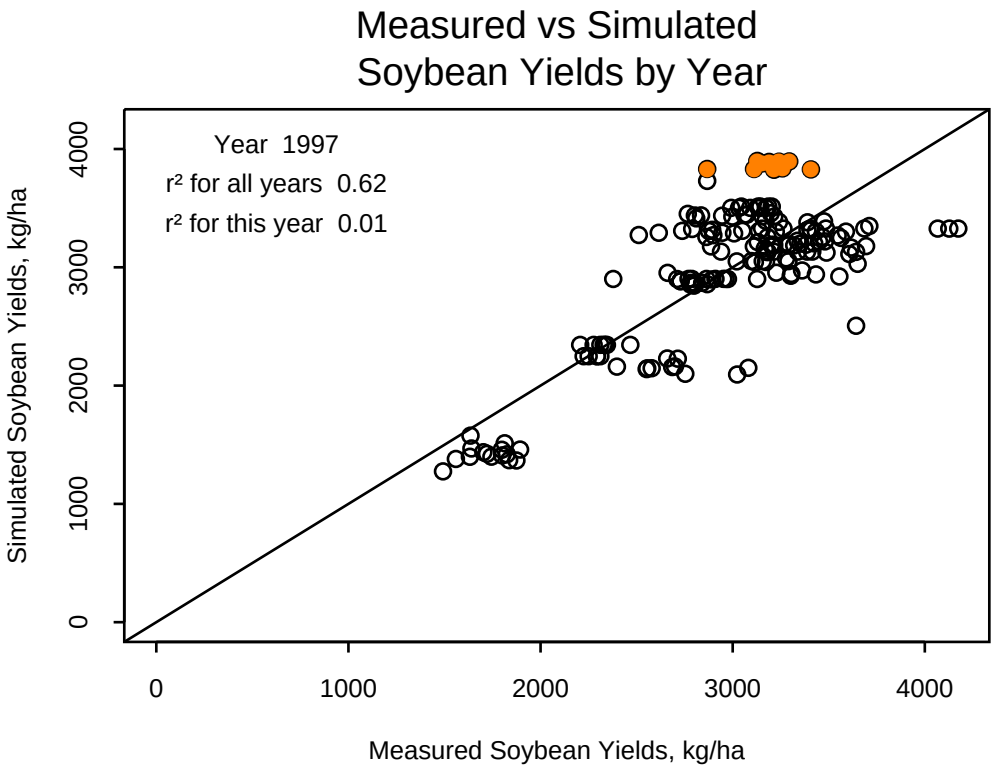

Measured vs Simulated
Soybean Yields by Year
Year 1992
r² for all years 0.62
r² for this year 0.64
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
0
1000
2000
3000
4000

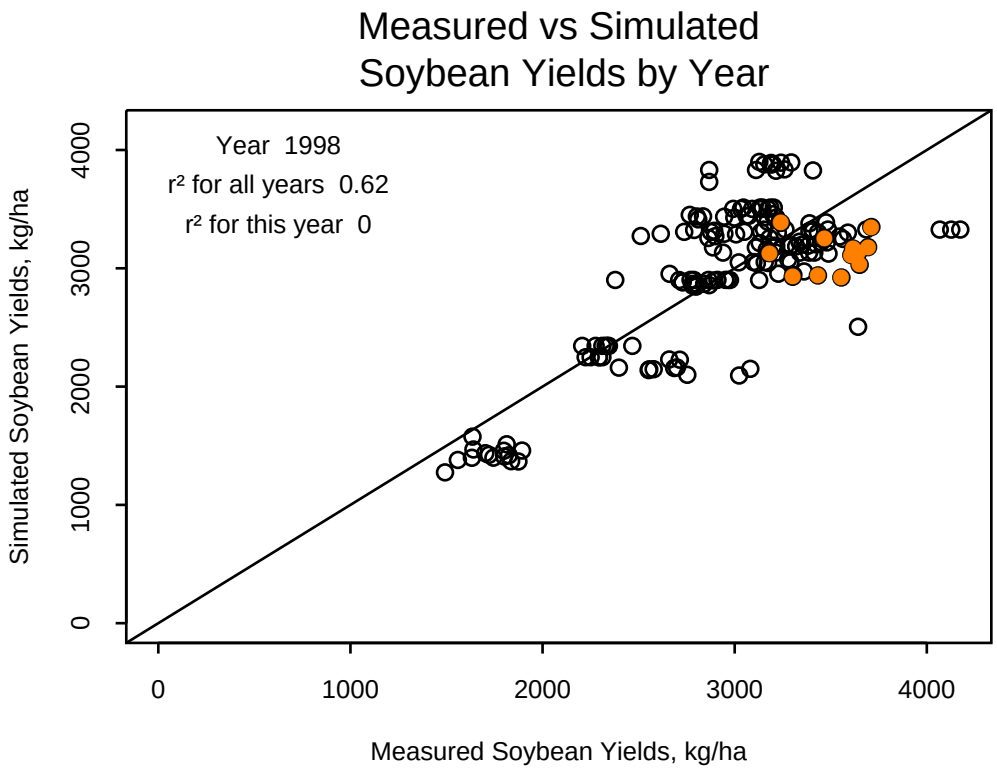

Measured vs Simulated
Soybean Yields by Year
Year 1993
r² for all years 0.62
r² for this year 0.15
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
0
1000
2000
3000
4000

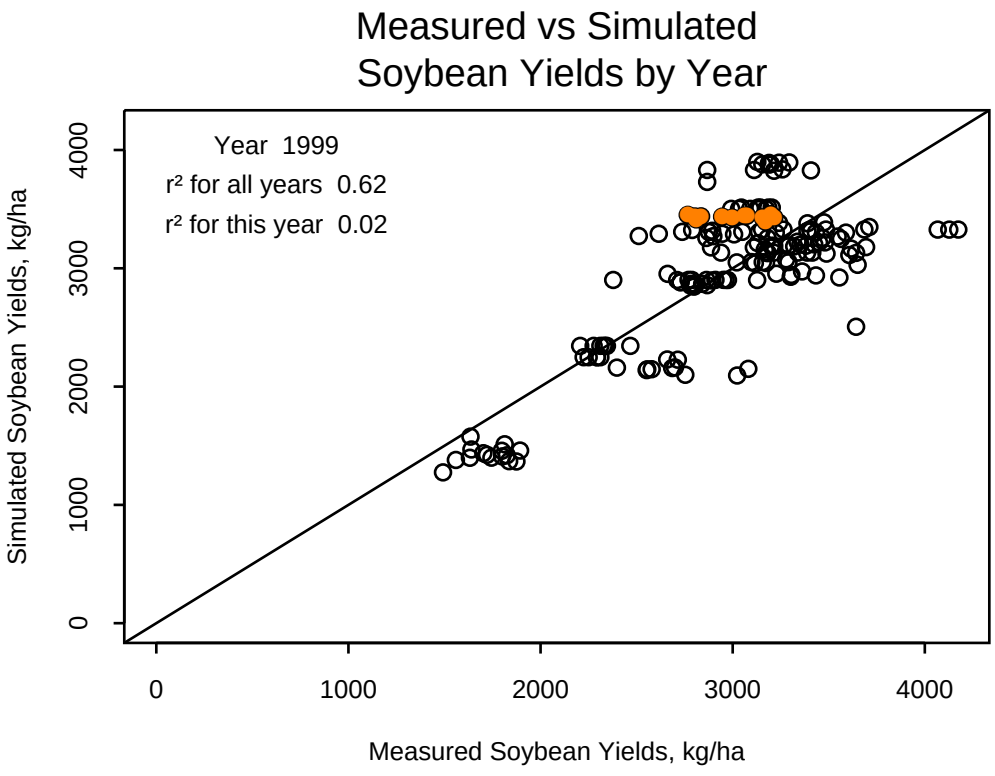

Measured vs Simulated
Soybean Yields by Year
Year 1994
r² for all years 0.62
r² for this year 0
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
0
1000
2000
3000
4000

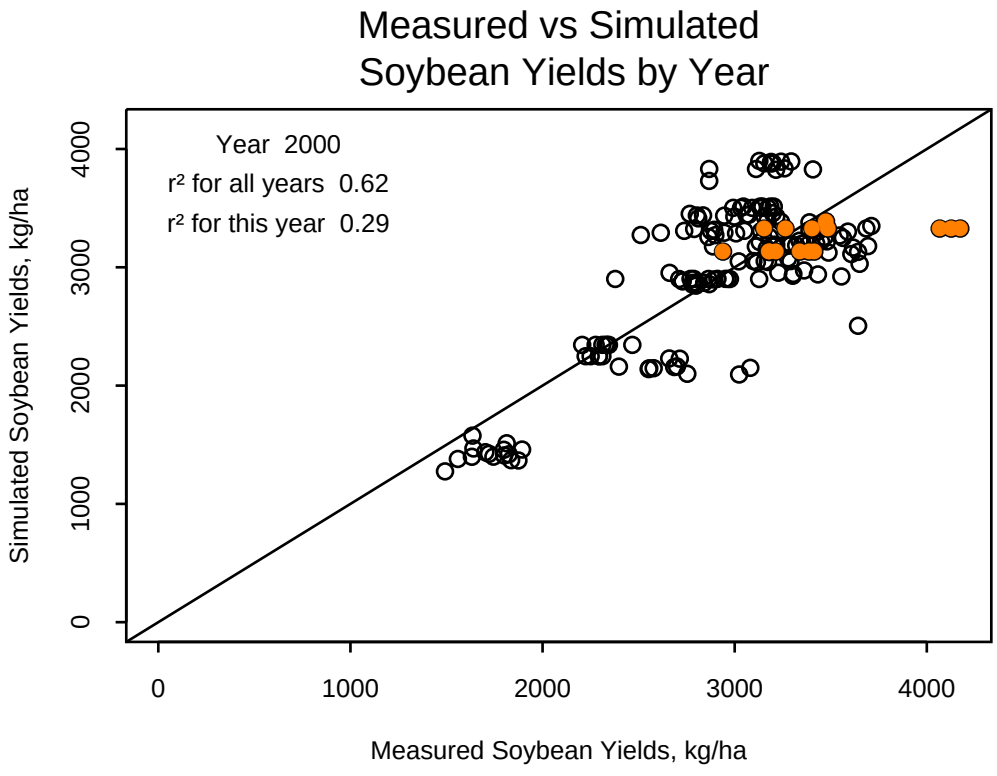

Measured vs Simulated
Soybean Yields by Year
Year 1995
r² for all years 0.62
r² for this year 0.06
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
0
1000
2000
3000
4000

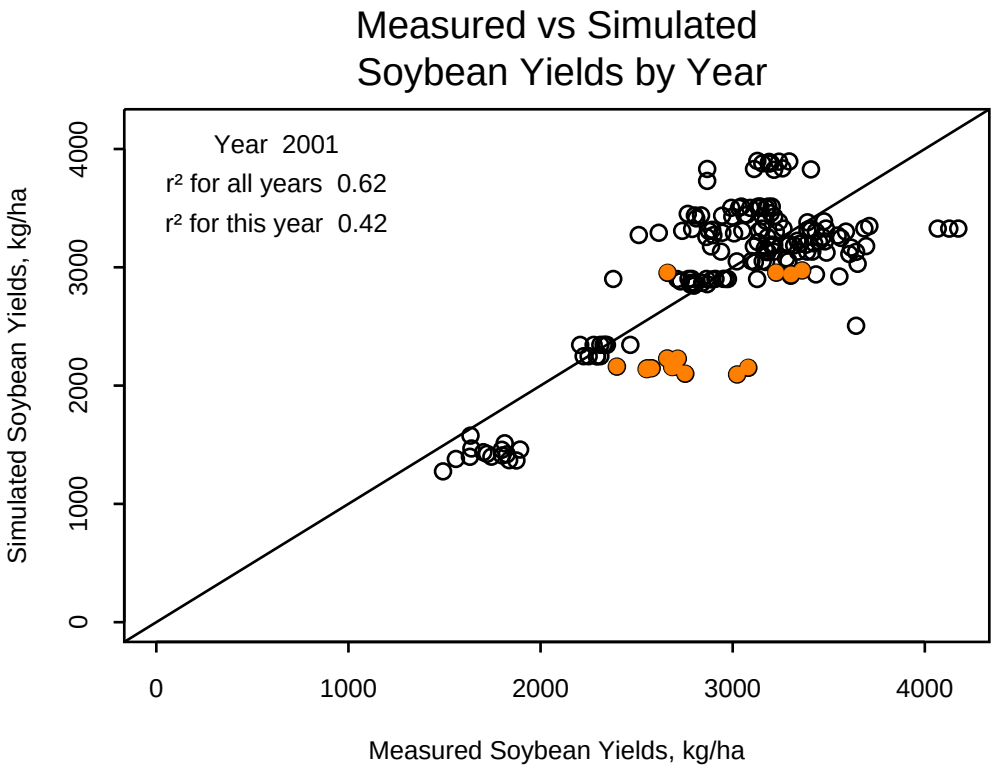

Measured vs Simulated
Soybean Yields by Year
Year 1996
r² for all years 0.62
r² for this year 0.12
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
0
1000
2000
3000
4000

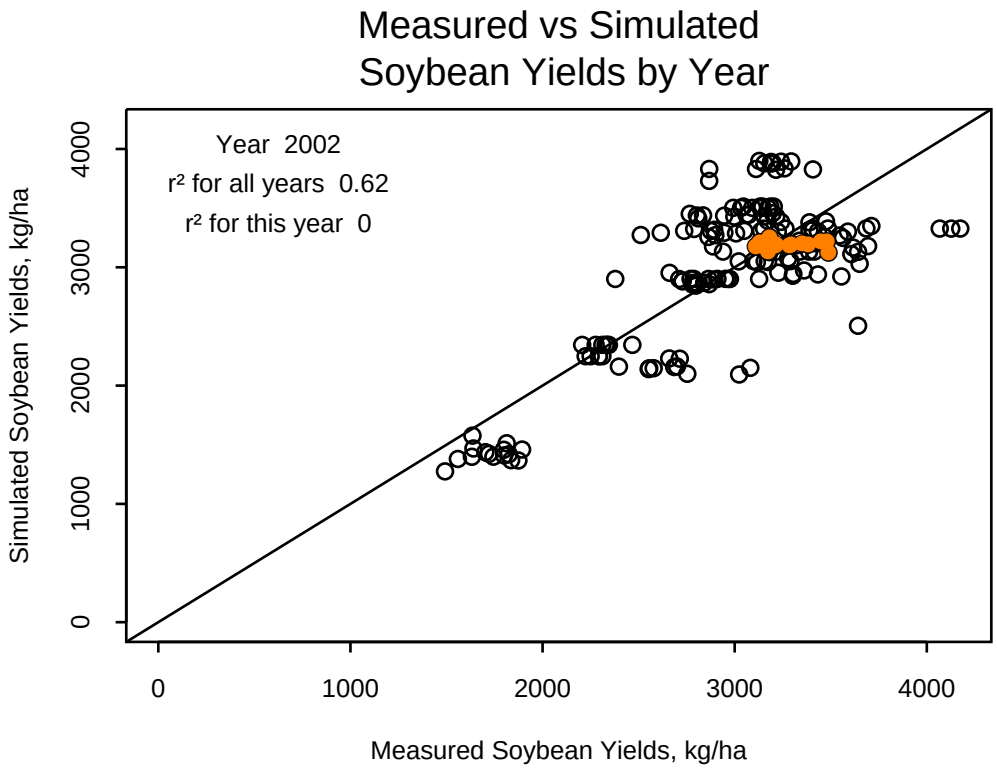

Measured vs Simulated
Soybean Yields by Year
Year 1997
r² for all years 0.62
r² for this year 0.01
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
0
1000
2000
3000
4000

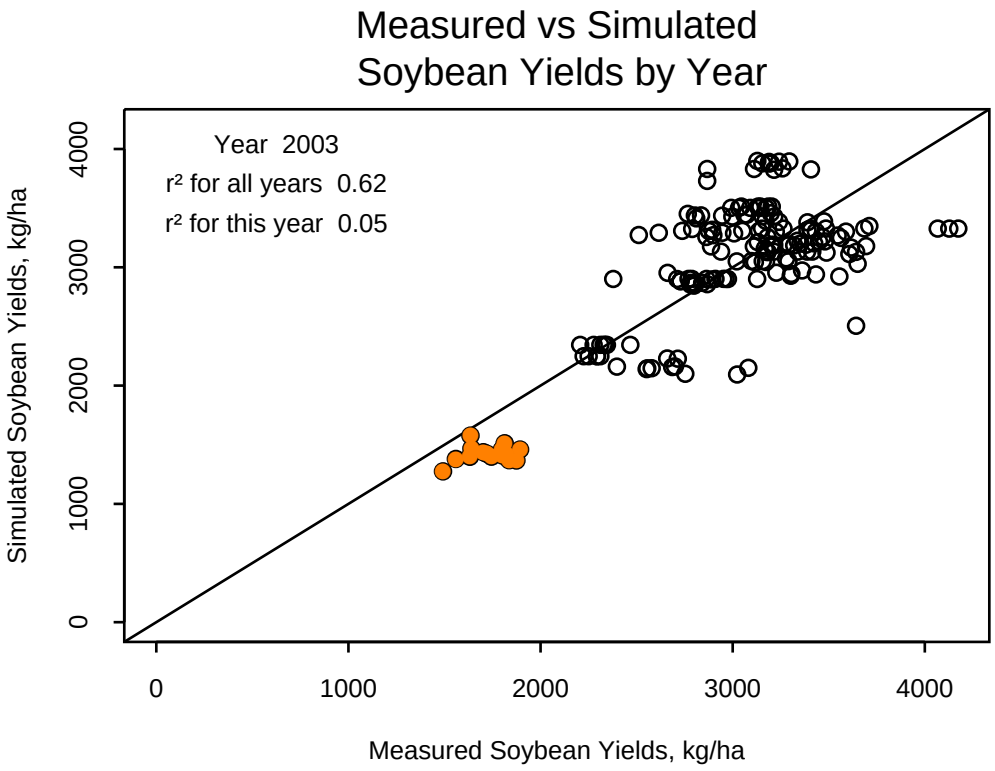

Measured vs Simulated
Soybean Yields by Year
Year 1998
r² for all years 0.62
r² for this year 0
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
0
1000
2000
3000
4000

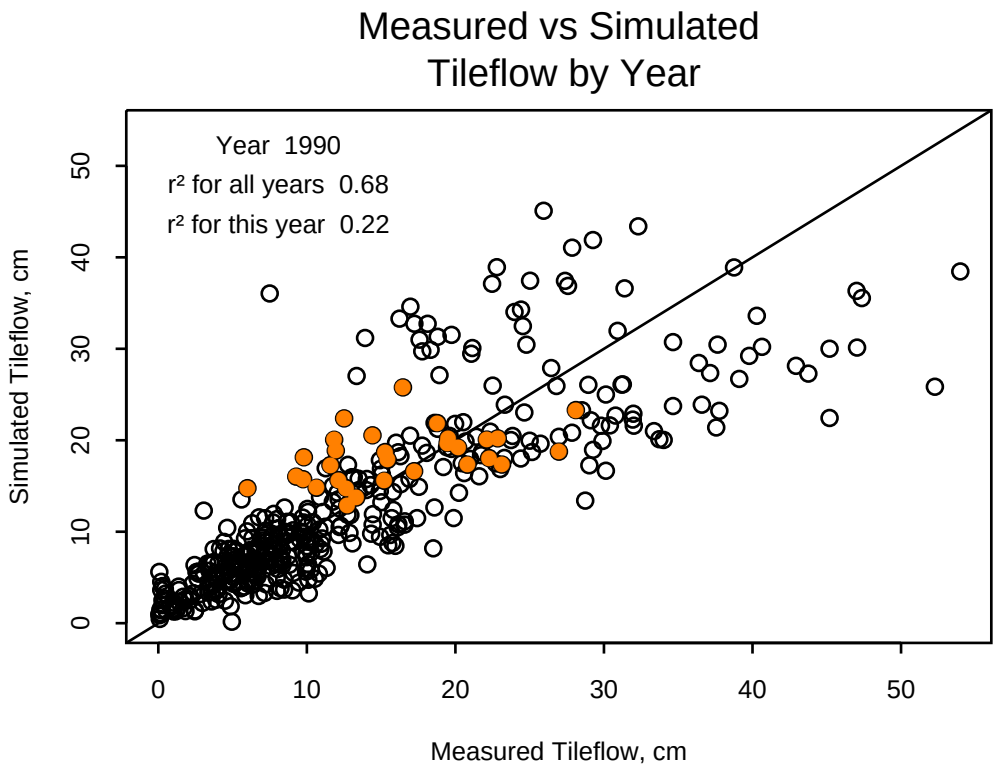

Measured vs Simulated
Soybean Yields by Year
Year 1999
r² for all years 0.62
r² for this year 0.02
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
0
1000
2000
3000
4000

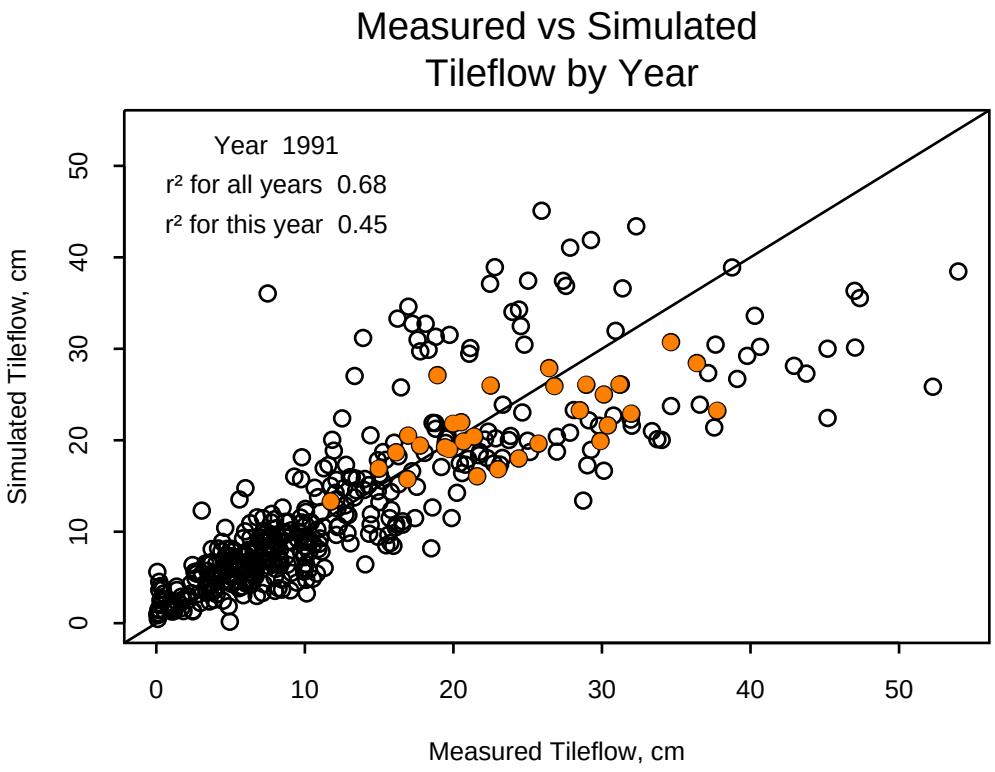

Measured vs Simulated
Soybean Yields by Year
Year 2000
r² for all years 0.62
r² for this year 0.29
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
0
1000
2000
3000
4000

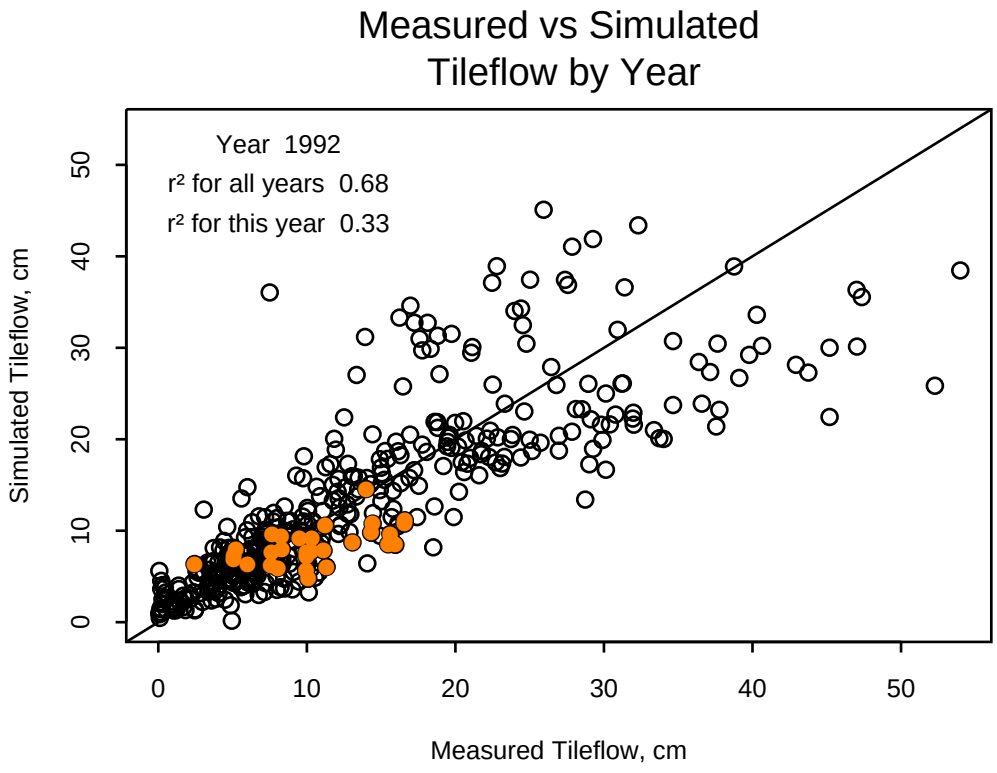

Measured vs Simulated
Soybean Yields by Year
Year 2001
r² for all years 0.62
r² for this year 0.42
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
0
1000
2000
3000
4000

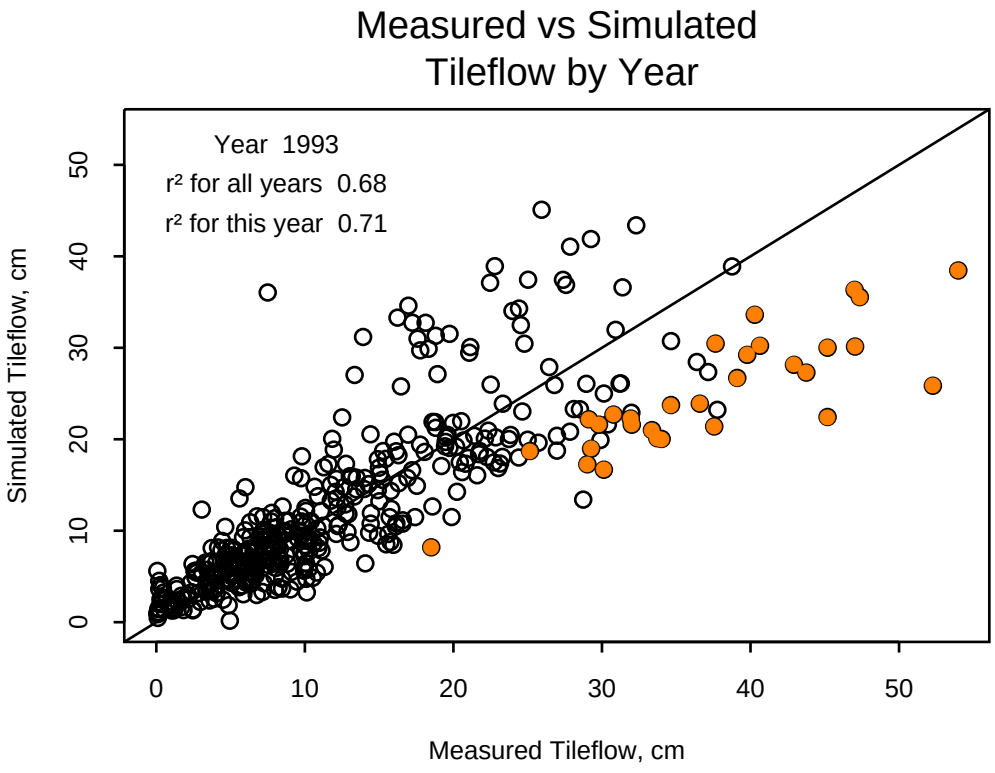

Measured vs Simulated
Soybean Yields by Year
Year 2002
r² for all years 0.62
r² for this year 0
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
0
1000
2000
3000
4000

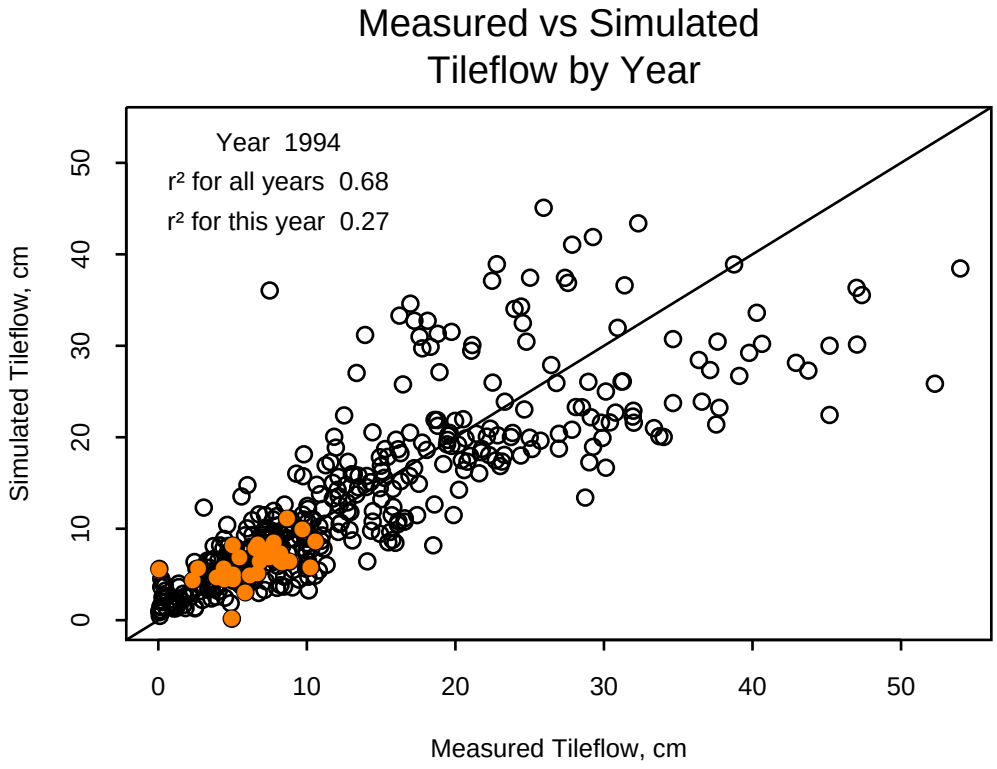

Measured vs Simulated
Soybean Yields by Year
Year 2003
r² for all years 0.62
r² for this year 0.05
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
0
1000
2000
3000
4000

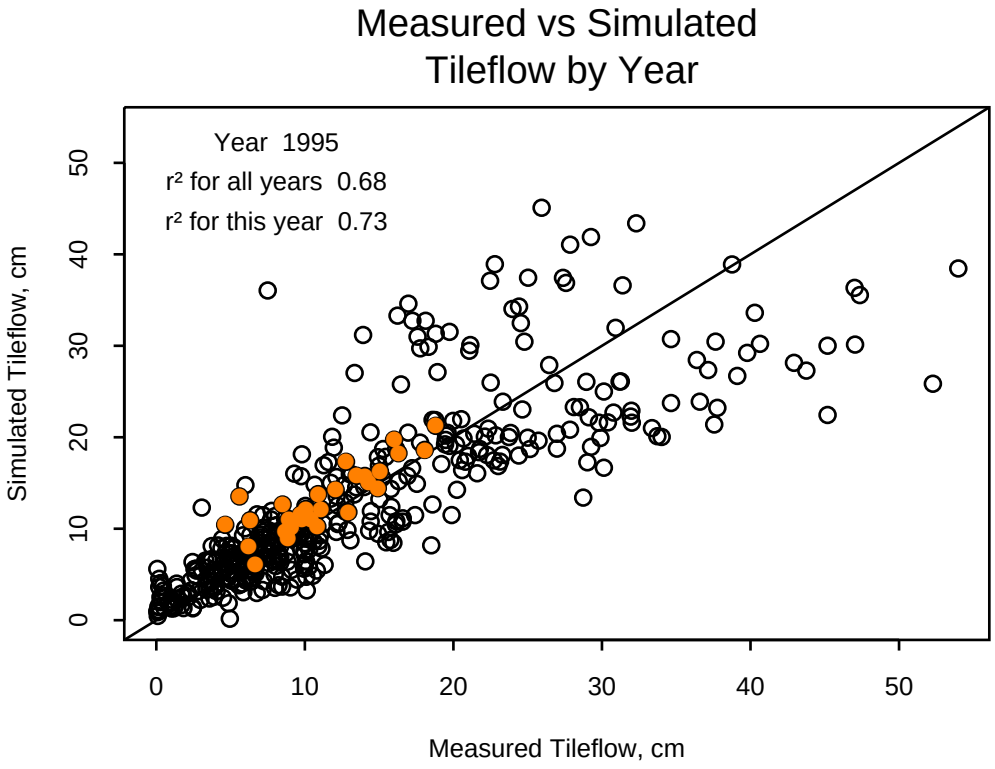

Measured vs Simulated
Tileflow by Year
Year 1990
r² for all years 0.68
r² for this year 0.22
Simulated Tileflow, cm
Measured Tileflow, cm
0
10
20
30
40
50

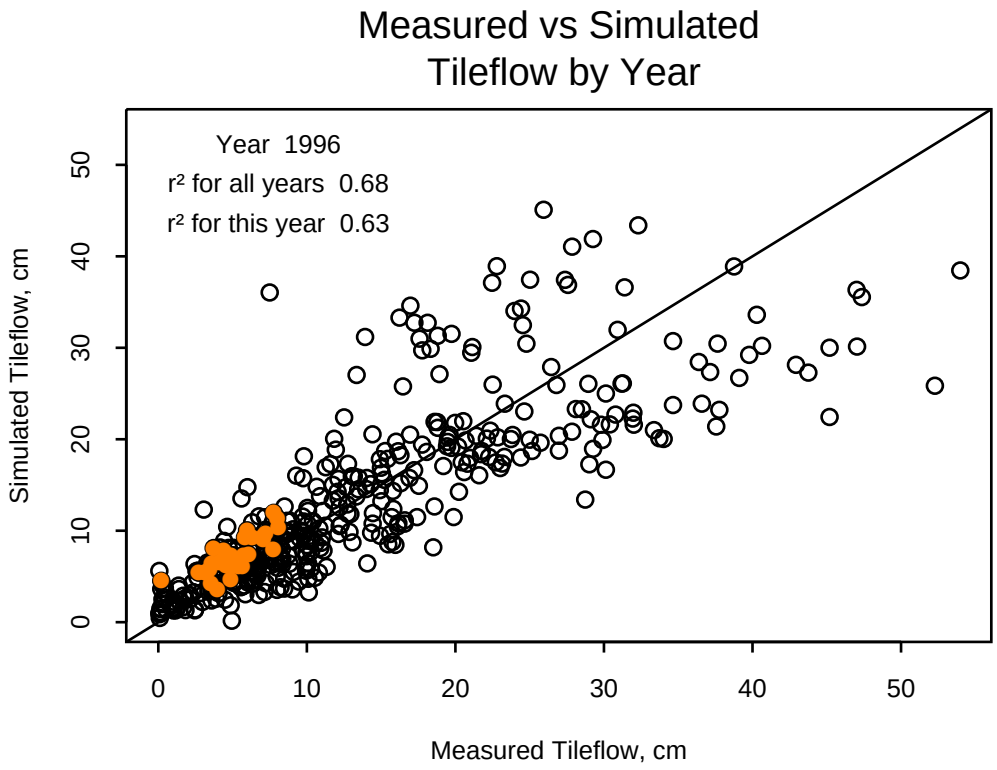

Measured vs Simulated
Tileflow by Year
Year 1991
r² for all years 0.68
r² for this year 0.45
Simulated Tileflow, cm
Measured Tileflow, cm
0
10
20
30
40
50

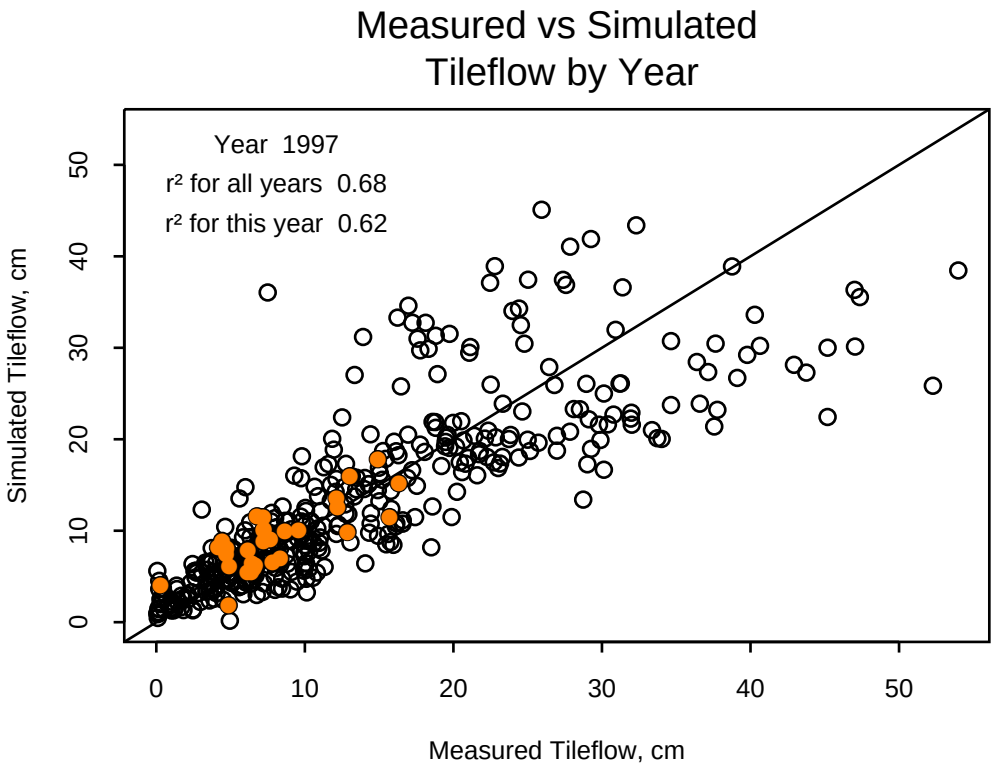

Measured vs Simulated
Tileflow by Year
Year 1992
r² for all years 0.68
r² for this year 0.33
Simulated Tileflow, cm
Measured Tileflow, cm
0
10
20
30
40
50

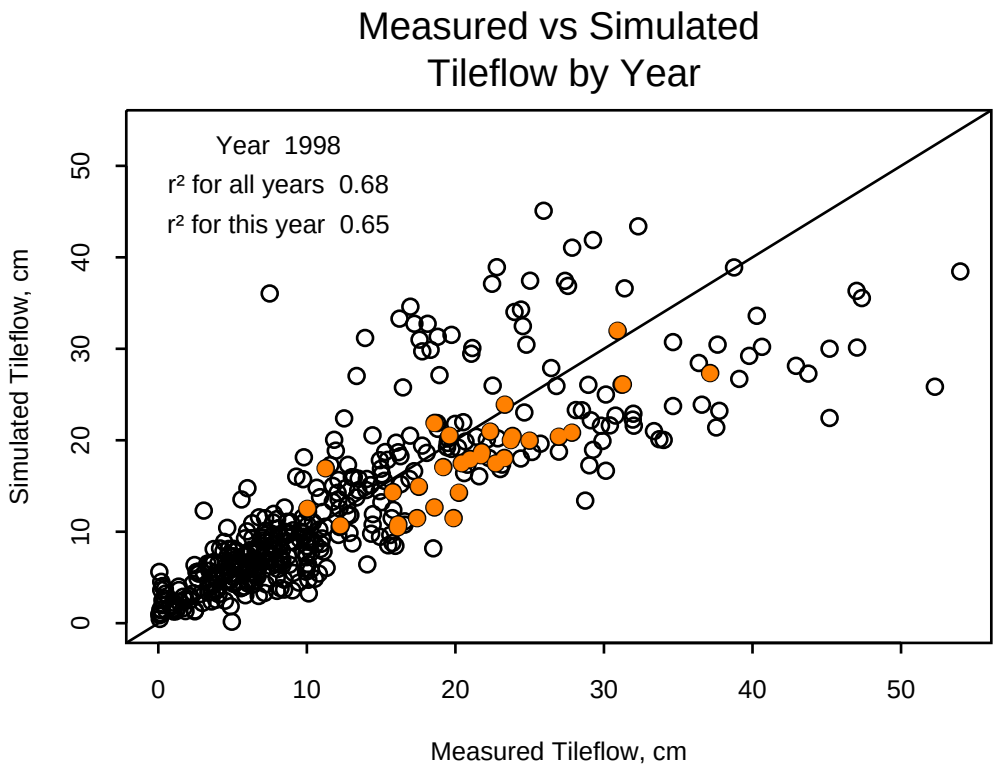

Measured vs Simulated
Tileflow by Year
Year 1993
r² for all years 0.68
r² for this year 0.71
Simulated Tileflow, cm
Measured Tileflow, cm
0
10
20
30
40
50

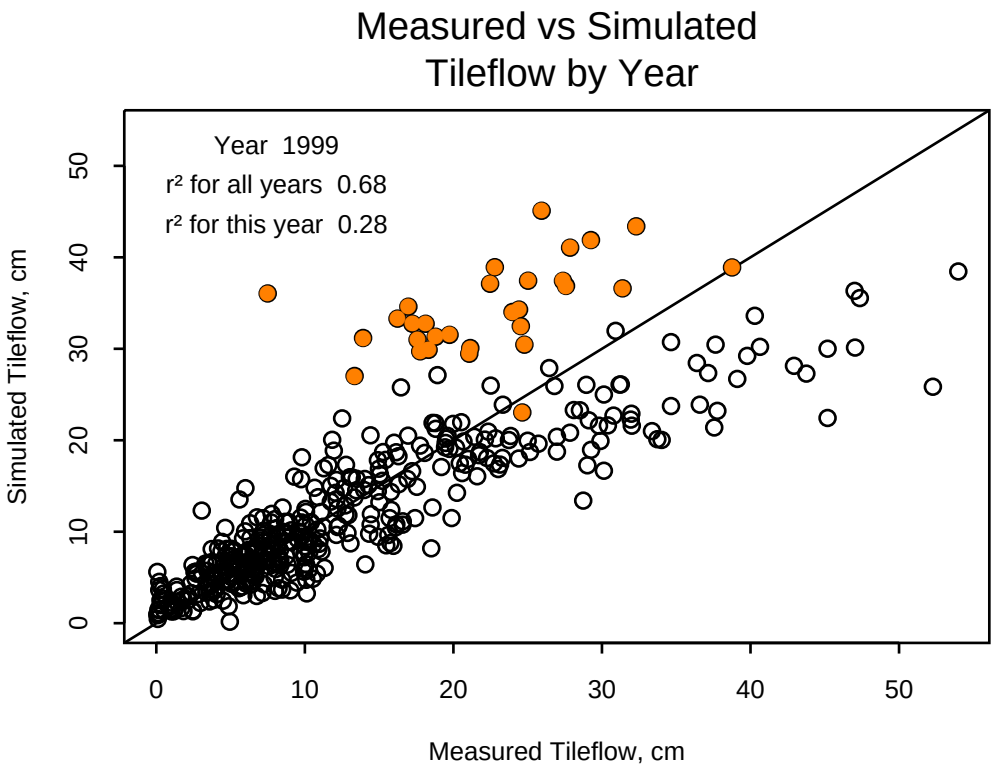

Measured vs Simulated
Tileflow by Year
Year 1994
r² for all years 0.68
r² for this year 0.27
Simulated Tileflow, cm
Measured Tileflow, cm
0
10
20
30
40
50

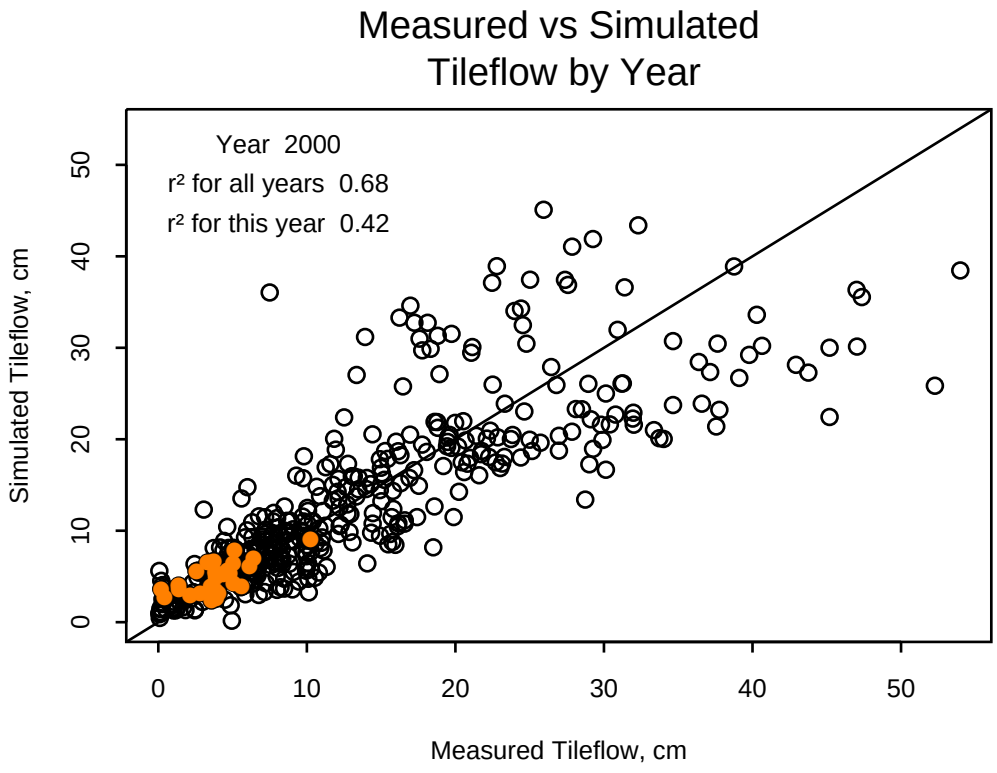

Measured vs Simulated
Tileflow by Year
Year 1995
r² for all years 0.68
r² for this year 0.73
Simulated Tileflow, cm
Measured Tileflow, cm
0
10
20
30
40
50

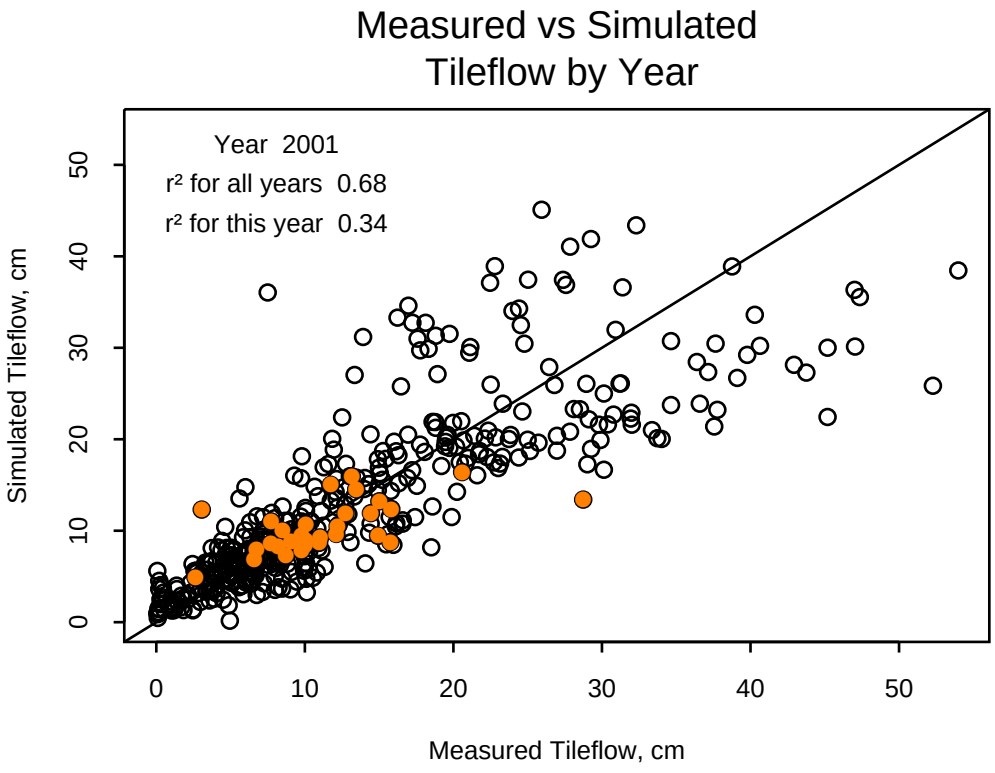

Measured vs Simulated
Tileflow by Year
Year 1996
r² for all years 0.68
r² for this year 0.63
Simulated Tileflow, cm
Measured Tileflow, cm
0
10
20
30
40
50

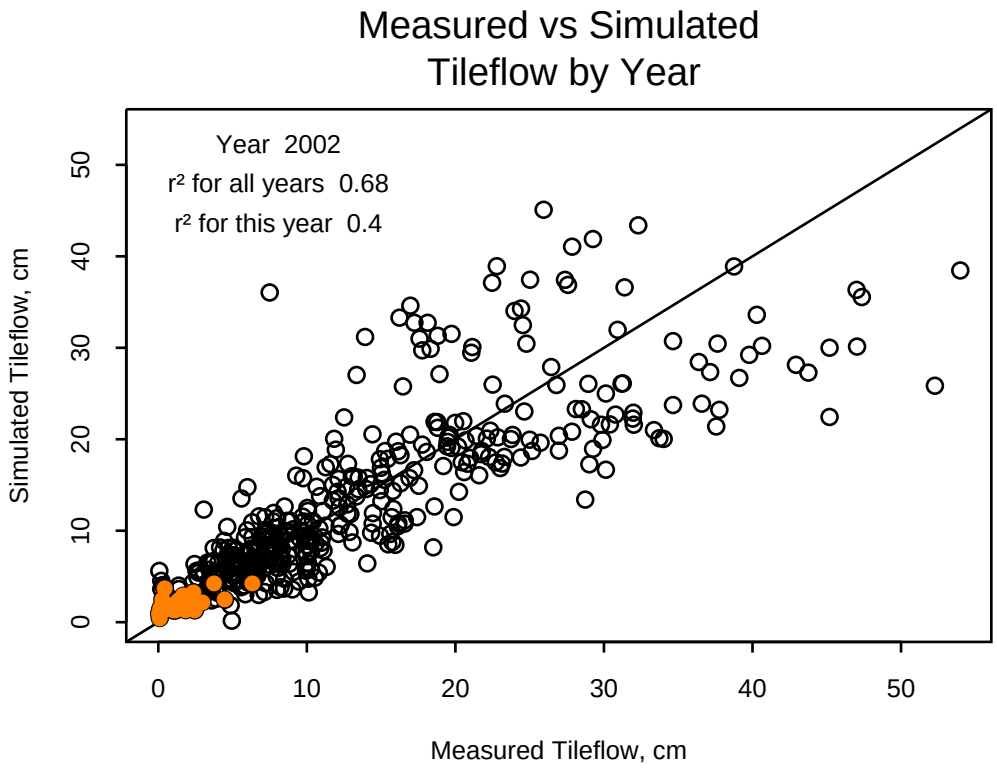

Measured vs Simulated
Tileflow by Year
Year 1997
r² for all years 0.68
r² for this year 0.62
Simulated Tileflow, cm
Measured Tileflow, cm
0
10
20
30
40
50

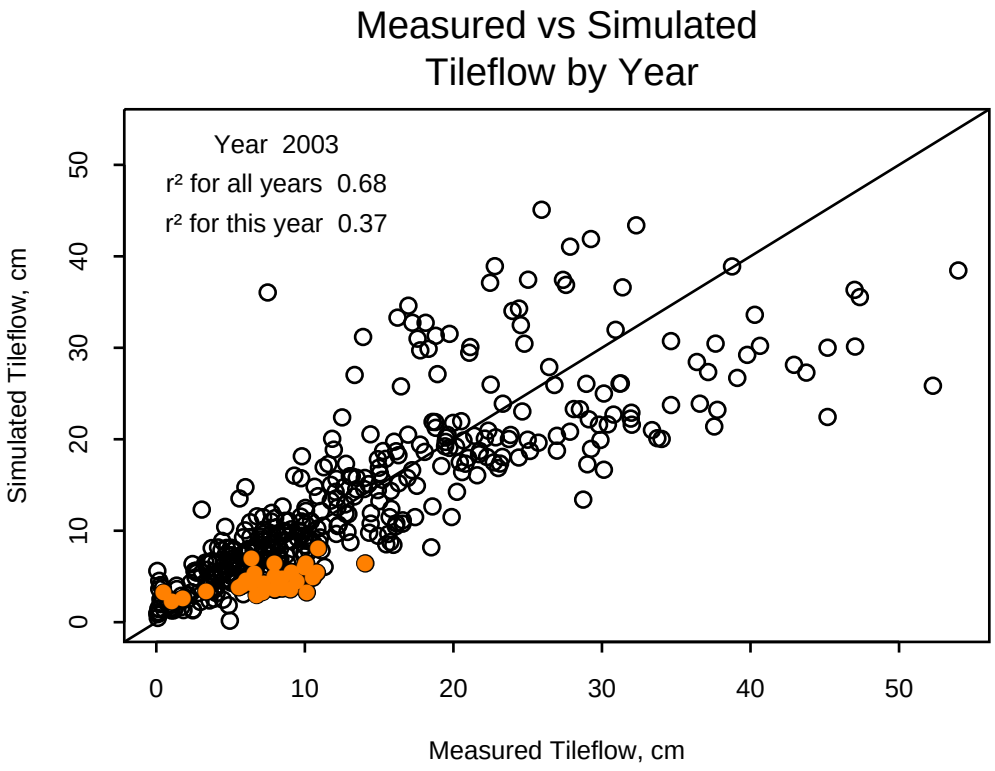

Measured vs Simulated
Tileflow by Year
Year 1998
r² for all years 0.68
r² for this year 0.65
Simulated Tileflow, cm
Measured Tileflow, cm
0
10
20
30
40
50

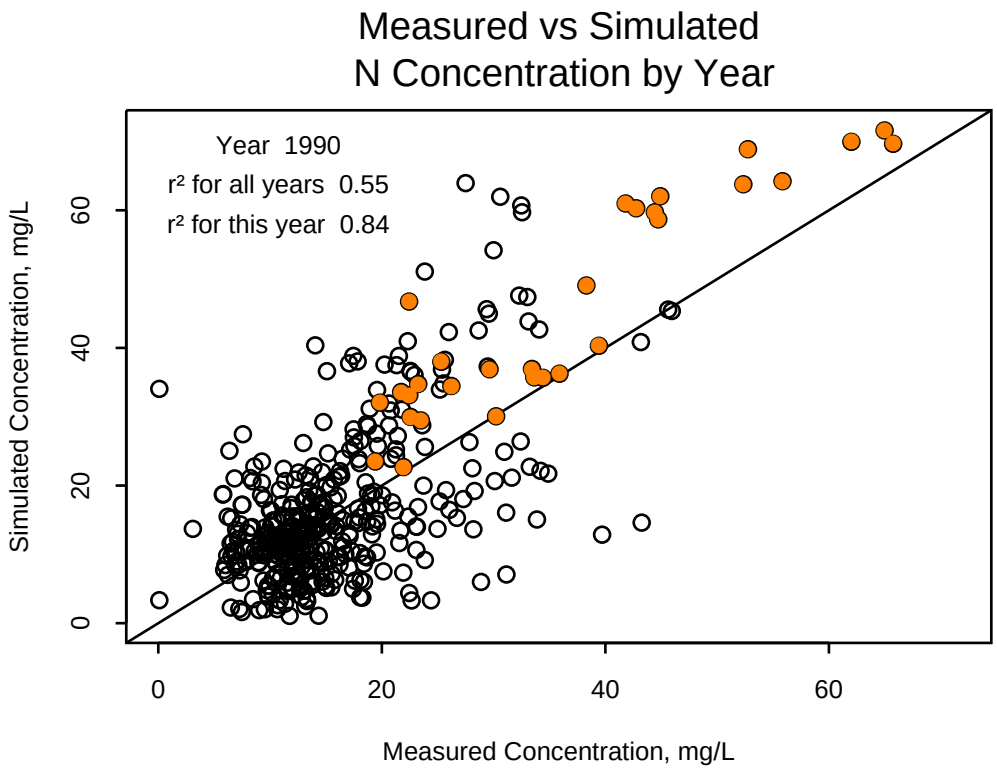

Measured vs Simulated
Tileflow by Year
Year 1999
r² for all years 0.68
r² for this year 0.28
Simulated Tileflow, cm
Measured Tileflow, cm
0
10
20
30
40
50

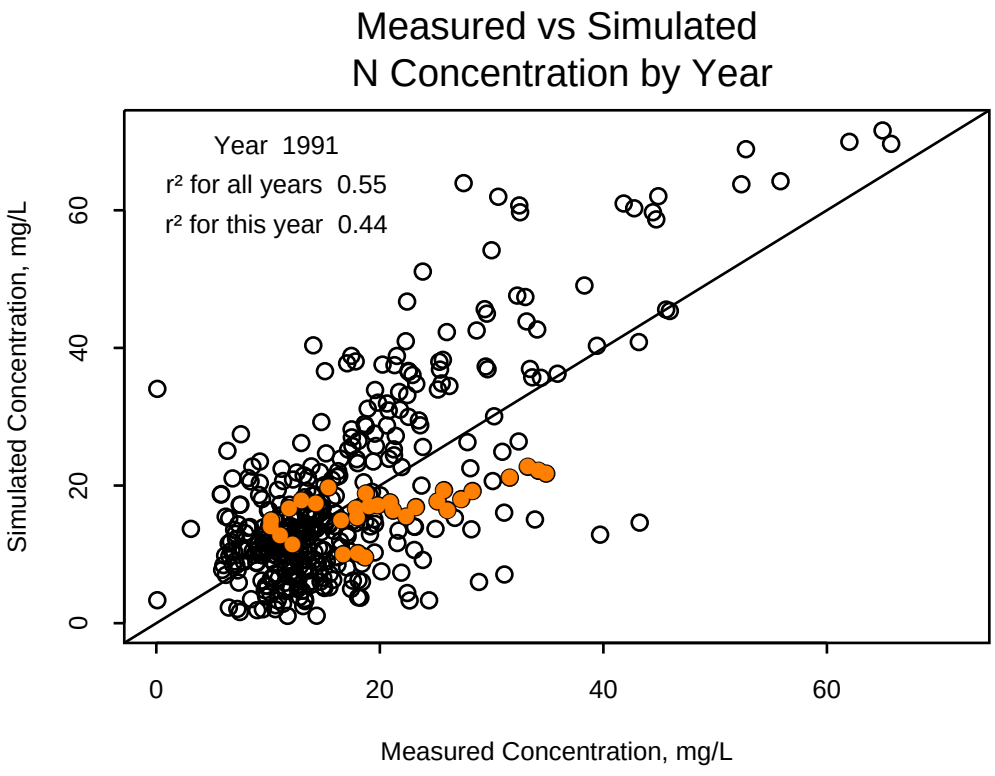

Measured vs Simulated
Tileflow by Year
Year 2000
r² for all years 0.68
r² for this year 0.42
Simulated Tileflow, cm
Measured Tileflow, cm
0
10
20
30
40
50

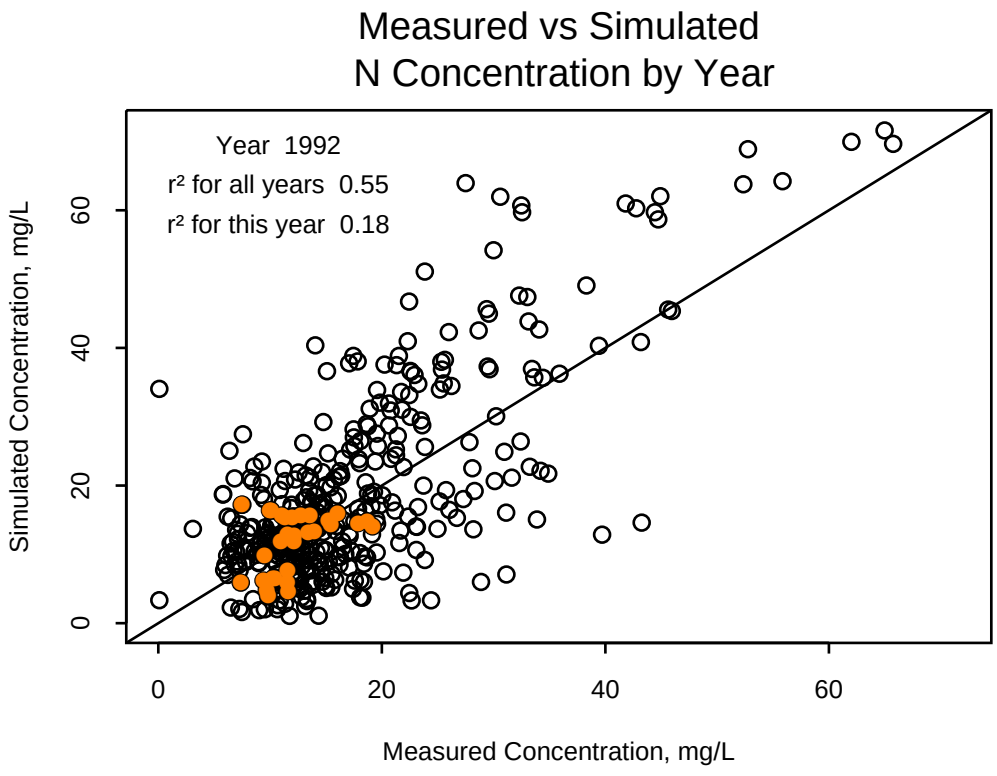

Measured vs Simulated
Tileflow by Year
Year 2001
r² for all years 0.68
r² for this year 0.34
Simulated Tileflow, cm
Measured Tileflow, cm
0
10
20
30
40
50

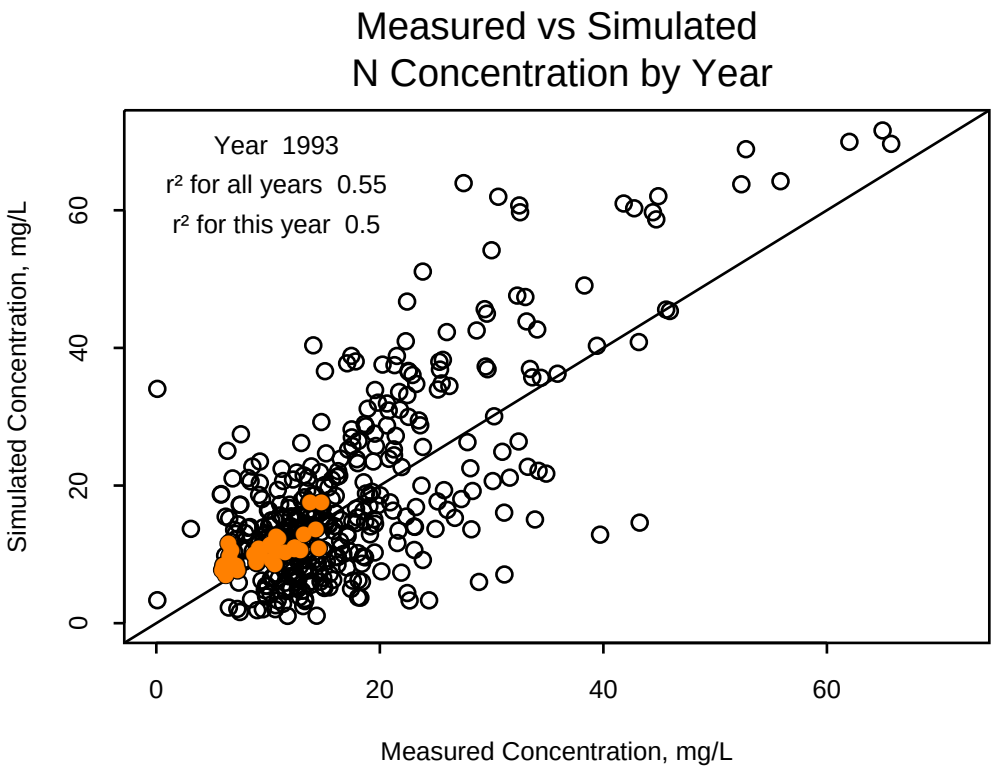

Measured vs Simulated
Tileflow by Year
Year 2002
r² for all years 0.68
r² for this year 0.4
Simulated Tileflow, cm
Measured Tileflow, cm
0
10
20
30
40
50

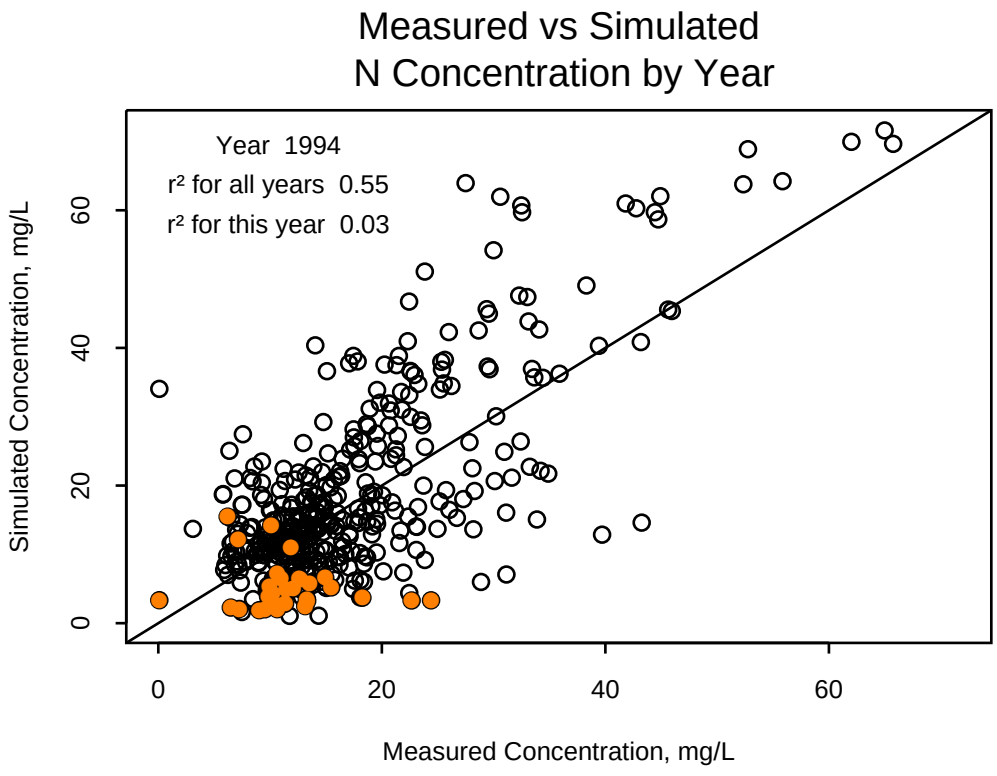

Measured vs Simulated
Tileflow by Year
Year 2003
r² for all years 0.68
r² for this year 0.37
Simulated Tileflow, cm
Measured Tileflow, cm
0
10
20
30
40
50

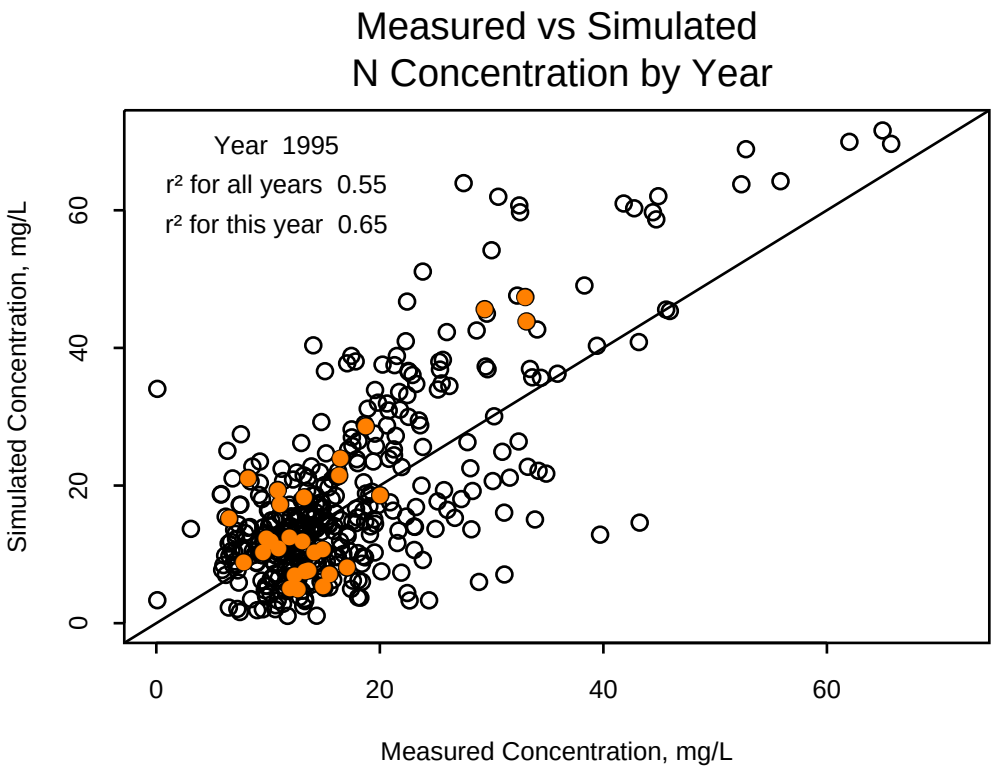

Measured vs Simulated
N Concentration by Year
Year 1990
r² for all years 0.55
r² for this year 0.84
Simulated Concentration, mg/L
Measured Concentration, mg/L
0
20
40
60

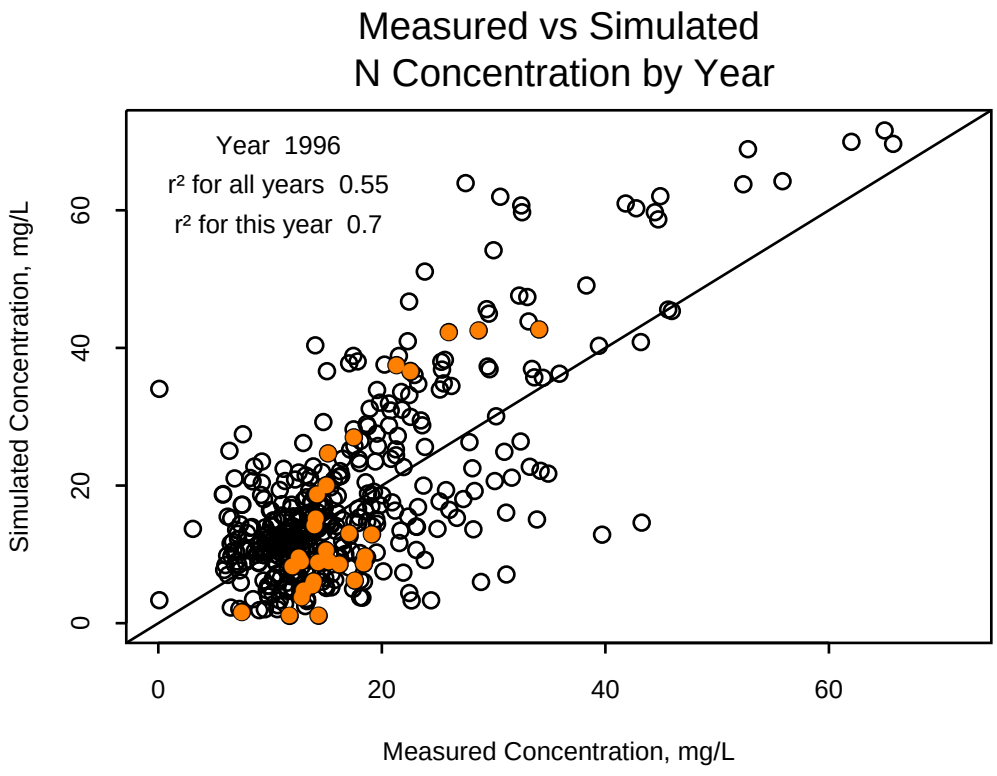

Measured vs Simulated
N Concentration by Year
Year 1991
r² for all years 0.55
r² for this year 0.44
Simulated Concentration, mg/L
Measured Concentration, mg/L
0
20
40
60

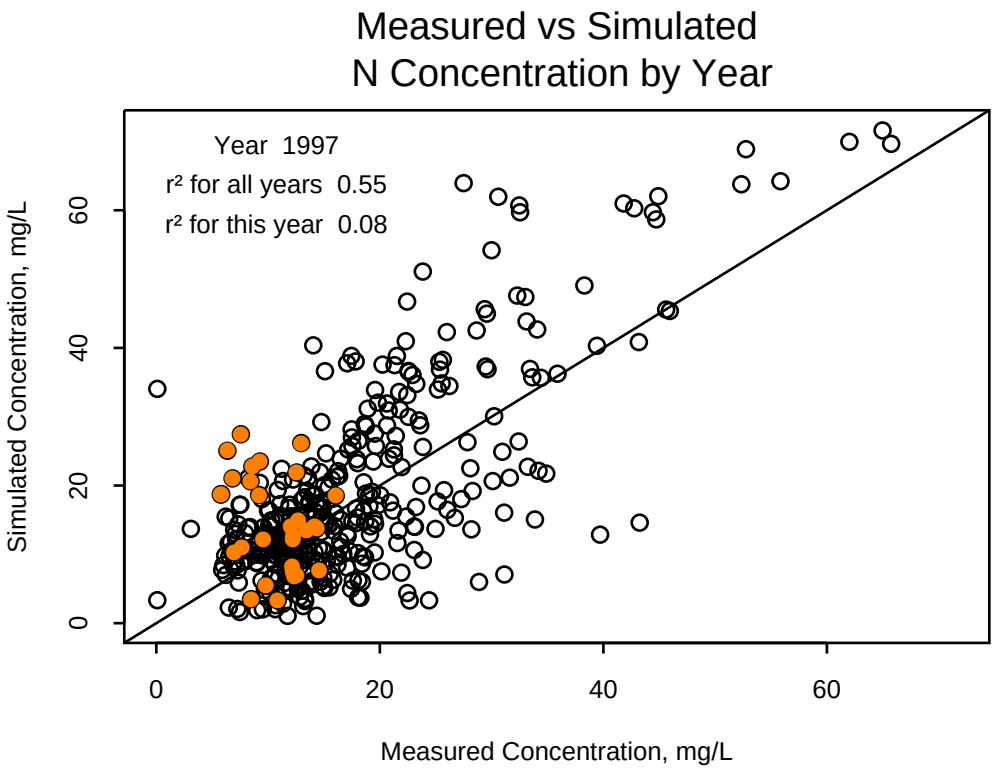

Measured vs Simulated
N Concentration by Year
Year 1992
r² for all years 0.55
r² for this year 0.18
Simulated Concentration, mg/L
Measured Concentration, mg/L
0
20
40
60

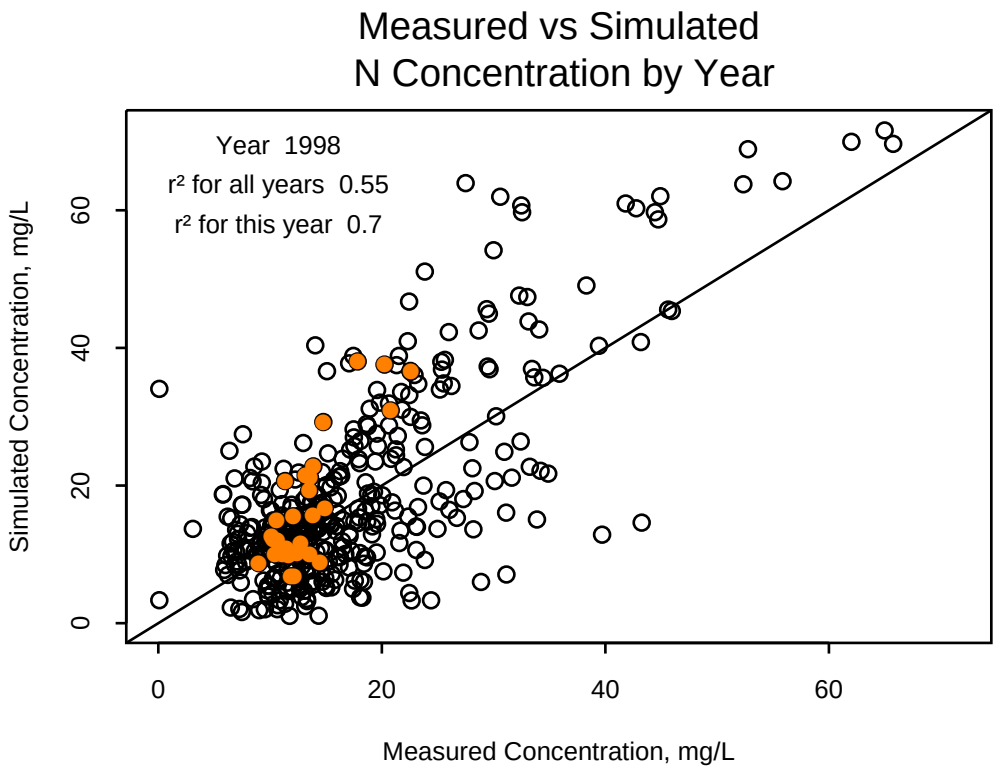

Measured vs Simulated
N Concentration by Year
Year 1993
r² for all years 0.55
r² for this year 0.5
Simulated Concentration, mg/L
Measured Concentration, mg/L
0
20
40
60

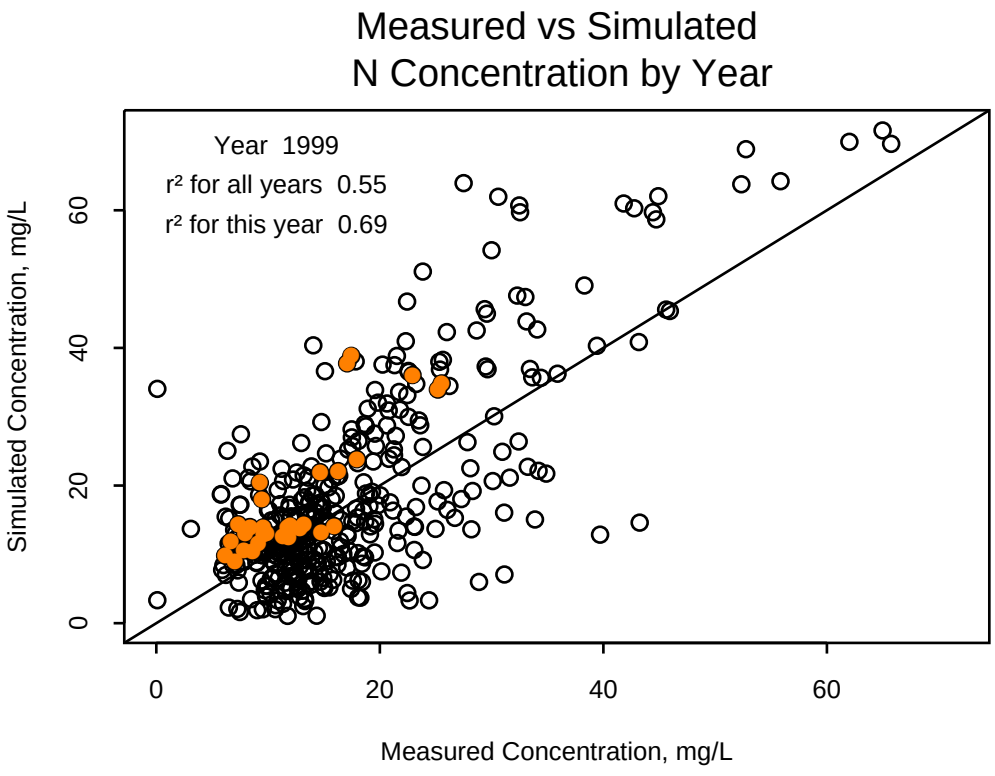

Measured vs Simulated
N Concentration by Year
Year 1994
r² for all years 0.55
r² for this year 0.03
Simulated Concentration, mg/L
Measured Concentration, mg/L
0
20
40
60

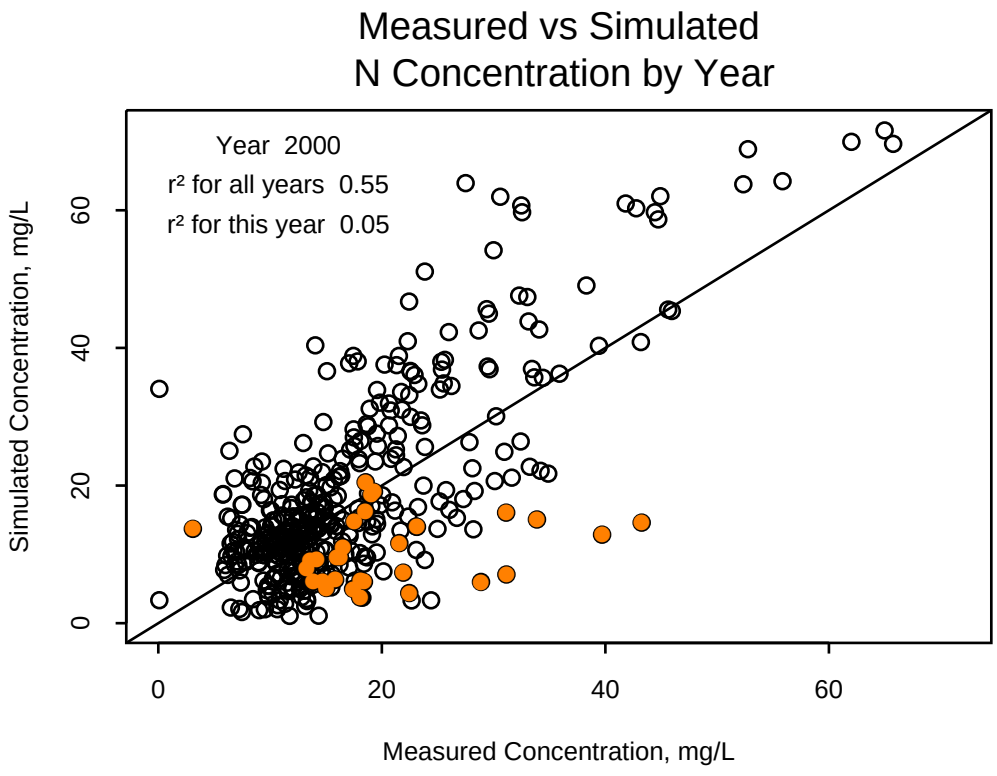

Measured vs Simulated
N Concentration by Year
Year 1995
r² for all years 0.55
r² for this year 0.65
Simulated Concentration, mg/L
Measured Concentration, mg/L
0
20
40
60

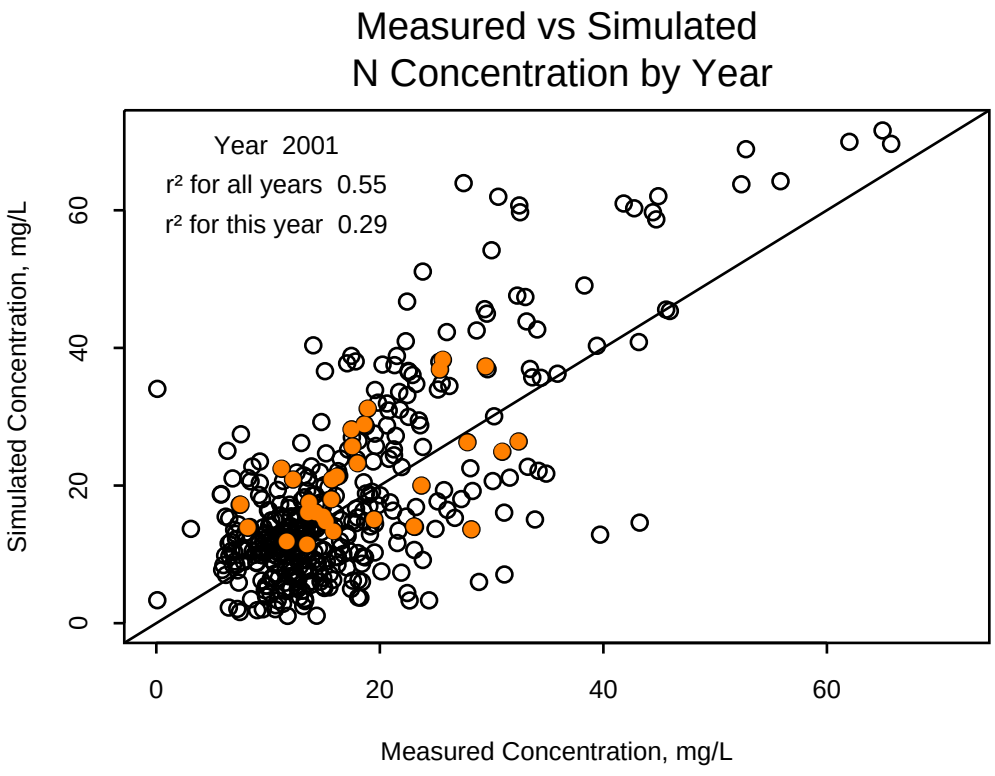

Measured vs Simulated
N Concentration by Year
Year 1996
r² for all years 0.55
r² for this year 0.7
Simulated Concentration, mg/L
Measured Concentration, mg/L
0
20
40
60

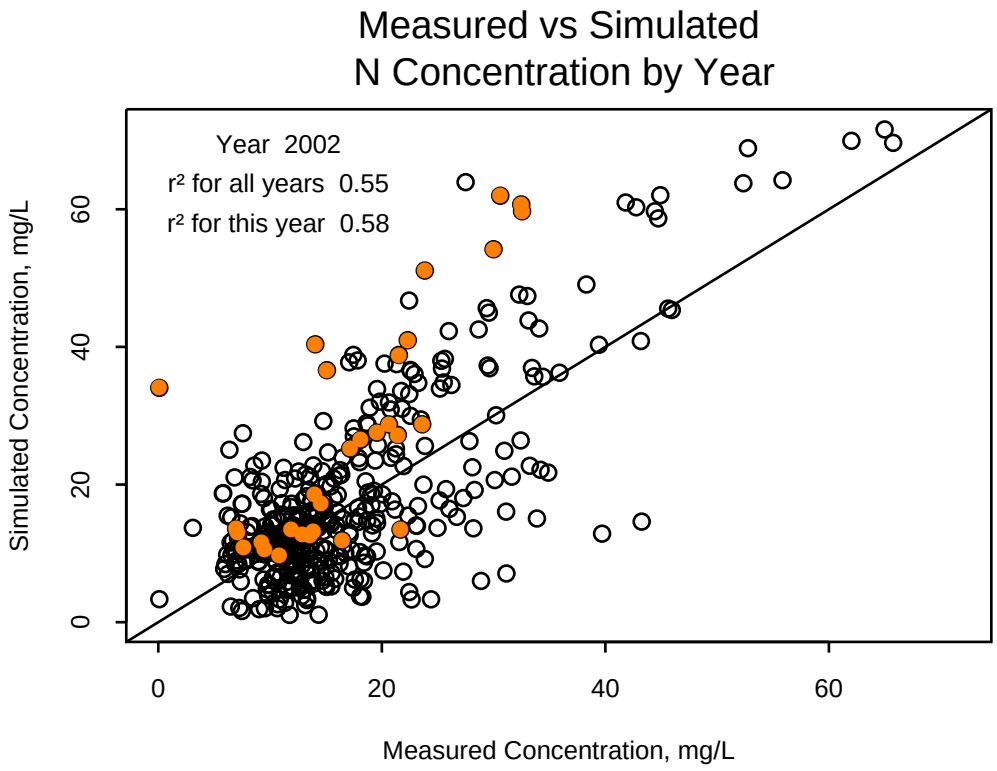

Measured vs Simulated
N Concentration by Year
Year 1997
r² for all years 0.55
r² for this year 0.08
Simulated Concentration, mg/L
Measured Concentration, mg/L
0
20
40
60

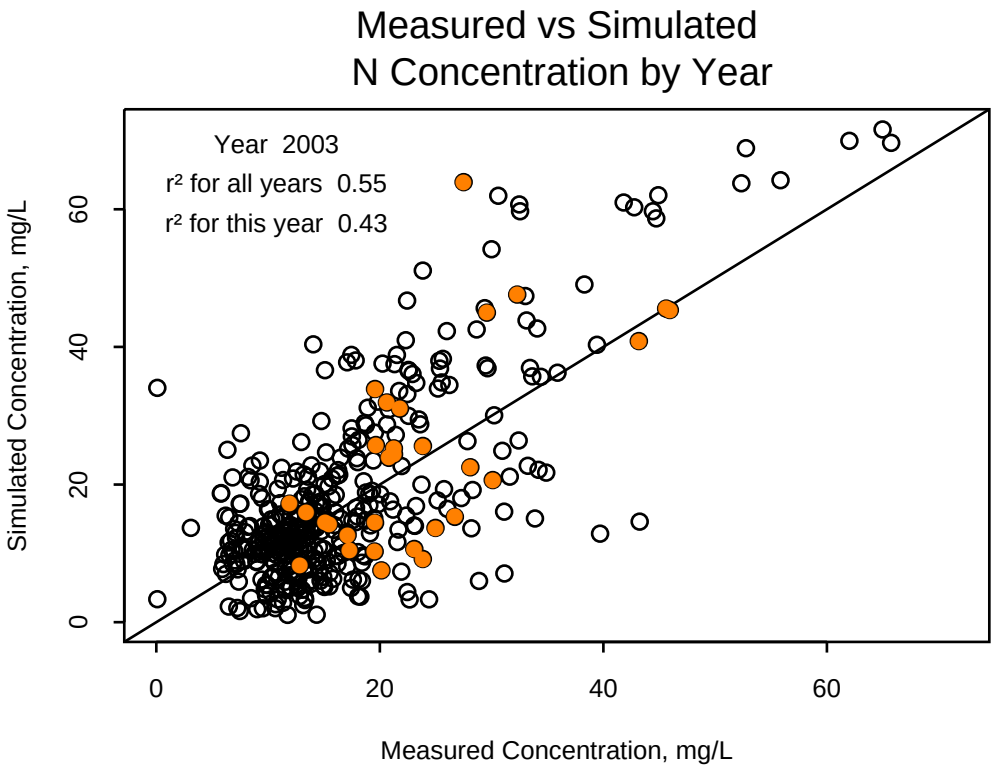

Measured vs Simulated
N Concentration by Year
Year 1998
r² for all years 0.55
r² for this year 0.7
Simulated Concentration, mg/L
Measured Concentration, mg/L
0
20
40
60

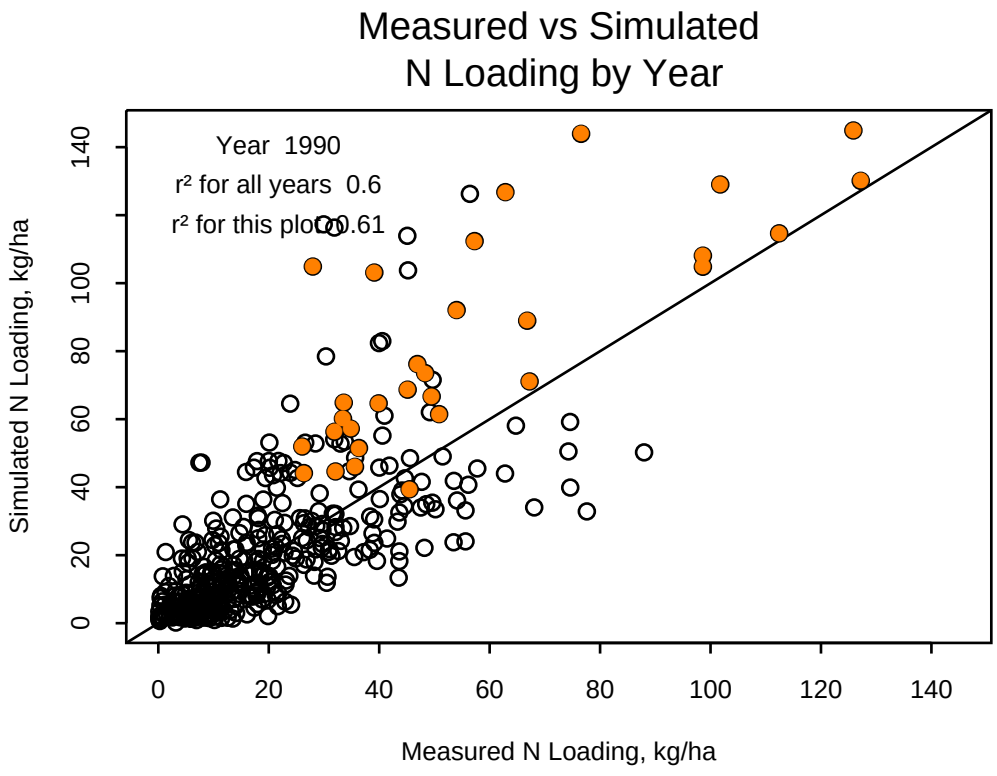

Measured vs Simulated
N Concentration by Year
Year 1999
r² for all years 0.55
r² for this year 0.69
Simulated Concentration, mg/L
Measured Concentration, mg/L
0
20
40
60

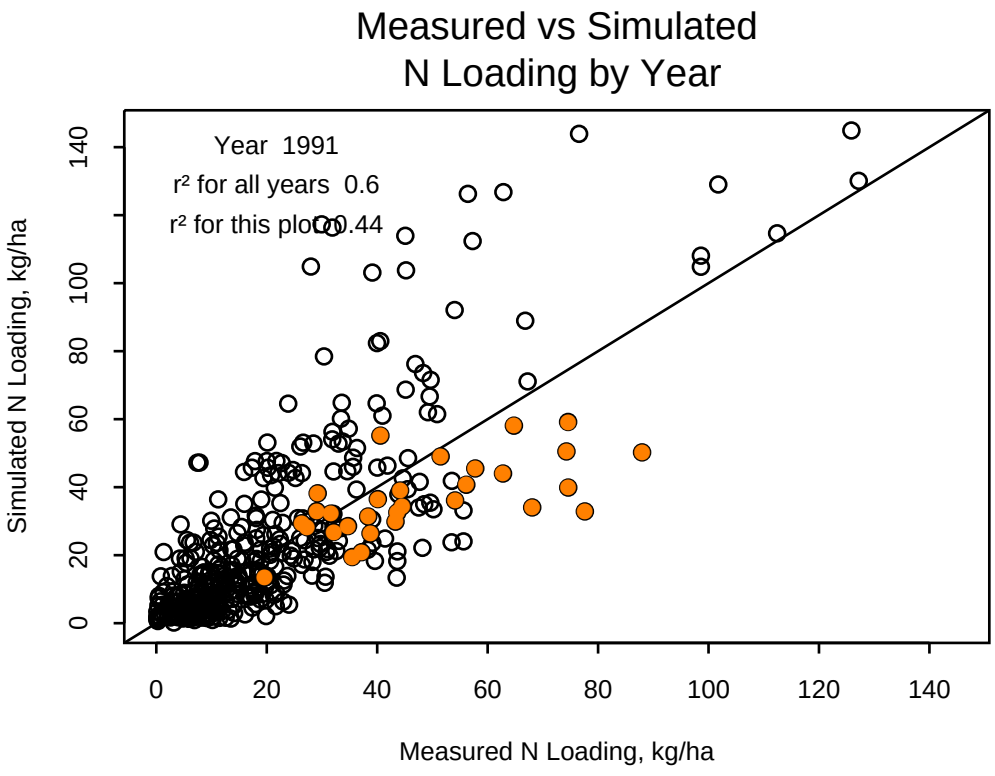

Measured vs Simulated
N Concentration by Year
Year 2000
r² for all years 0.55
r² for this year 0.05
Simulated Concentration, mg/L
Measured Concentration, mg/L
0
20
40
60

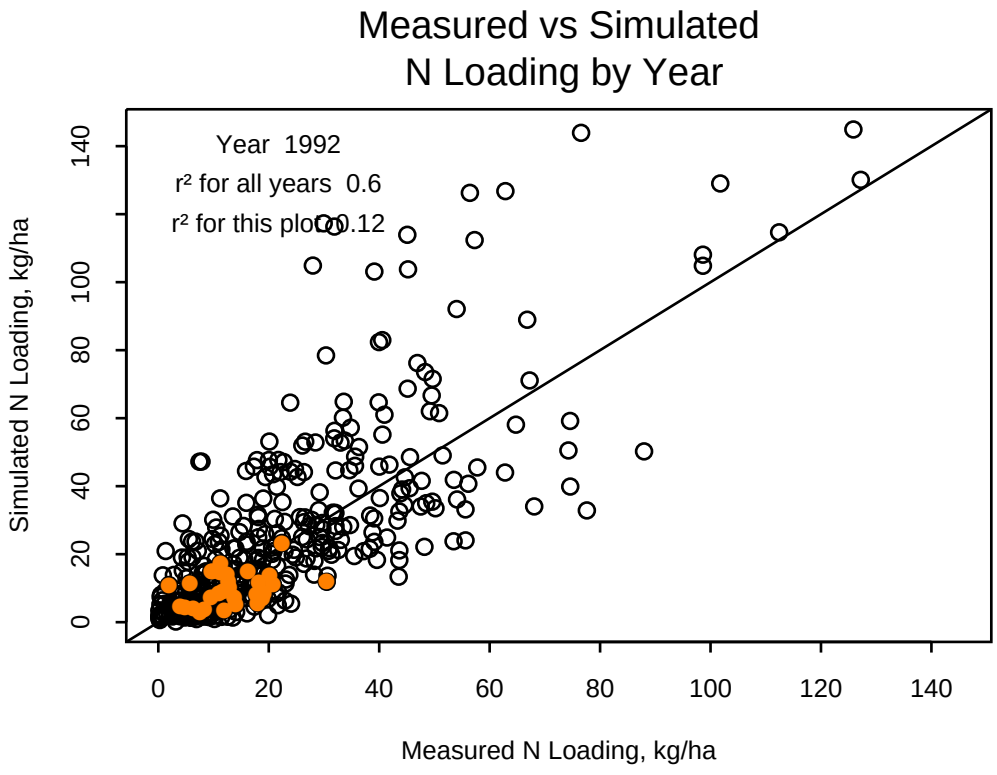

Measured vs Simulated
N Concentration by Year
Year 2001
r² for all years 0.55
r² for this year 0.29
Simulated Concentration, mg/L
Measured Concentration, mg/L
0
20
40
60

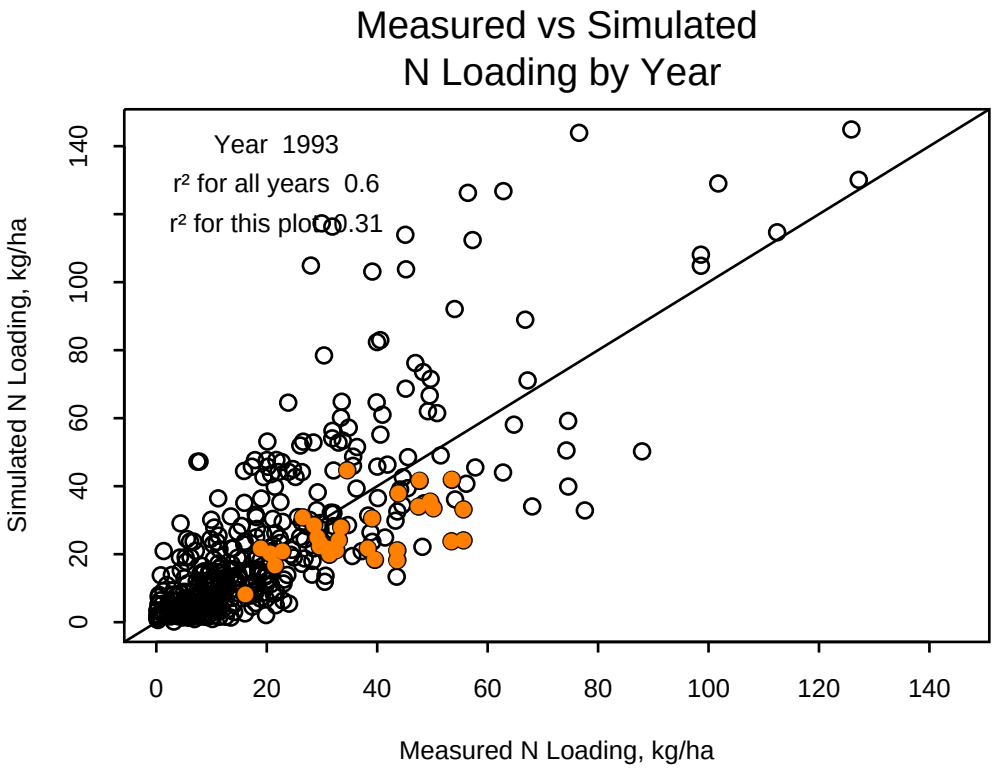

Measured vs Simulated
N Concentration by Year
Year 2002
r² for all years 0.55
r² for this year 0.58
Simulated Concentration, mg/L
Measured Concentration, mg/L
0
20
40
60

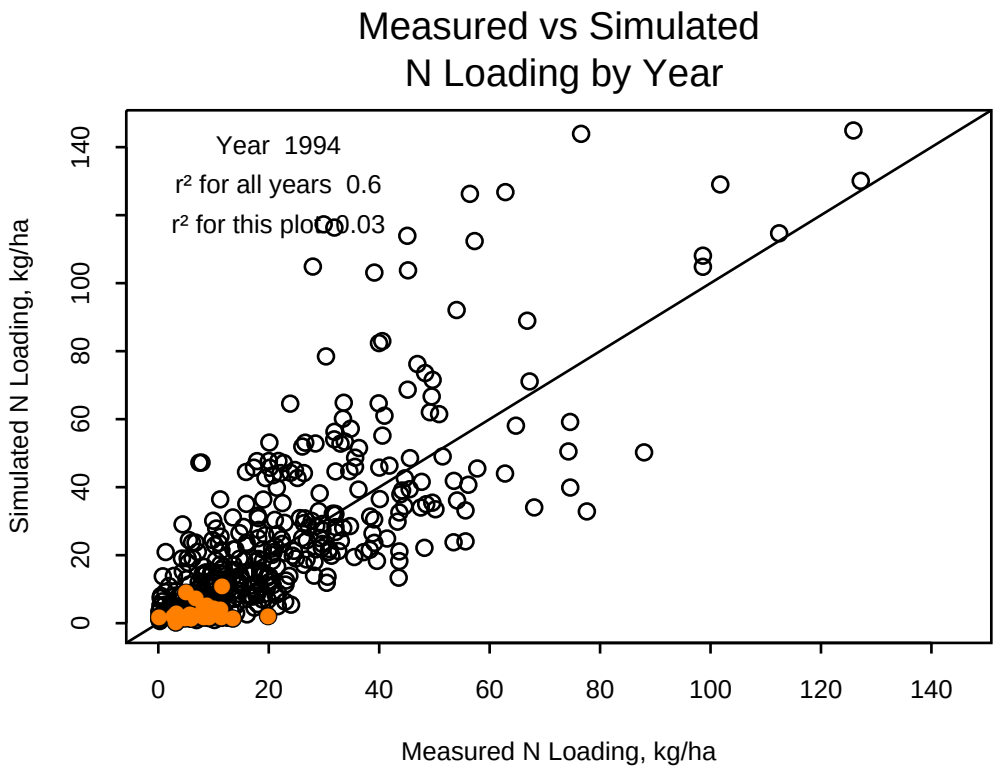

Measured vs Simulated
N Concentration by Year
Year 2003
r² for all years 0.55
r² for this year 0.43
Simulated Concentration, mg/L
Measured Concentration, mg/L
0
20
40
60

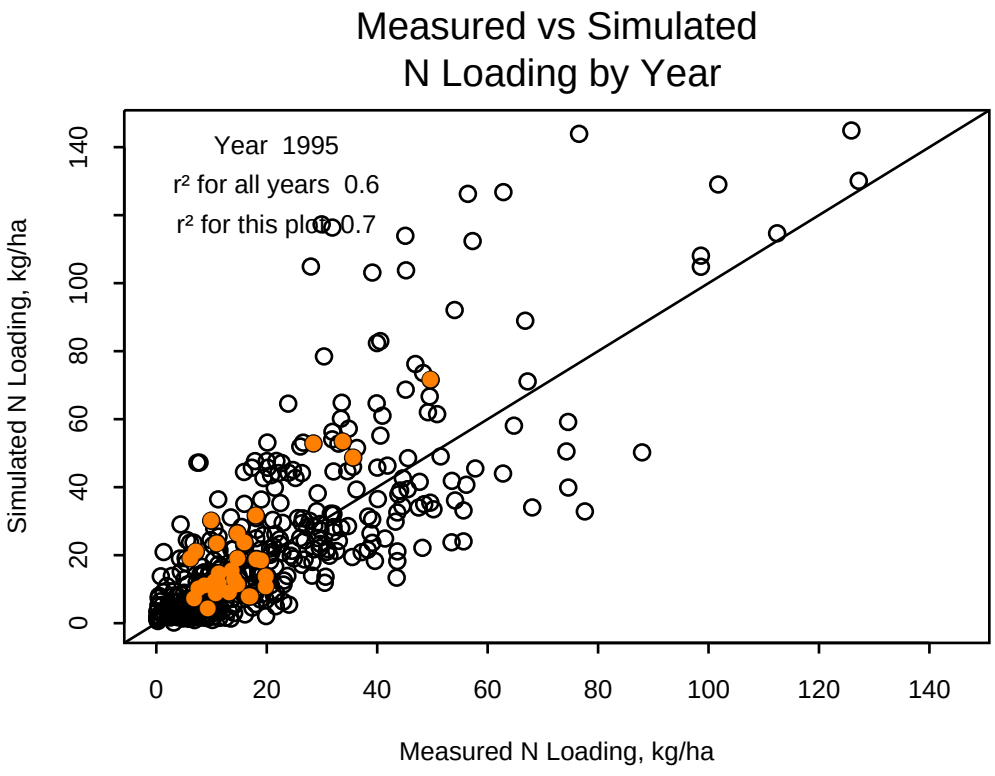

Measured vs Simulated
N Loading by Year
Year 1990
r² for all years 0.6
r² for this plot 0.61
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
0
20
40
60
80
100
120
140

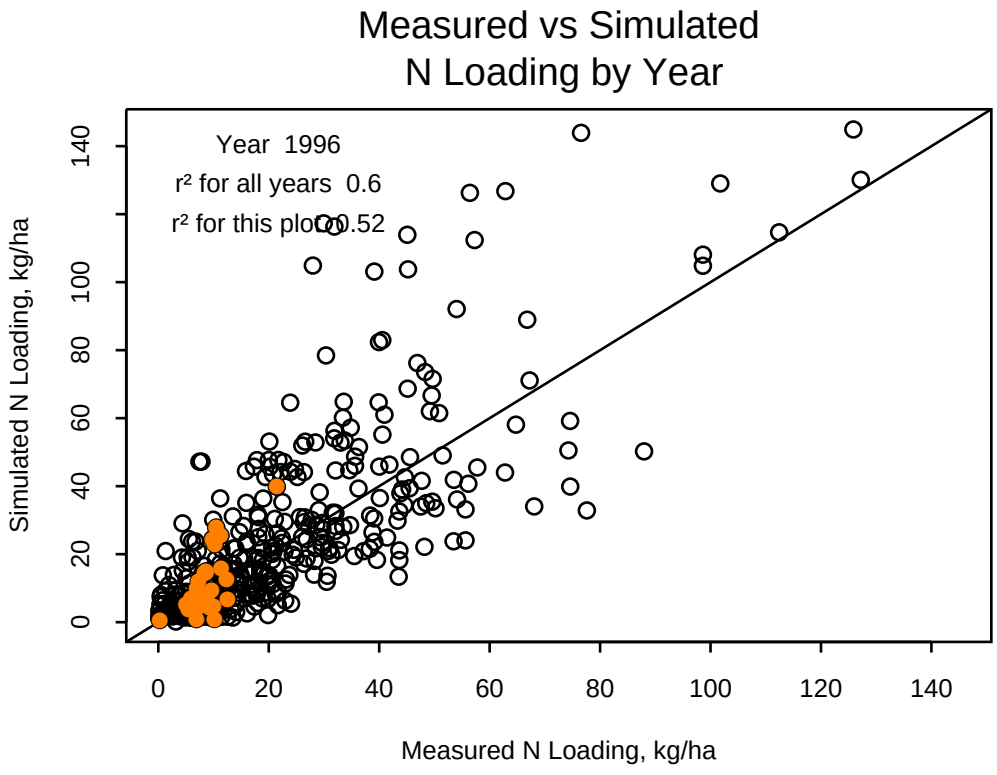

Measured vs Simulated
N Loading by Year
Year 1991
r² for all years 0.6
r² for this plot 0.44
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
0
20
40
60
80
100
120
140

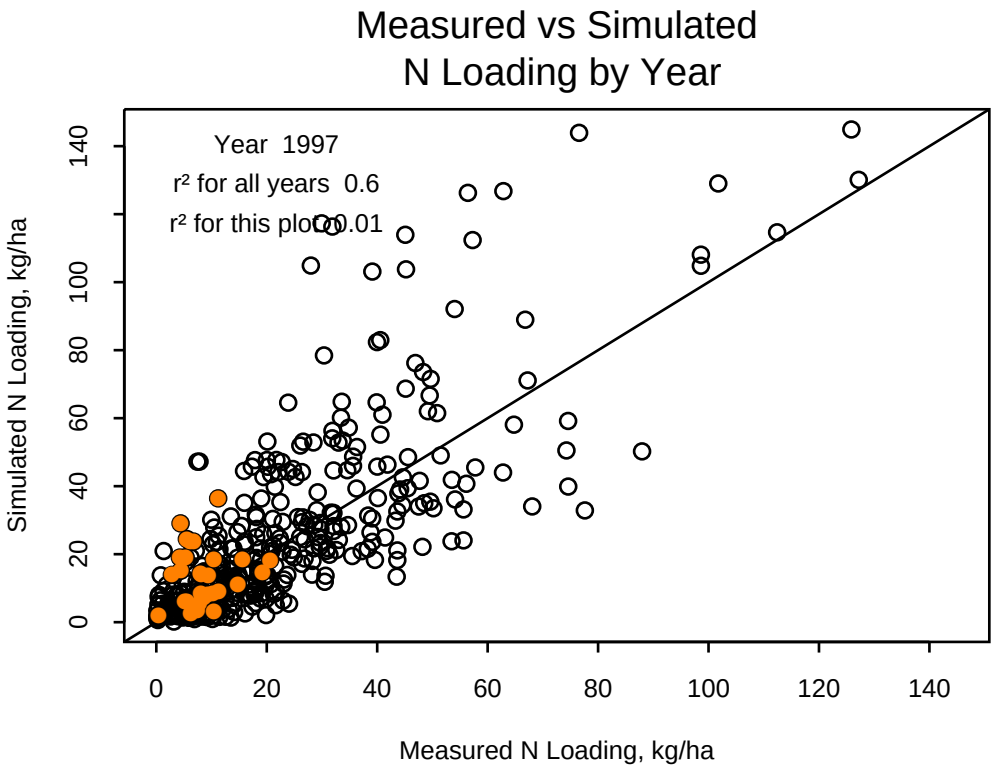

Measured vs Simulated
N Loading by Year
Year 1992
r² for all years 0.6
r² for this plot 0.12
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
0
20
40
60
80
100
120
140

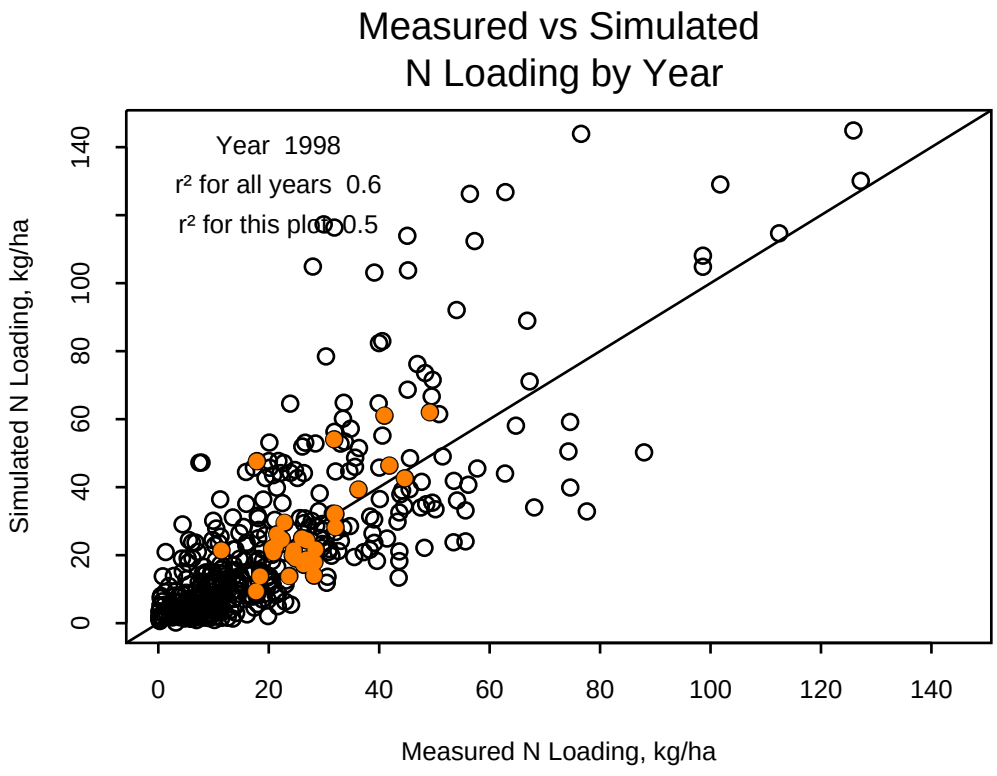

Measured vs Simulated
N Loading by Year
Year 1993
r² for all years 0.6
r² for this plot 0.31
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
0
20
40
60
80
100
120
140

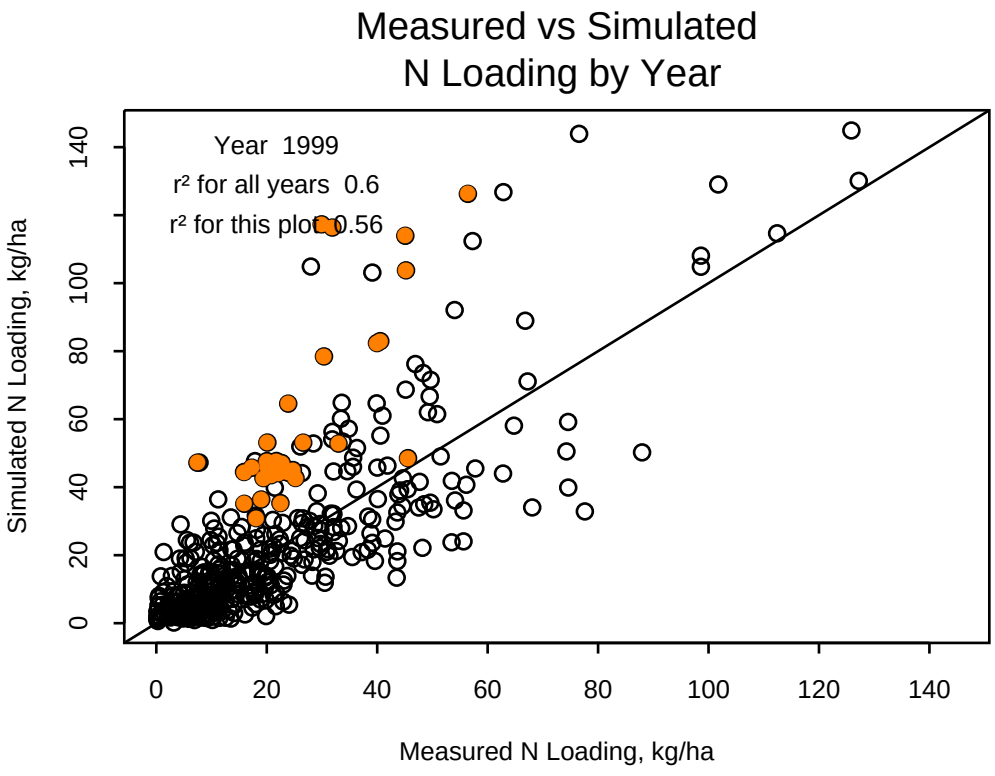

Measured vs Simulated
N Loading by Year
Year 1994
r² for all years 0.6
r² for this plot 0.03
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
0
20
40
60
80
100
120
140

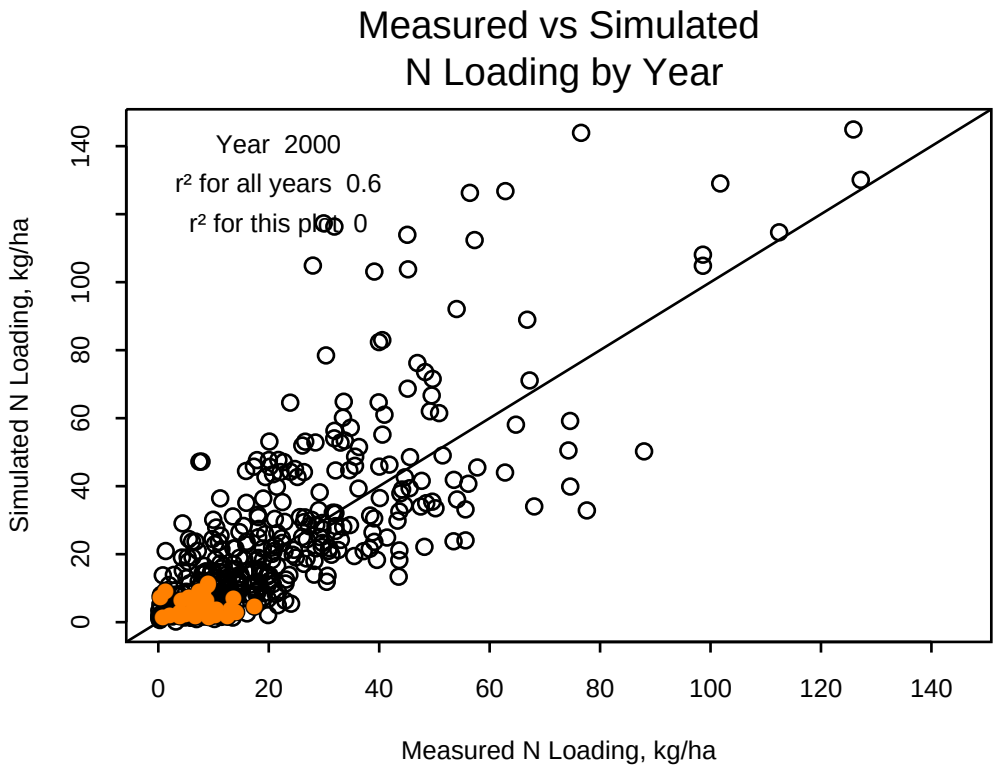

Measured vs Simulated
N Loading by Year
Year 1995
r² for all years 0.6
r² for this plot 0.7
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
0
20
40
60
80
100
120
140

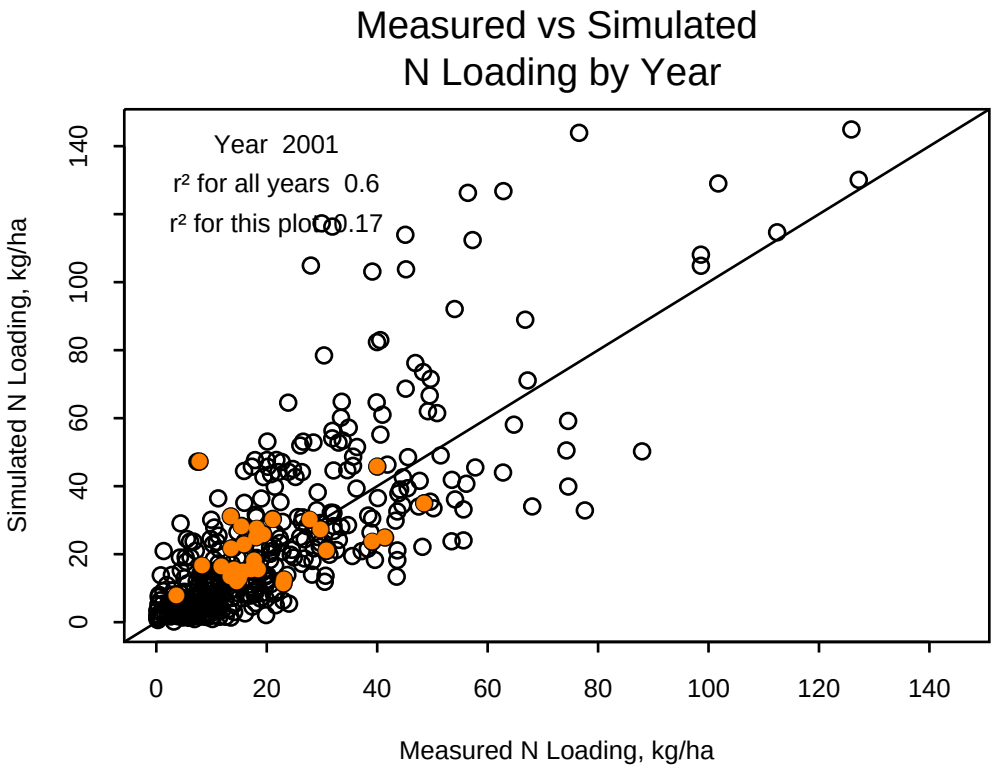

Measured vs Simulated
N Loading by Year
Year 1996
r² for all years 0.6
r² for this plot 0.52
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
0
20
40
60
80
100
120
140

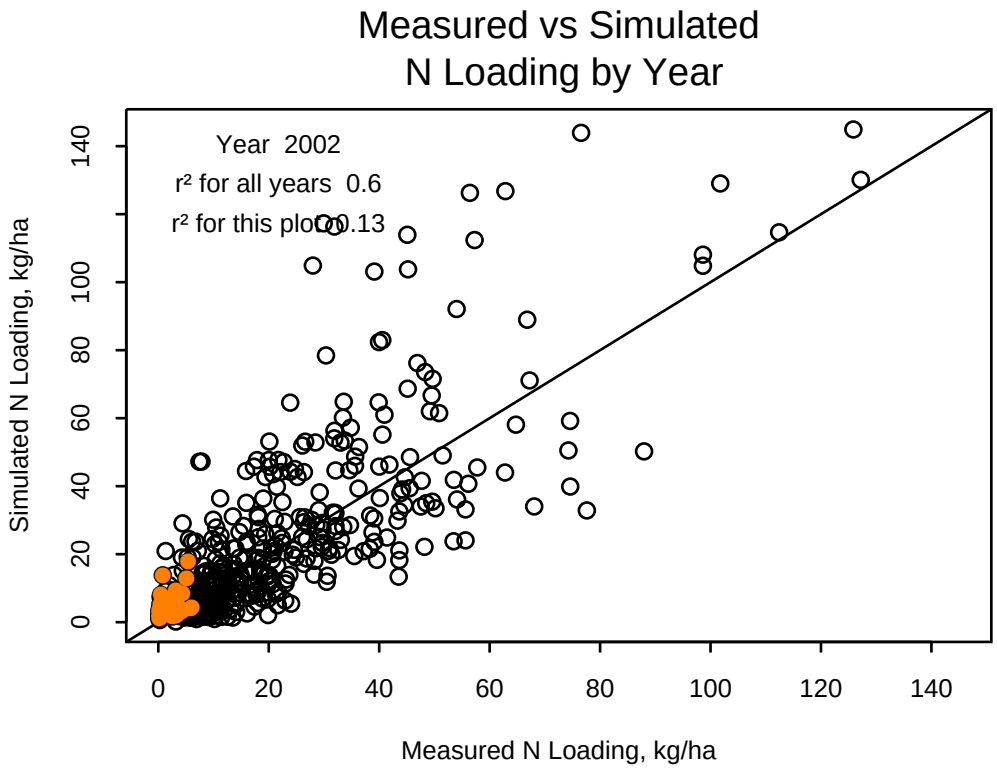

Measured vs Simulated
N Loading by Year
Year 1997
r² for all years 0.6
r² for this plot 0.01
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
0
20
40
60
80
100
120
140

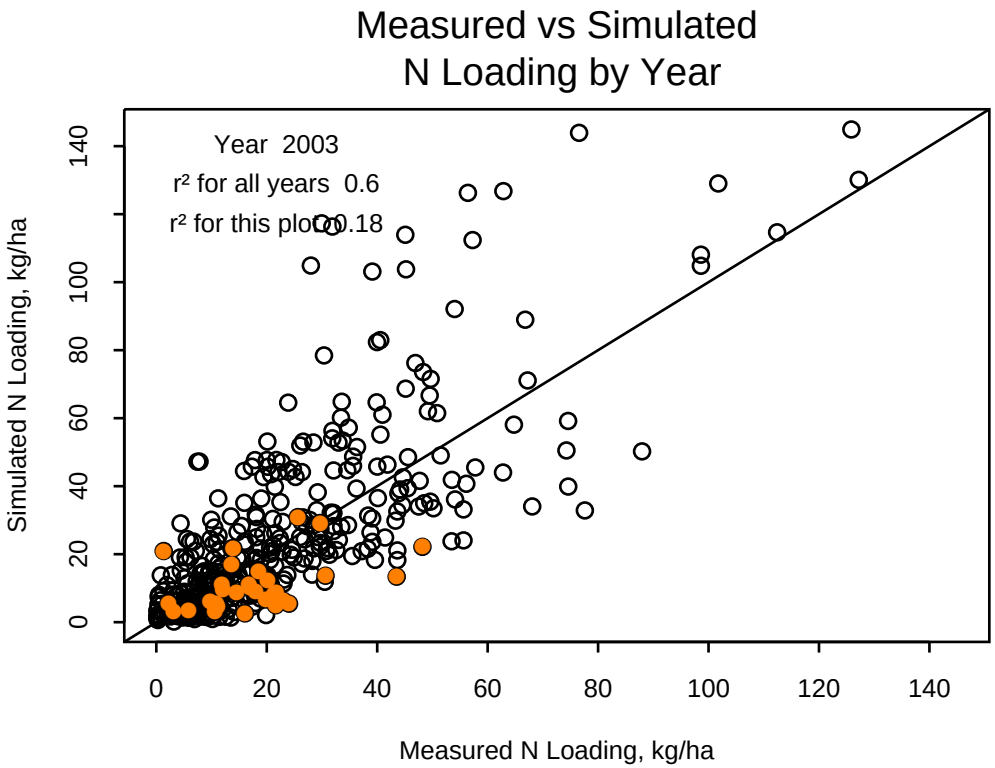

Measured vs Simulated
N Loading by Year
Year 1998
r² for all years 0.6
r² for this plot 0.5
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
0
20
40
60
80
100
120
140

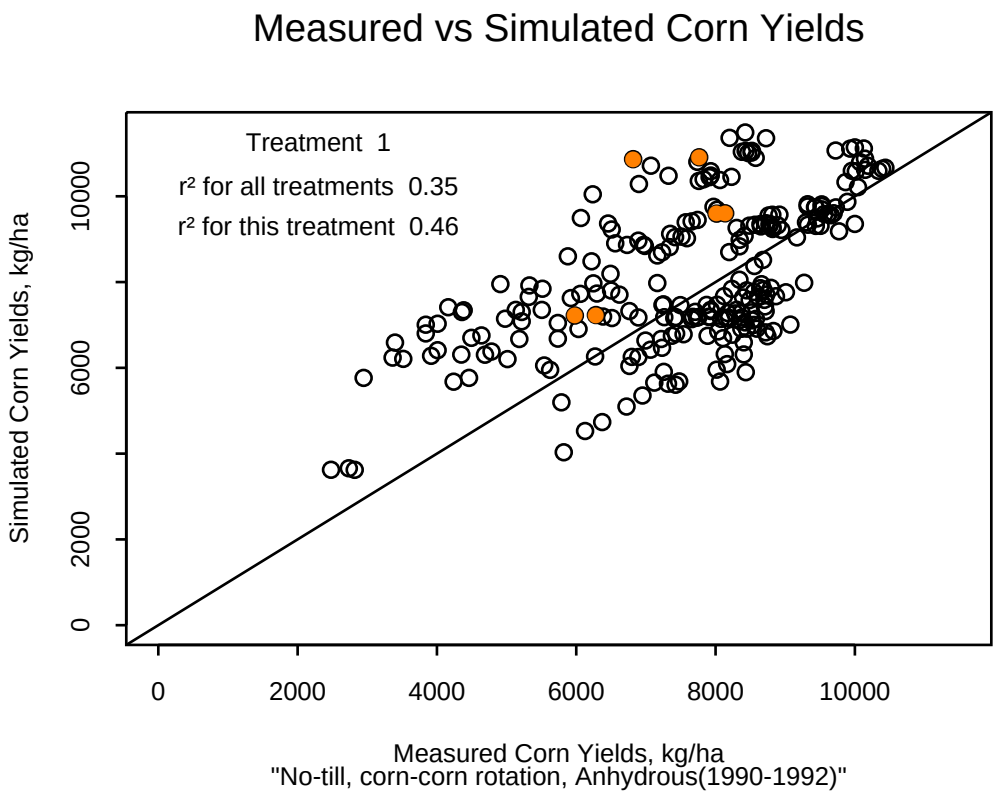

Measured vs Simulated
N Loading by Year
Year 1999
r² for all years 0.6
r² for this plot 0.56
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
0
20
40
60
80
100
120
140

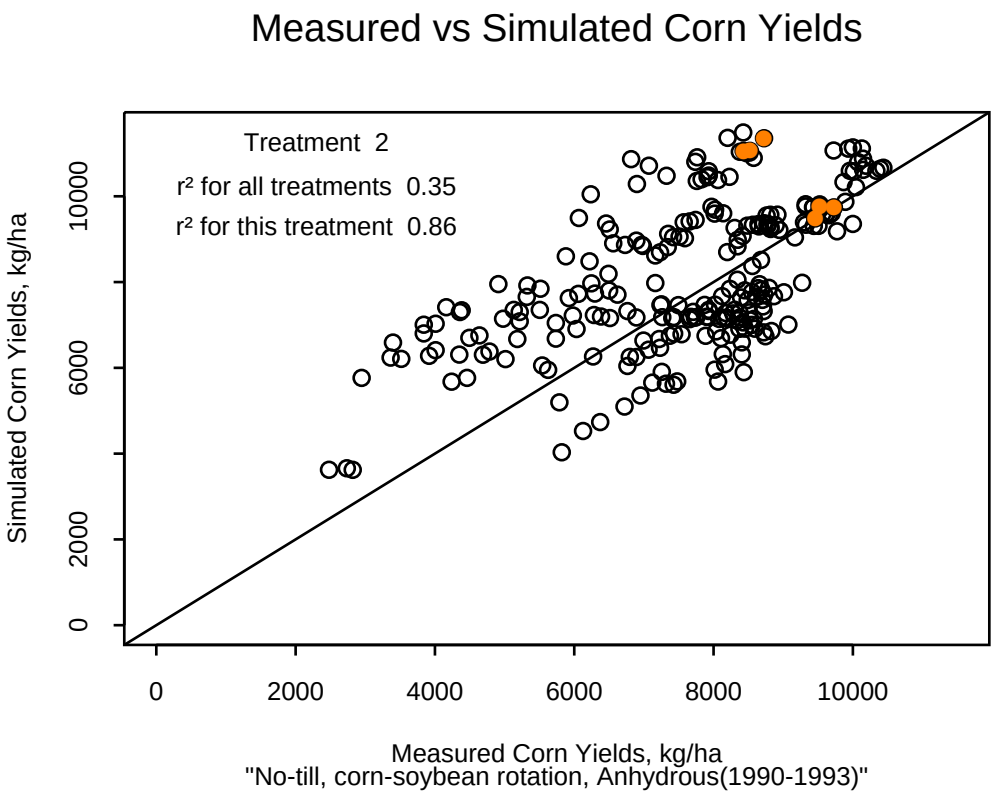

Measured vs Simulated
N Loading by Year
Year 2000
r² for all years 0.6
r² for this plot 0
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
0
20
40
60
80
100
120
140

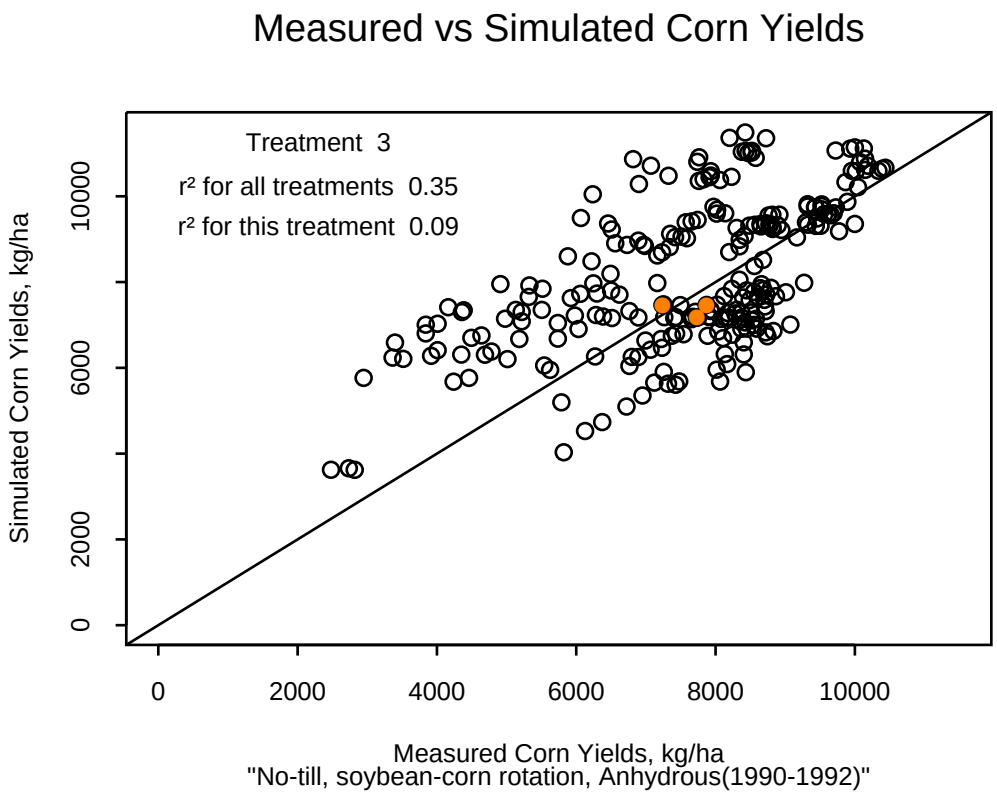

Measured vs Simulated
N Loading by Year
Year 2001
r² for all years 0.6
r² for this plot 0.17
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
0
20
40
60
80
100
120
140

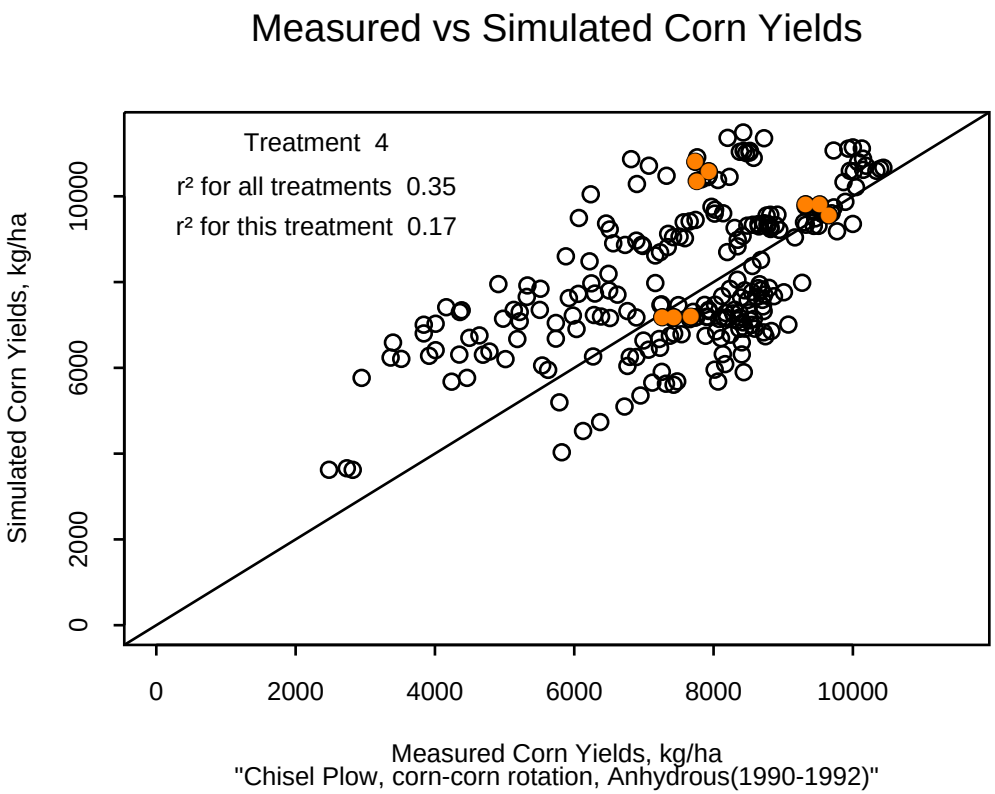

Measured vs Simulated
N Loading by Year
Year 2002
r² for all years 0.6
r² for this plot 0.13
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
0
20
40
60
80
100
120
140

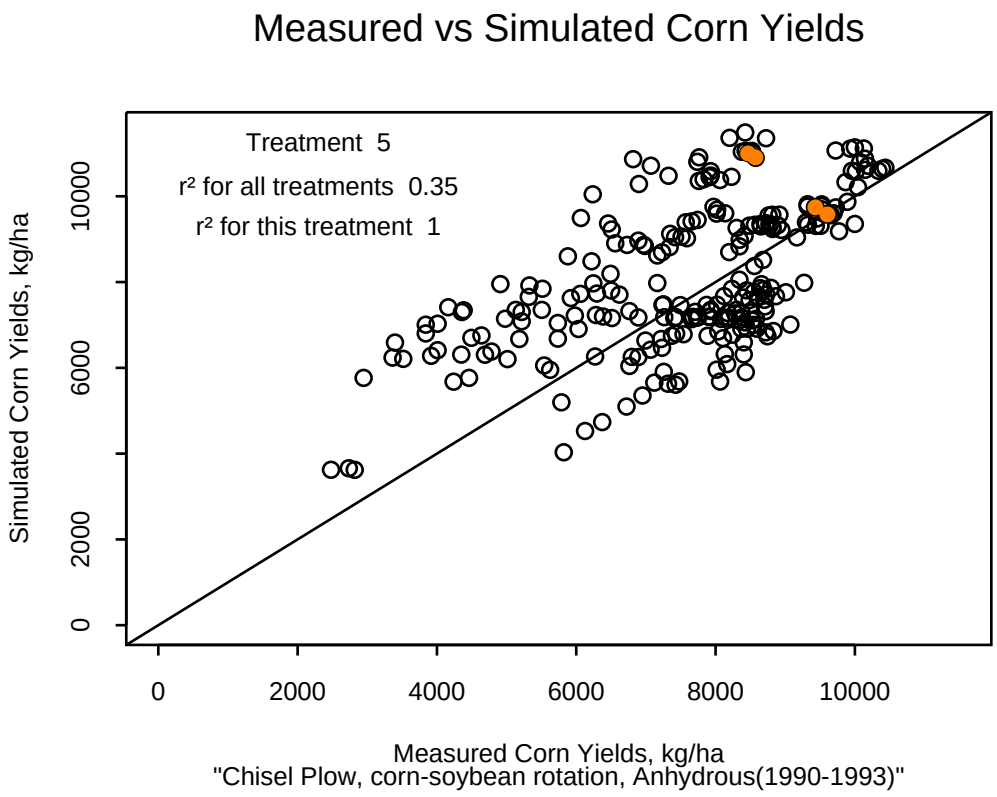

Measured vs Simulated
N Loading by Year
Year 2003
r² for all years 0.6
r² for this plot 0.18
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
0
20
40
60
80
100
120
140

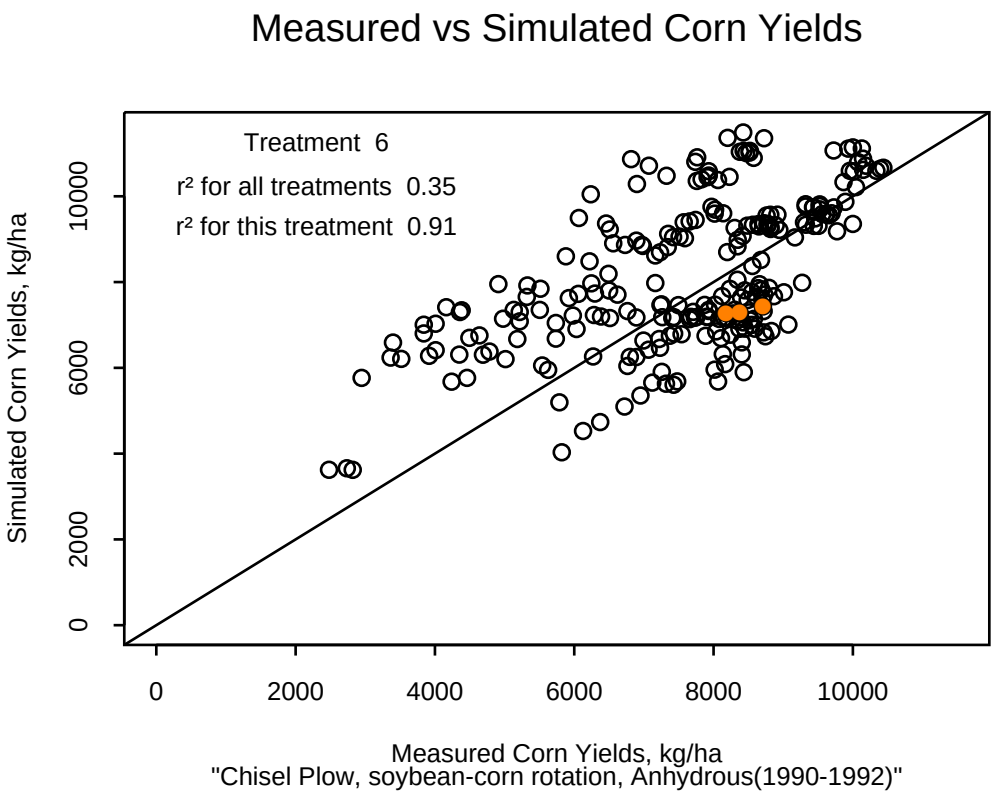

Measured vs Simulated Corn Yields
Treatment 1
r² for all treatments 0.35
r² for this treatment 0.46
Simulated Corn Yields, kg/ha
0
2000
6000
10000
0
2000
4000
6000
8000
10000
Measured Corn Yields, kg/ha
"No-till, corn-corn rotation, Anhydrous(1990-1992)"

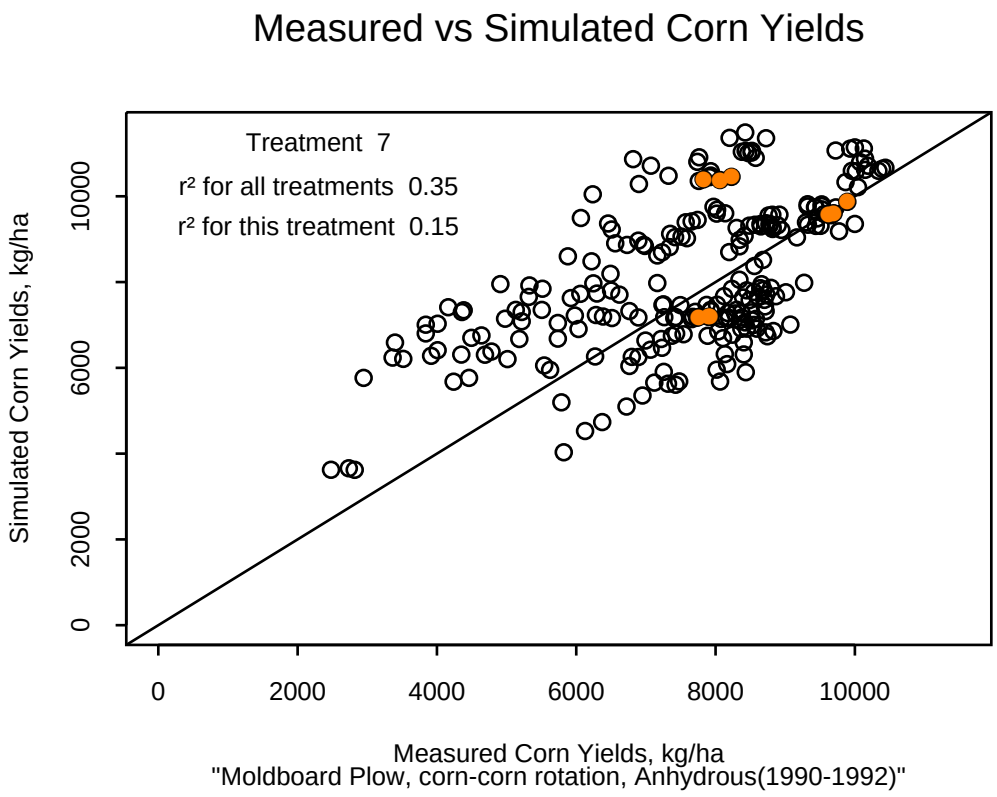

Measured vs Simulated Corn Yields
Treatment 2
r² for all treatments 0.35
r² for this treatment 0.86
Simulated Corn Yields, kg/ha
0
2000
6000
10000
0
2000
4000
6000
8000
10000
Measured Corn Yields, kg/ha
"No-till, corn-soybean rotation, Anhydrous(1990-1993)"

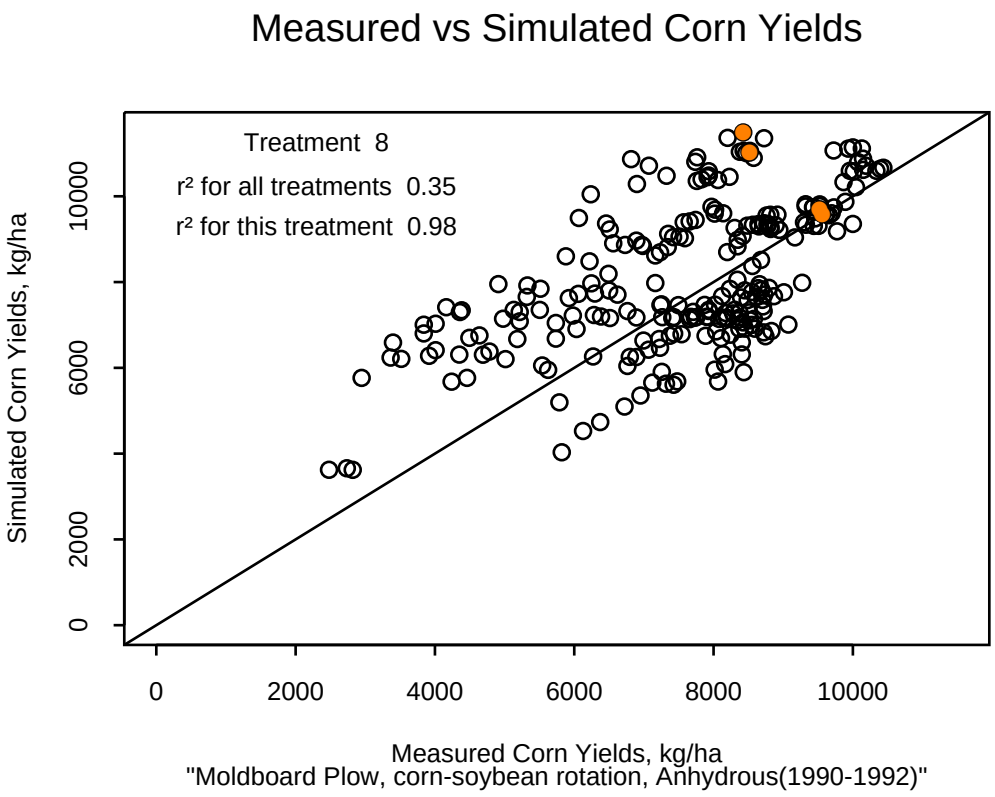

Measured vs Simulated Corn Yields
Treatment 3
r² for all treatments 0.35
r² for this treatment 0.09
Simulated Corn Yields, kg/ha
0
2000
6000
10000
0
2000
4000
6000
8000
10000
Measured Corn Yields, kg/ha
"No-till, soybean-corn rotation, Anhydrous(1990-1992)"

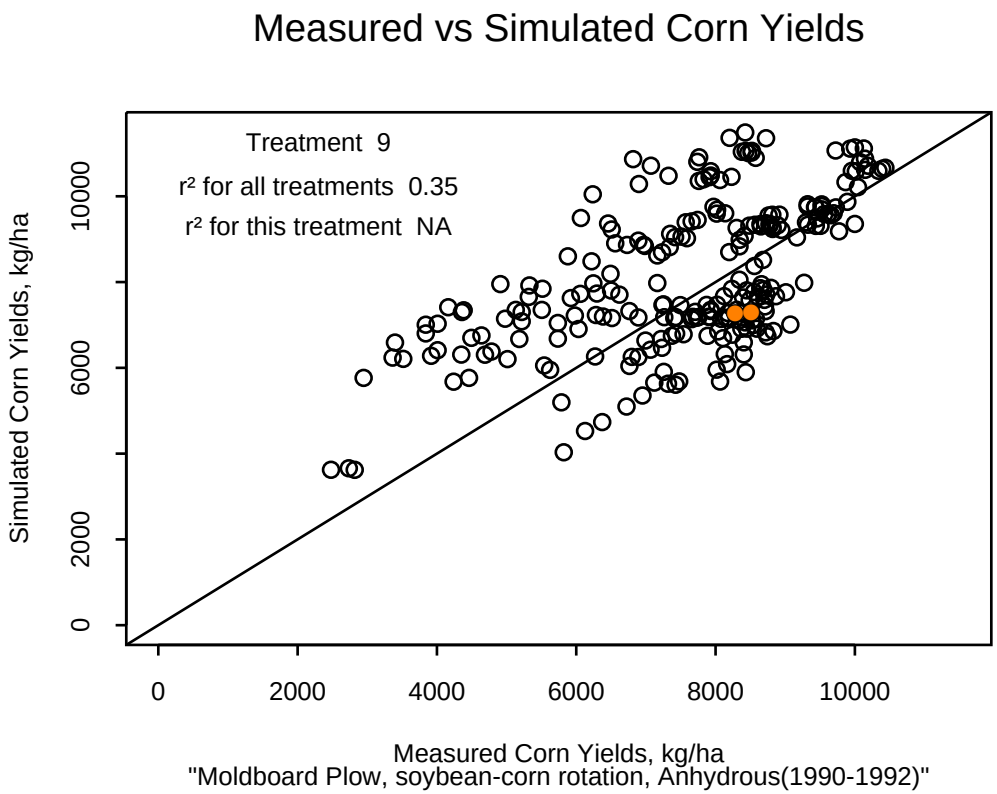

Measured vs Simulated Corn Yields
Treatment 4
r² for all treatments 0.35
r² for this treatment 0.17
Simulated Corn Yields, kg/ha
0
2000
6000
10000
0
2000
4000
6000
8000
10000
Measured Corn Yields, kg/ha
"Chisel Plow, corn-corn rotation, Anhydrous(1990-1992)"

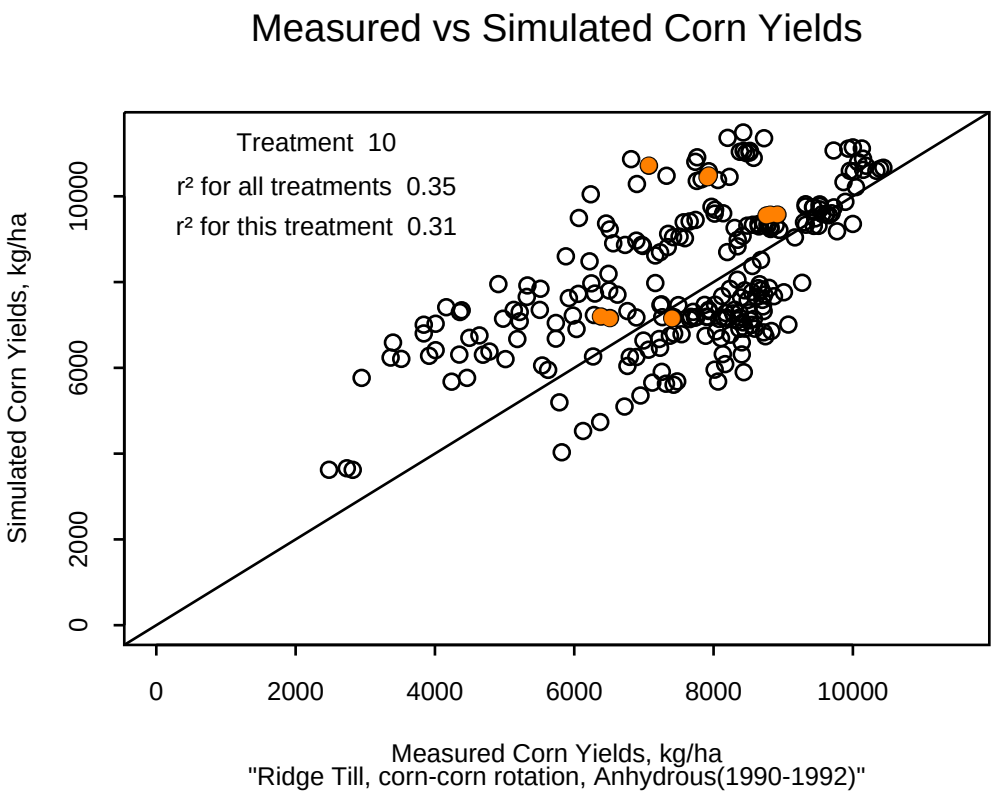

Measured vs Simulated Corn Yields
Treatment 5
r² for all treatments 0.35
r² for this treatment 1
Simulated Corn Yields, kg/ha
0
2000
6000
10000
0
2000
4000
6000
8000
10000
Measured Corn Yields, kg/ha
"Chisel Plow, corn-soybean rotation, Anhydrous(1990-1993)"

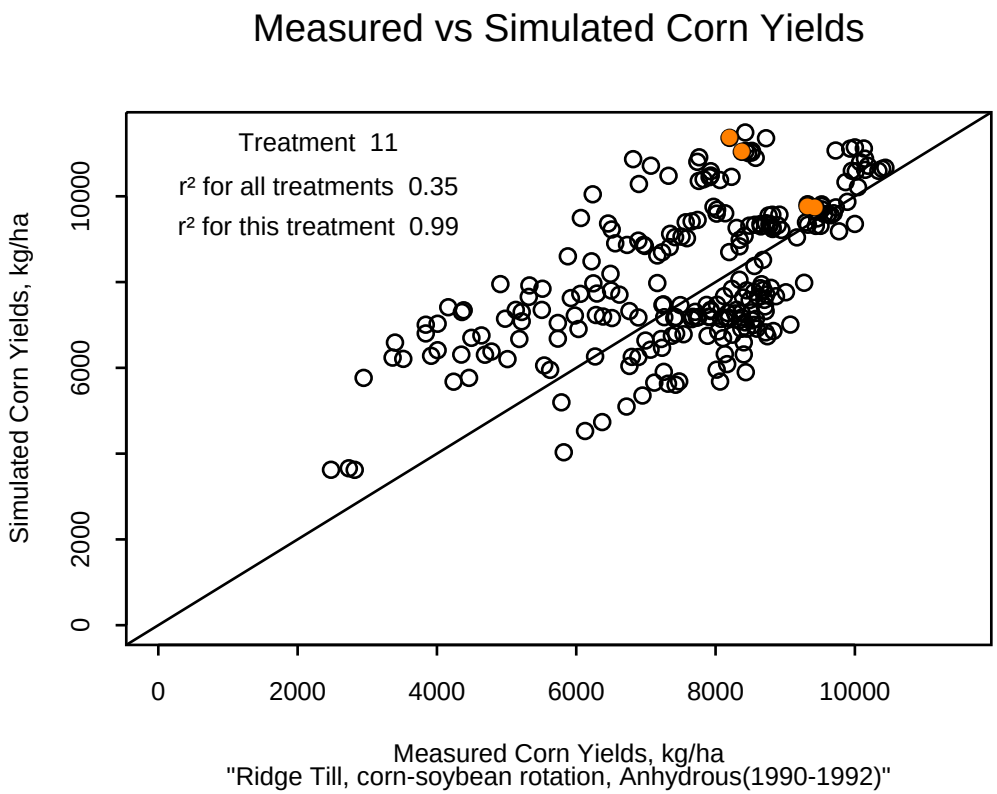

Measured vs Simulated Corn Yields
Treatment 6
r² for all treatments 0.35
r² for this treatment 0.91
Simulated Corn Yields, kg/ha
0
2000
6000
10000
0
2000
4000
6000
8000
10000
Measured Corn Yields, kg/ha
"Chisel Plow, soybean-corn rotation, Anhydrous(1990-1992)"

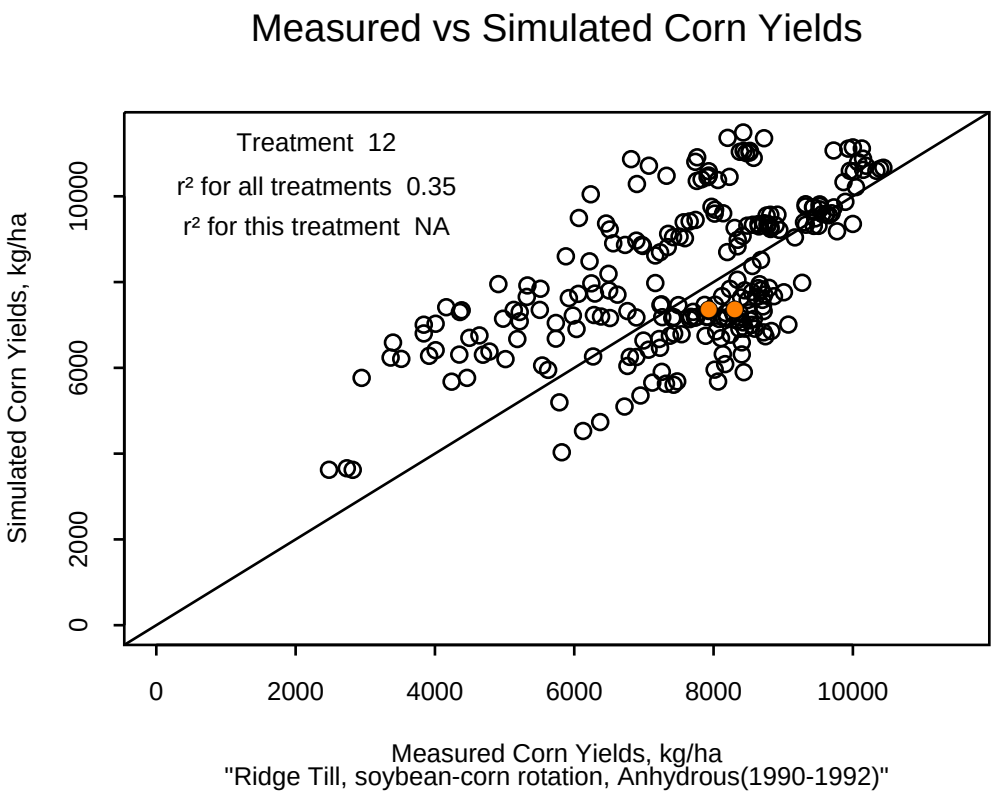

Measured vs Simulated Corn Yields
Treatment 7
r² for all treatments 0.35
r² for this treatment 0.15
Simulated Corn Yields, kg/ha
0
2000
6000
10000
0
2000
4000
6000
8000
10000
Measured Corn Yields, kg/ha
"Moldboard Plow, corn-corn rotation, Anhydrous(1990-1992)"

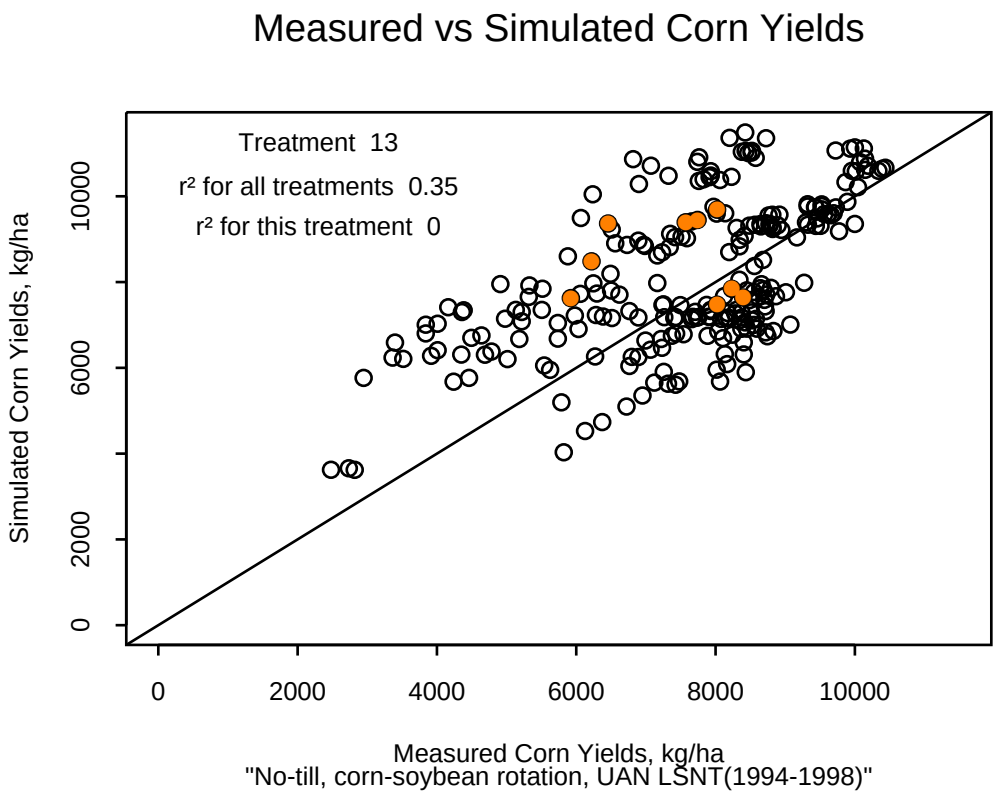

Measured vs Simulated Corn Yields
Treatment 8
r² for all treatments 0.35
r² for this treatment 0.98
Simulated Corn Yields, kg/ha
0
2000
6000
10000
0
2000
4000
6000
8000
10000
Measured Corn Yields, kg/ha
"Moldboard Plow, corn-soybean rotation, Anhydrous(1990-1992)"

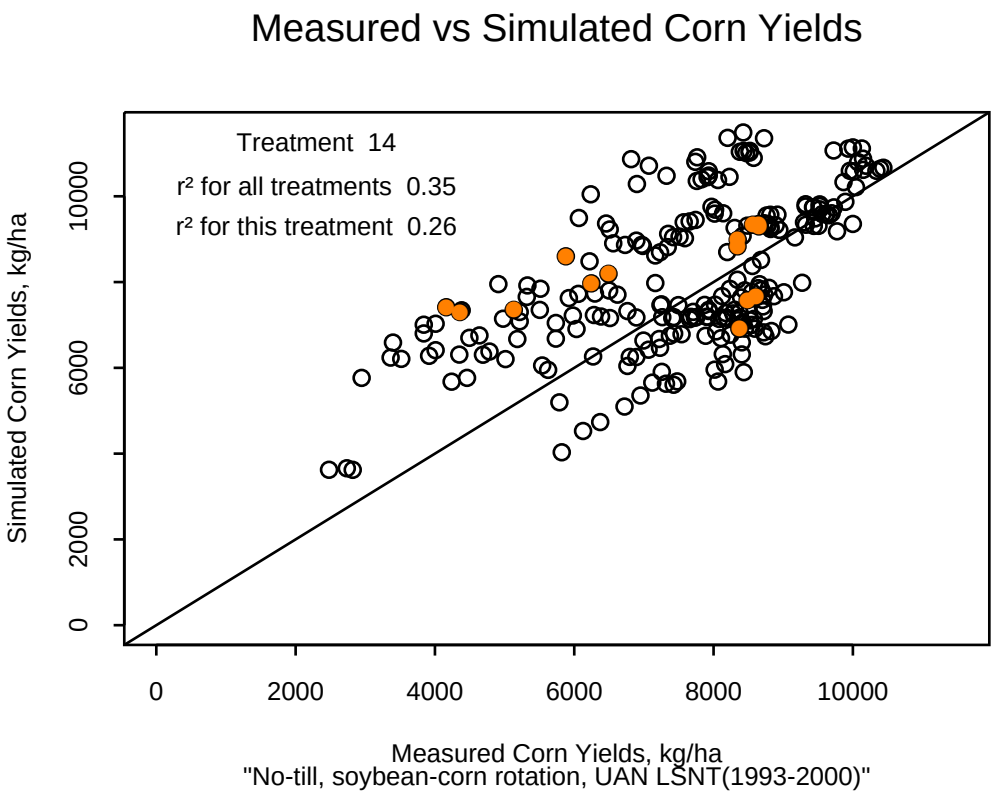

Measured vs Simulated Corn Yields
Treatment 9
r² for all treatments 0.35
r² for this treatment NA
Simulated Corn Yields, kg/ha
0
2000
6000
10000
0
2000
4000
6000
8000
10000
Measured Corn Yields, kg/ha
"Moldboard Plow, soybean-corn rotation, Anhydrous(1990-1992)"

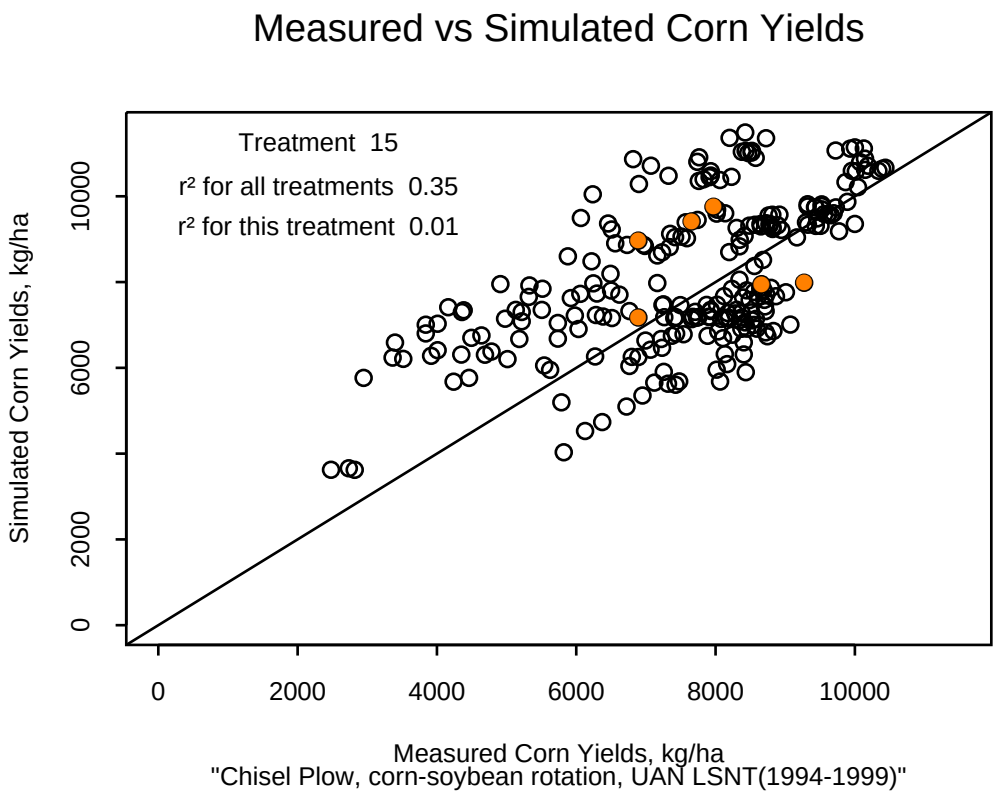

Measured vs Simulated Corn Yields
Treatment 10
r² for all treatments 0.35
r² for this treatment 0.31
Simulated Corn Yields, kg/ha
0
2000
6000
10000
0
2000
4000
6000
8000
10000
Measured Corn Yields, kg/ha
"Ridge Till, corn-corn rotation, Anhydrous(1990-1992)"

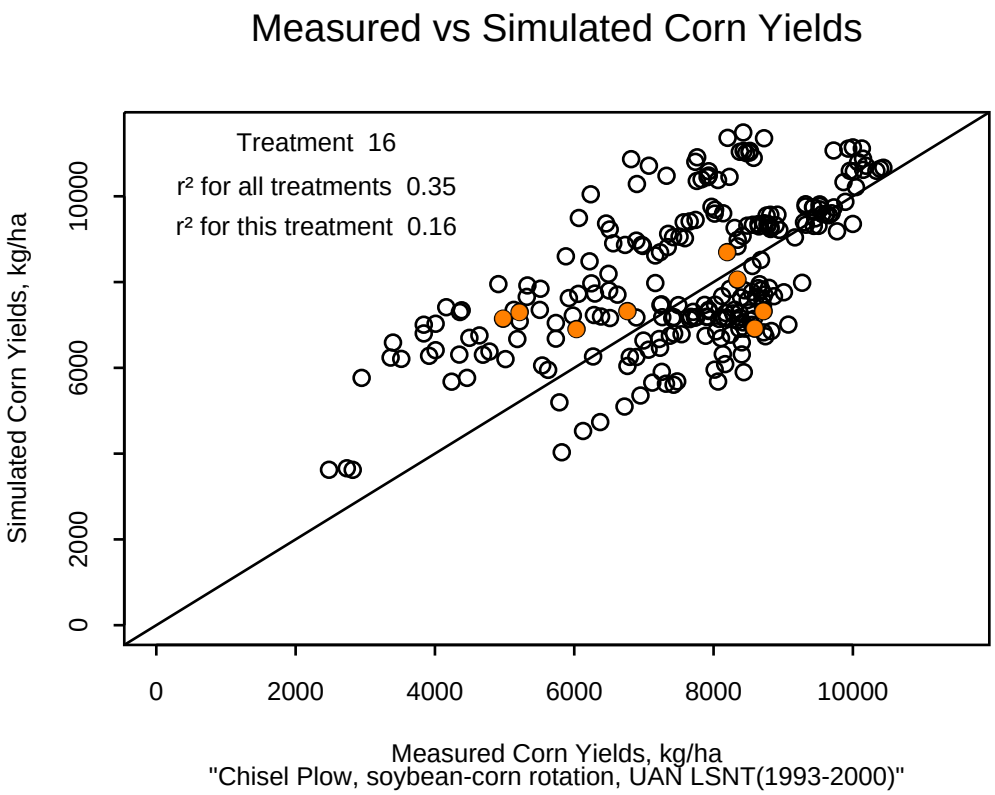

Measured vs Simulated Corn Yields
Treatment 11
r² for all treatments 0.35
r² for this treatment 0.99
Simulated Corn Yields, kg/ha
0
2000
6000
10000
0
2000
4000
6000
8000
10000
Measured Corn Yields, kg/ha
"Ridge Till, corn-soybean rotation, Anhydrous(1990-1992)"

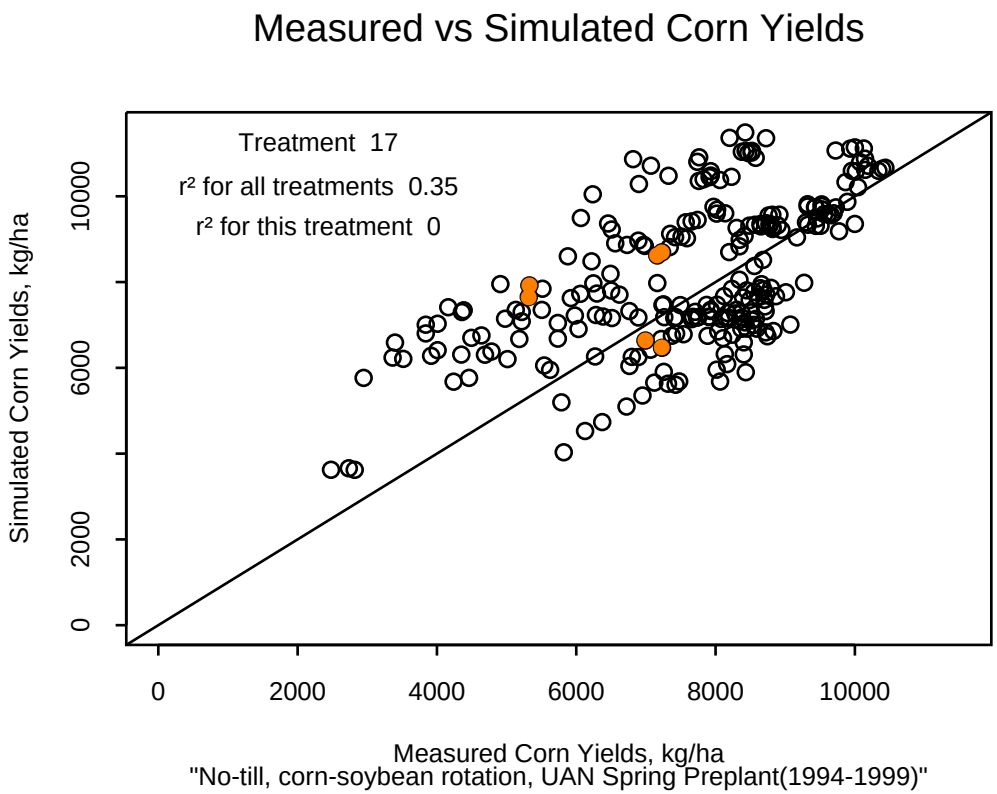

Measured vs Simulated Corn Yields
Treatment 12
r² for all treatments 0.35
r² for this treatment NA
Simulated Corn Yields, kg/ha
0
2000
6000
10000
0
2000
4000
6000
8000
10000
Measured Corn Yields, kg/ha
"Ridge Till, soybean-corn rotation, Anhydrous(1990-1992)"

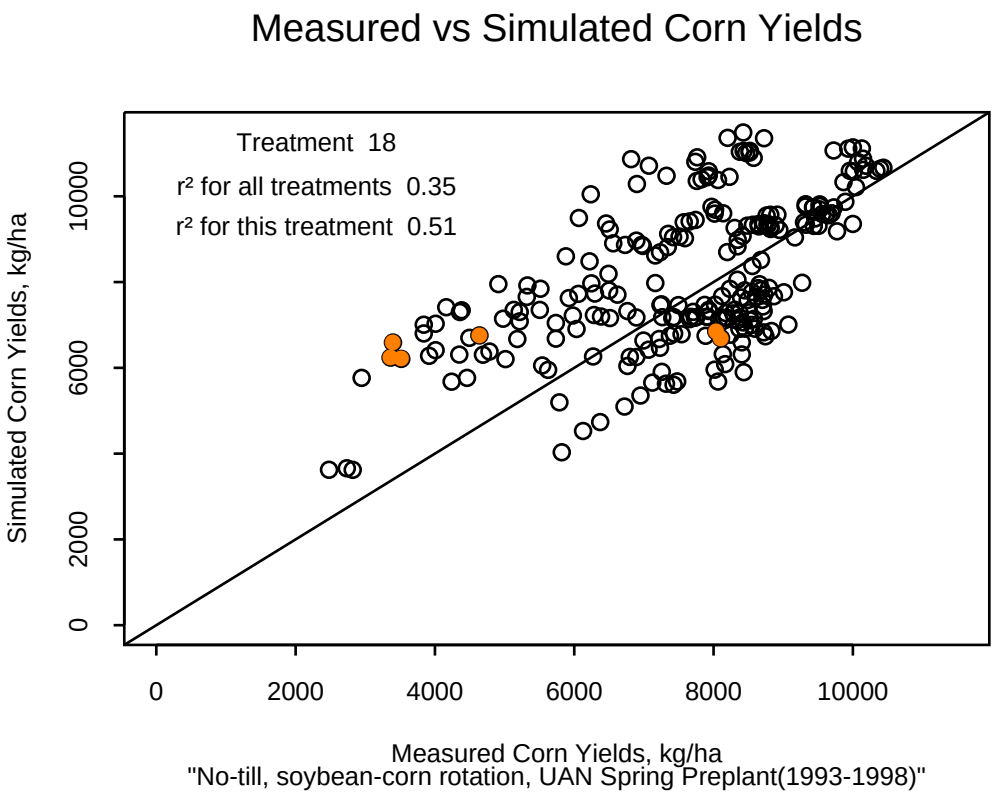

Measured vs Simulated Corn Yields
Treatment 13
r² for all treatments 0.35
r² for this treatment 0
Simulated Corn Yields, kg/ha
Measured Corn Yields, kg/ha
"No-till, corn-soybean rotation, UAN LSNT(1994-1998)"

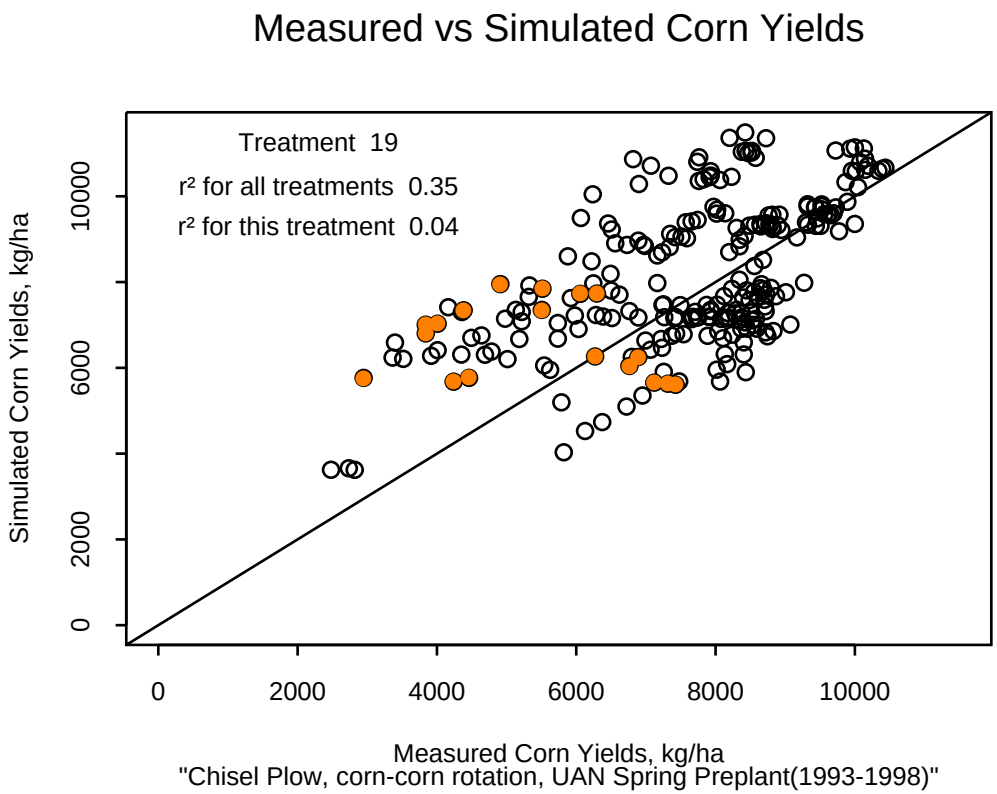

Measured vs Simulated Corn Yields
Treatment 14
r² for all treatments 0.35
r² for this treatment 0.26
Simulated Corn Yields, kg/ha
Measured Corn Yields, kg/ha
"No-till, soybean-corn rotation, UAN LSNT(1993-2000)"

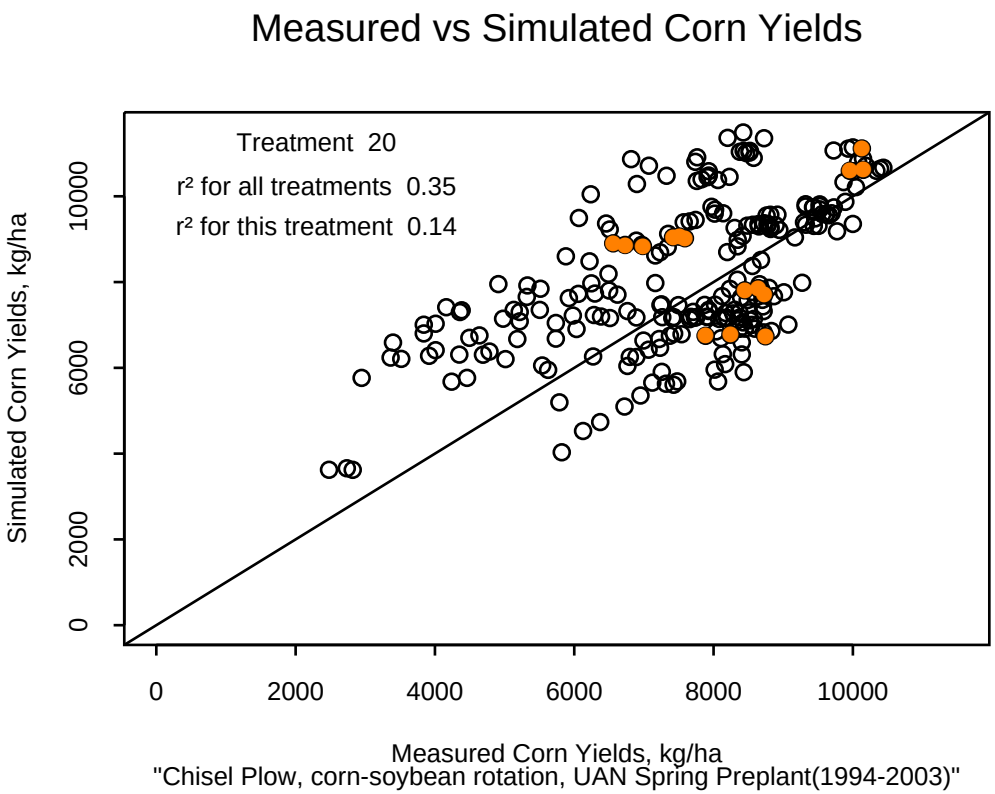

Measured vs Simulated Corn Yields
Treatment 15
r² for all treatments 0.35
r² for this treatment 0.01
Simulated Corn Yields, kg/ha
Measured Corn Yields, kg/ha
"Chisel Plow, corn-soybean rotation, UAN LSNT(1994-1999)"

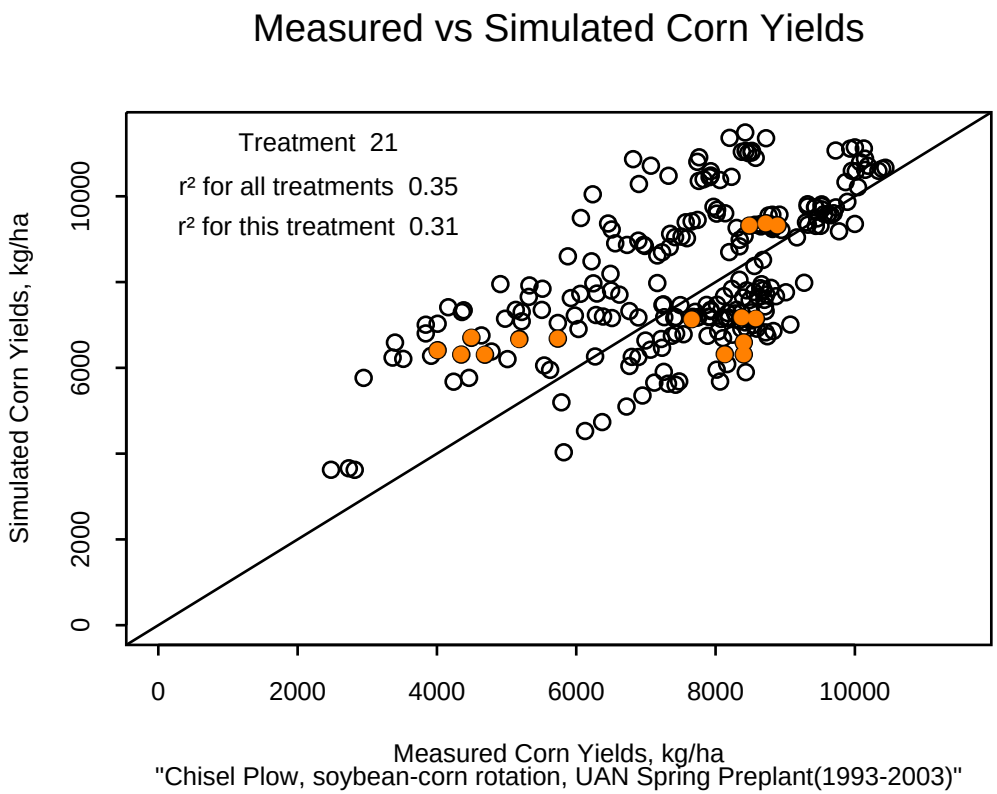

Measured vs Simulated Corn Yields
Treatment 16
r² for all treatments 0.35
r² for this treatment 0.16
Simulated Corn Yields, kg/ha
Measured Corn Yields, kg/ha
"Chisel Plow, soybean-corn rotation, UAN LSNT(1993-2000)"

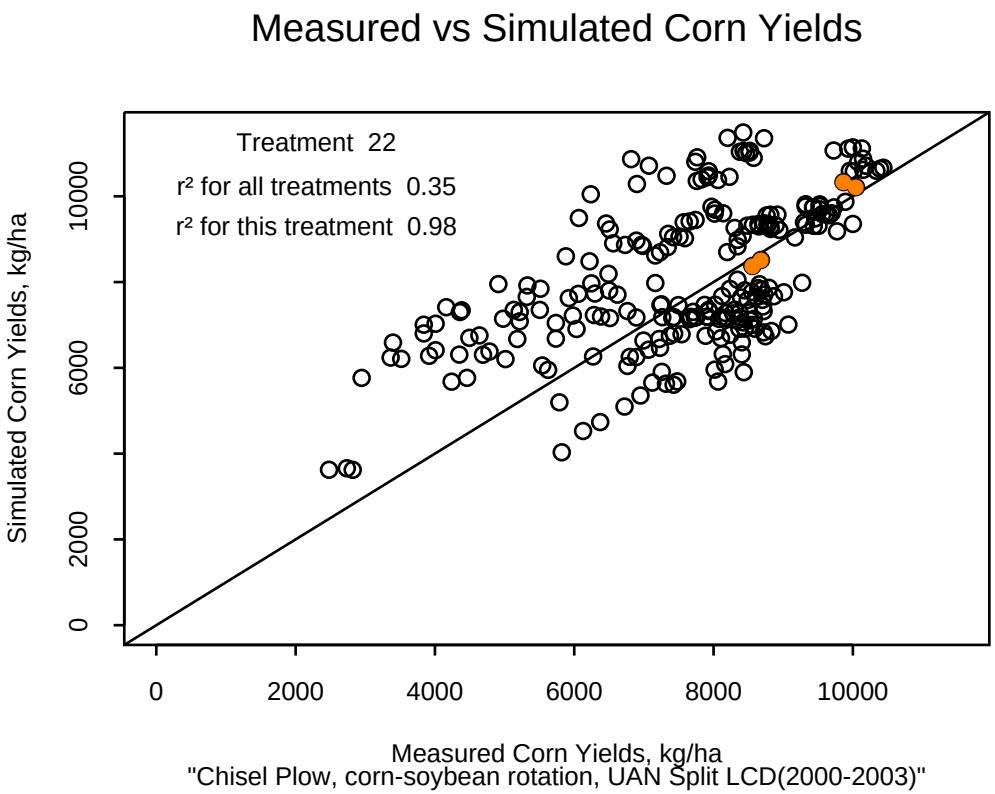

Measured vs Simulated Corn Yields
Treatment 17
r² for all treatments 0.35
r² for this treatment 0
Simulated Corn Yields, kg/ha
Measured Corn Yields, kg/ha
"No-till, corn-soybean rotation, UAN Spring Preplant(1994-1999)"

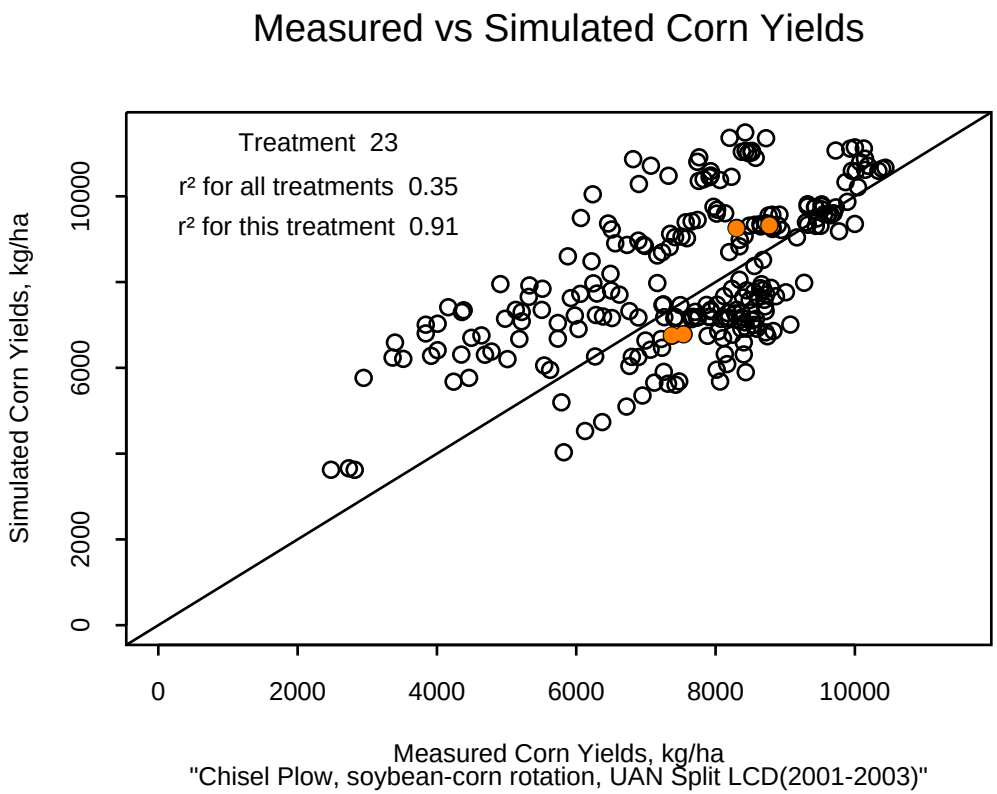

Measured vs Simulated Corn Yields
Treatment 18
r² for all treatments 0.35
r² for this treatment 0.51
Simulated Corn Yields, kg/ha
Measured Corn Yields, kg/ha
"No-till, soybean-corn rotation, UAN Spring Preplant(1993-1998)"

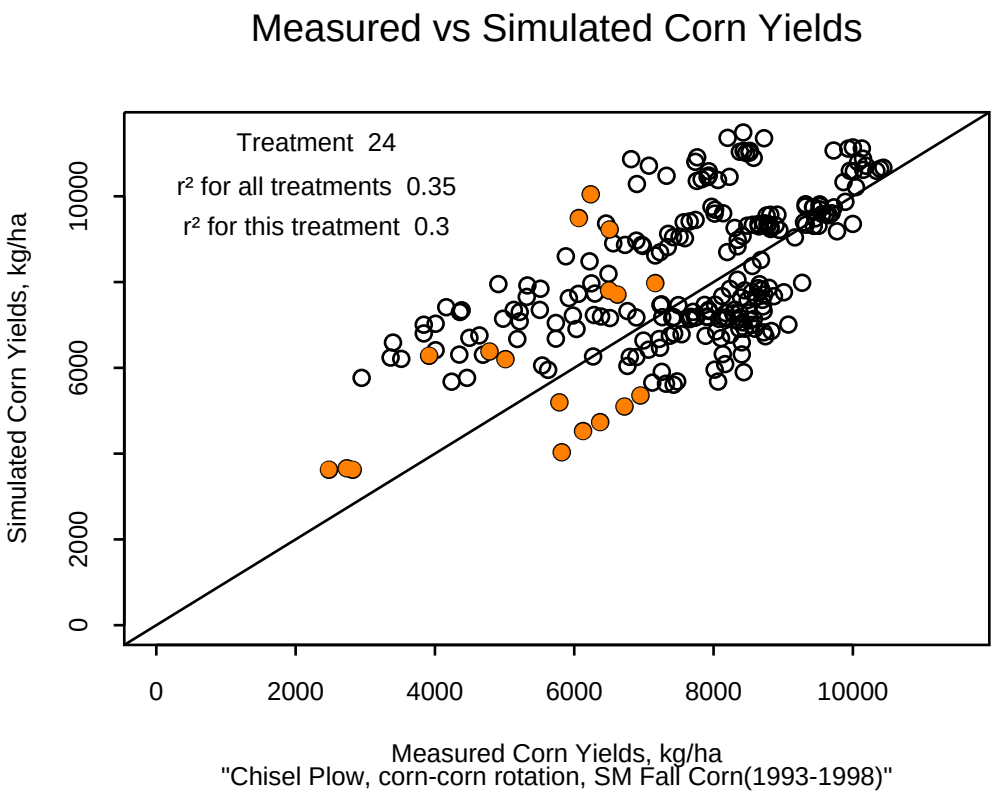

Measured vs Simulated Corn Yields
Treatment 19
r² for all treatments 0.35
r² for this treatment 0.04
Simulated Corn Yields, kg/ha
Measured Corn Yields, kg/ha
"Chisel Plow, corn-corn rotation, UAN Spring Preplant(1993-1998)"

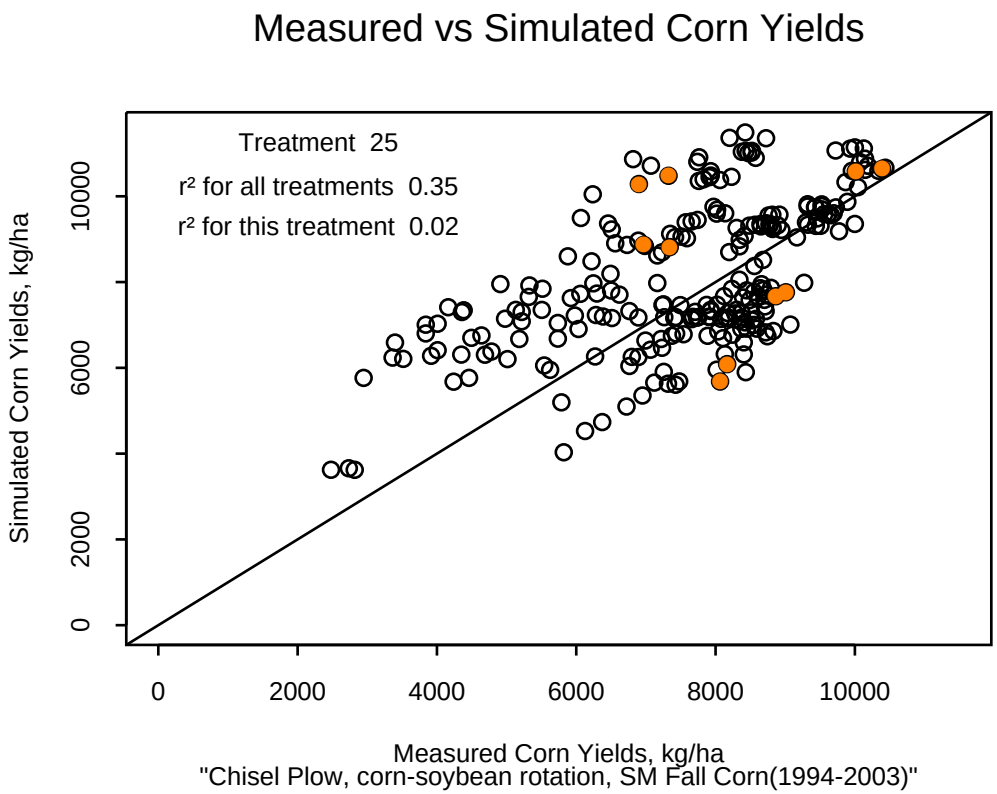

Measured vs Simulated Corn Yields
Treatment 20
r² for all treatments 0.35
r² for this treatment 0.14
Simulated Corn Yields, kg/ha
Measured Corn Yields, kg/ha
"Chisel Plow, corn-soybean rotation, UAN Spring Preplant(1994-2003)"

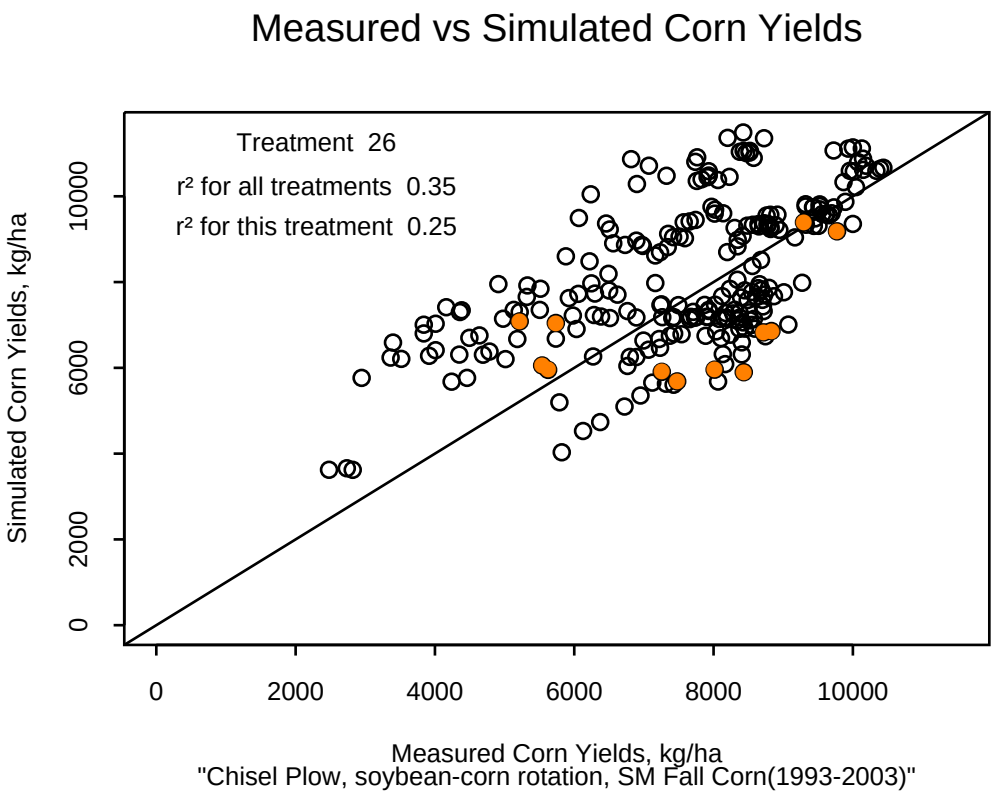

Measured vs Simulated Corn Yields
Treatment 21
r² for all treatments 0.35
r² for this treatment 0.31
Simulated Corn Yields, kg/ha
0
2000
6000
10000
0
2000
4000
6000
8000
10000
Measured Corn Yields, kg/ha
"Chisel Plow, soybean-corn rotation, UAN Spring Preplant(1993-2003)"

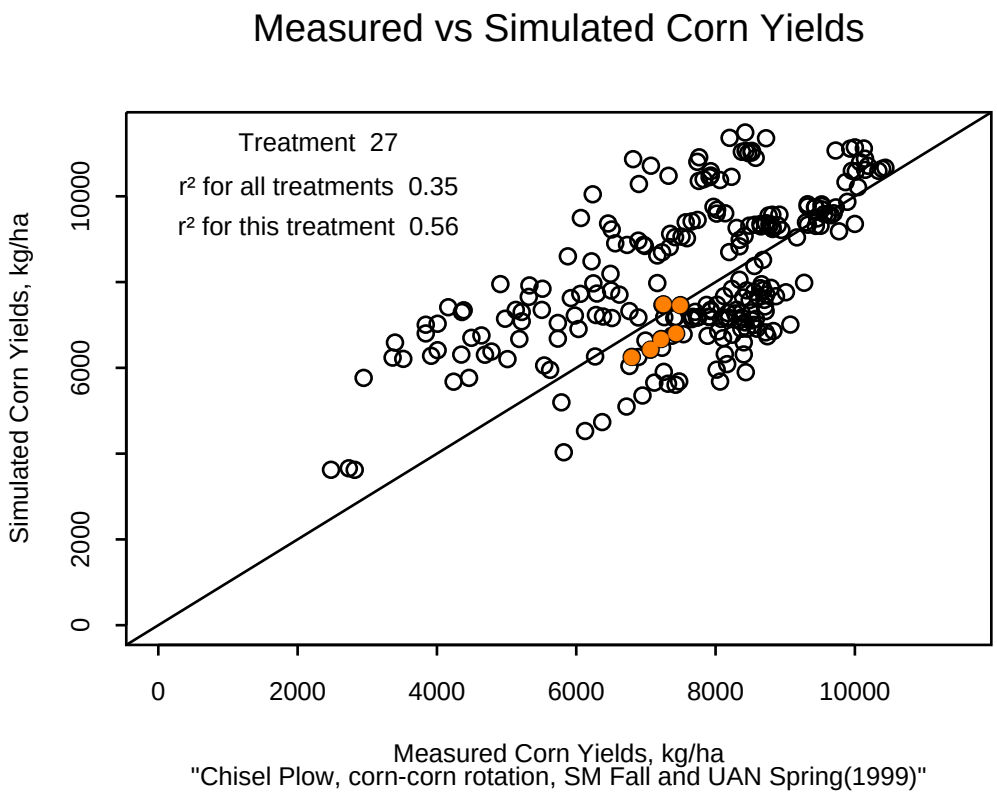

Measured vs Simulated Corn Yields
Treatment 22
r² for all treatments 0.35
r² for this treatment 0.98
Simulated Corn Yields, kg/ha
0
2000
6000
10000
0
2000
4000
6000
8000
10000
Measured Corn Yields, kg/ha
"Chisel Plow, corn-soybean rotation, UAN Split LCD(2000-2003)"

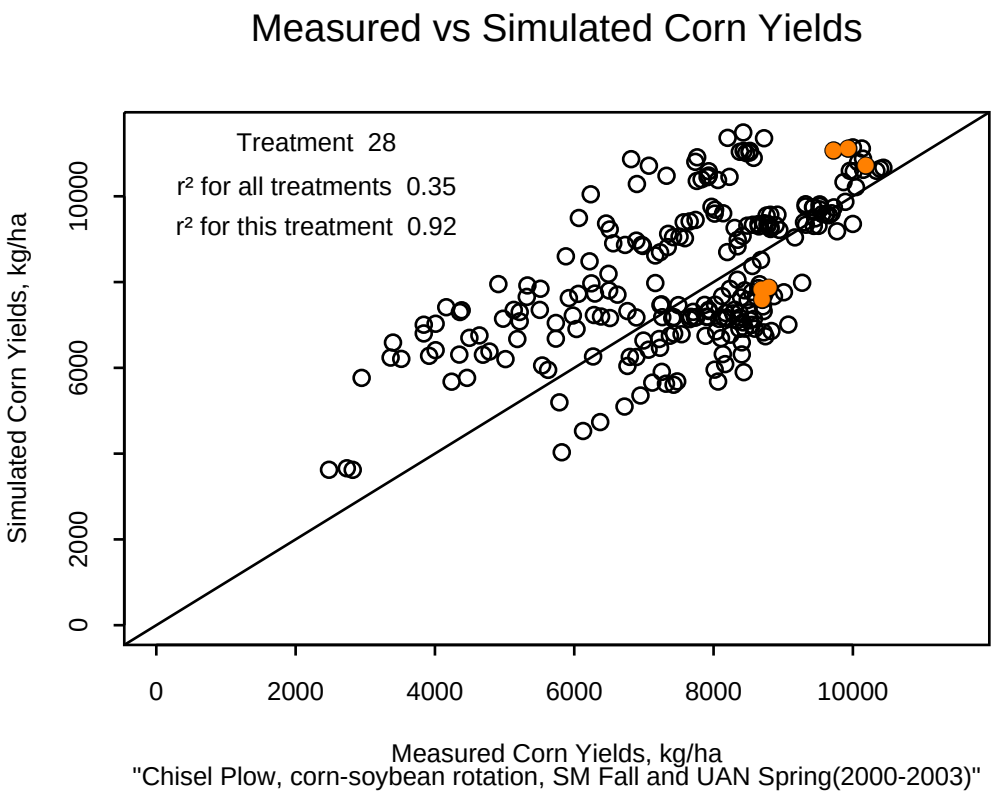

Measured vs Simulated Corn Yields
Treatment 23
r² for all treatments 0.35
r² for this treatment 0.91
Simulated Corn Yields, kg/ha
0
2000
6000
10000
0
2000
4000
6000
8000
10000
Measured Corn Yields, kg/ha
"Chisel Plow, soybean-corn rotation, UAN Split LCD(2001-2003)"

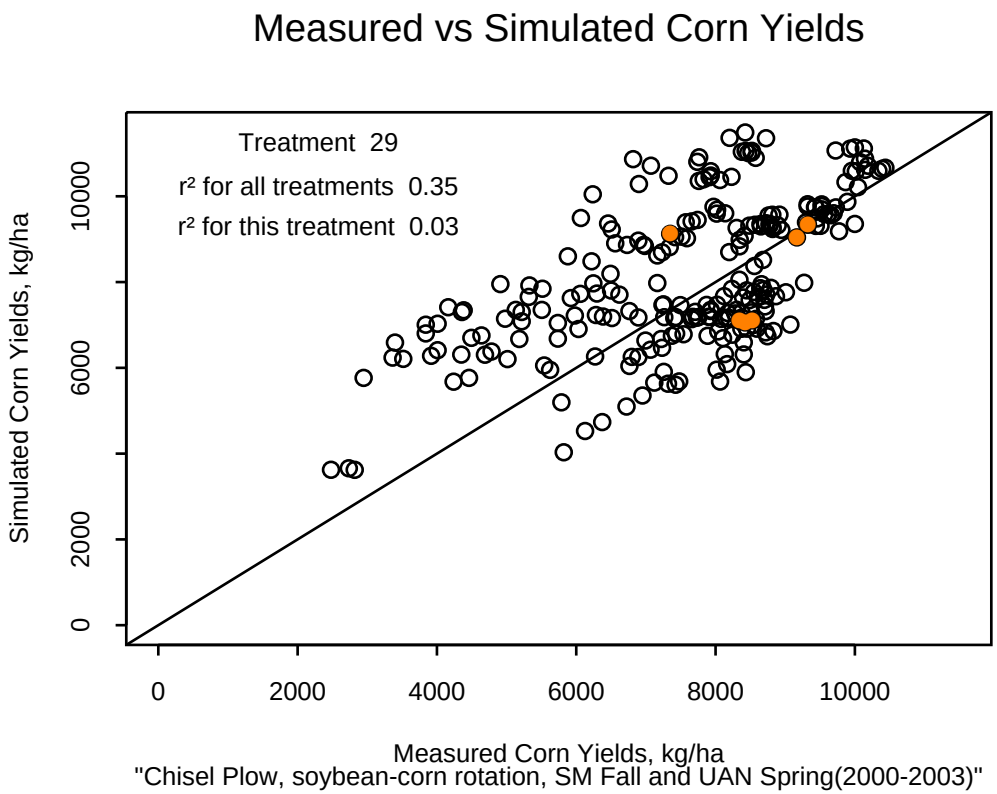

Measured vs Simulated Corn Yields
Treatment 24
r² for all treatments 0.35
r² for this treatment 0.3
Simulated Corn Yields, kg/ha
0
2000
6000
10000
0
2000
4000
6000
8000
10000
Measured Corn Yields, kg/ha
"Chisel Plow, corn-corn rotation, SM Fall Corn(1993-1998)"

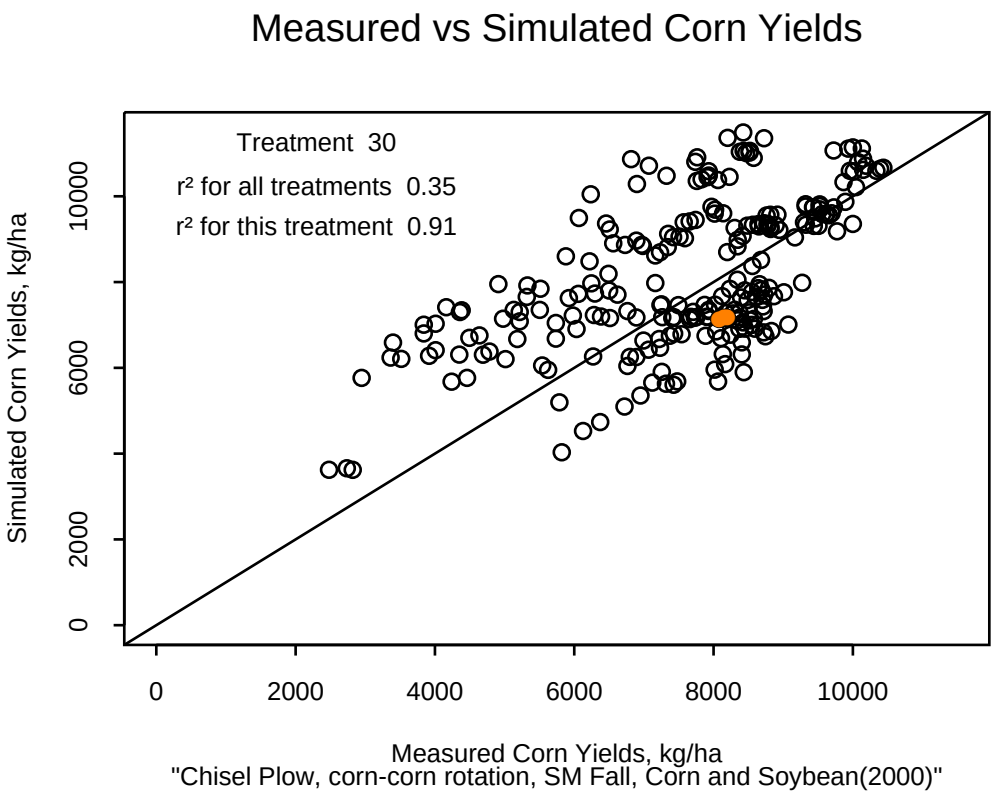

Measured vs Simulated Corn Yields
Treatment 25
r² for all treatments 0.35
r² for this treatment 0.02
Simulated Corn Yields, kg/ha
0
2000
6000
10000
0
2000
4000
6000
8000
10000
Measured Corn Yields, kg/ha
"Chisel Plow, corn-soybean rotation, SM Fall Corn(1994-2003)"

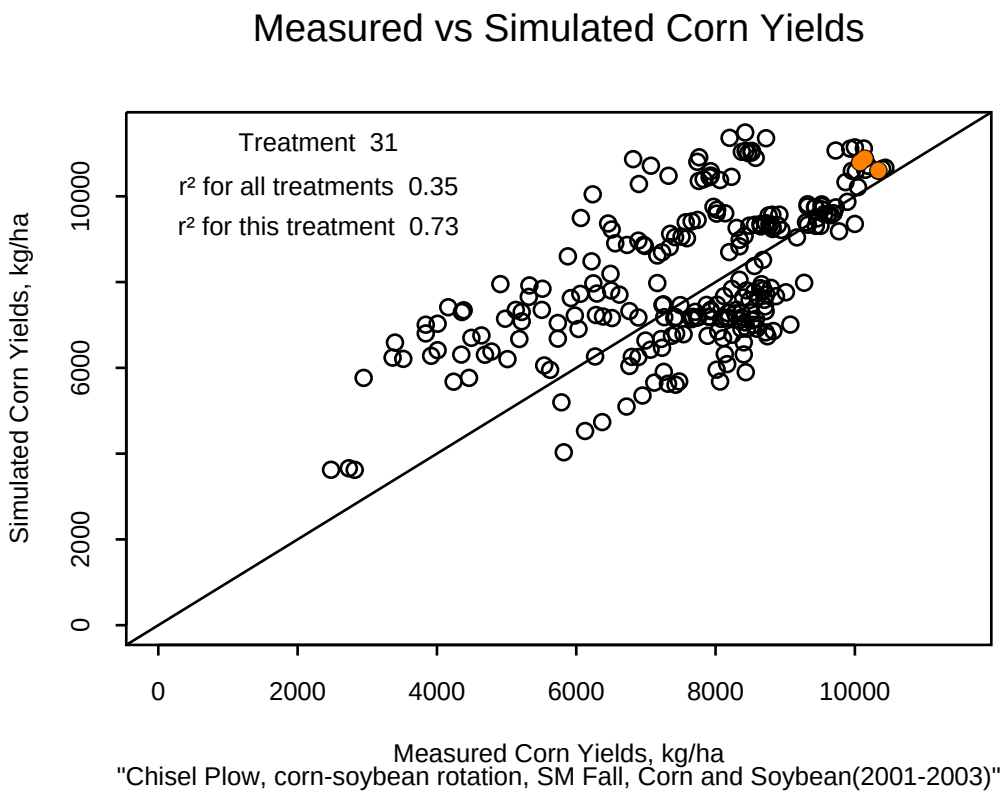

Measured vs Simulated Corn Yields
Treatment 26
r² for all treatments 0.35
r² for this treatment 0.25
Simulated Corn Yields, kg/ha
0
2000
6000
10000
0
2000
4000
6000
8000
10000
Measured Corn Yields, kg/ha
"Chisel Plow, soybean-corn rotation, SM Fall Corn(1993-2003)"

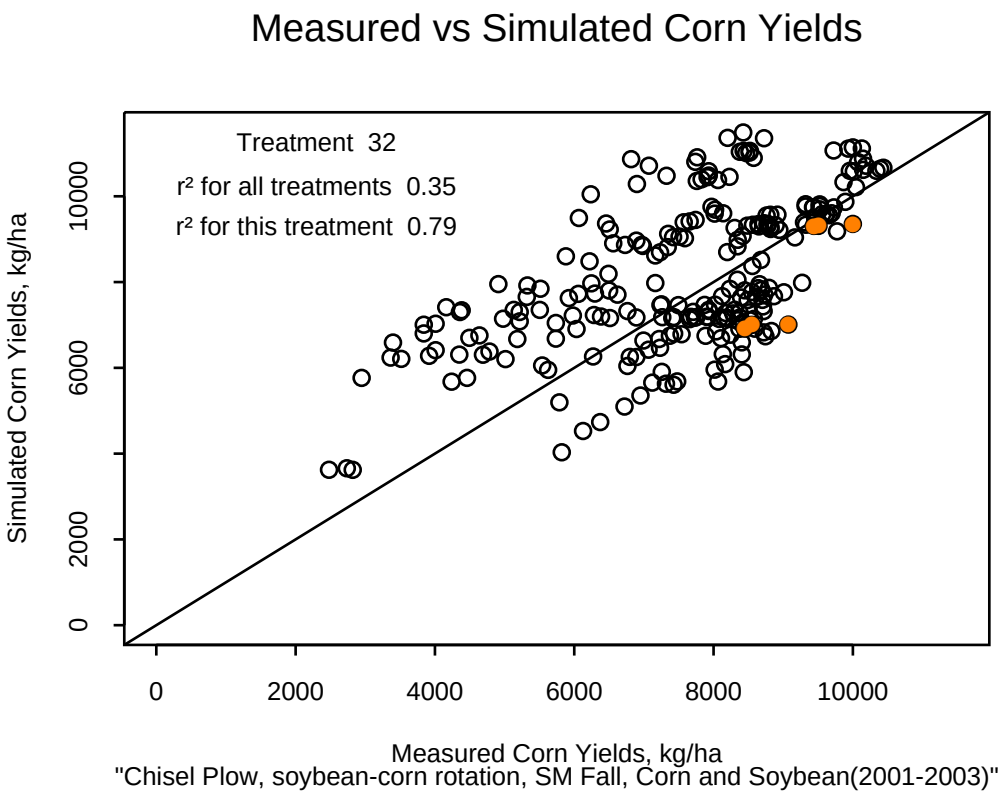

Measured vs Simulated Corn Yields
Treatment 27
r² for all treatments 0.35
r² for this treatment 0.56
Simulated Corn Yields, kg/ha
0
2000
6000
10000
0
2000
4000
6000
8000
10000
Measured Corn Yields, kg/ha
"Chisel Plow, corn-corn rotation, SM Fall and UAN Spring(1999)"

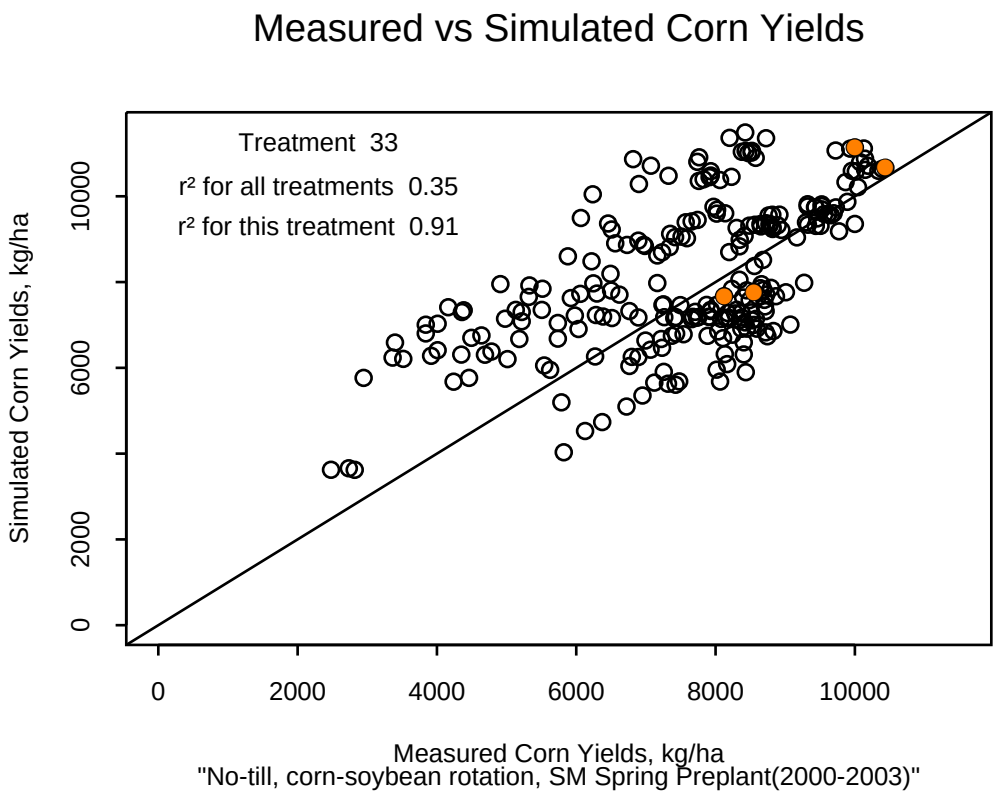

Measured vs Simulated Corn Yields
Treatment 28
r² for all treatments 0.35
r² for this treatment 0.92
Simulated Corn Yields, kg/ha
0
2000
6000
10000
0
2000
4000
6000
8000
10000
Measured Corn Yields, kg/ha
"Chisel Plow, corn-soybean rotation, SM Fall and UAN Spring(2000-2003)"

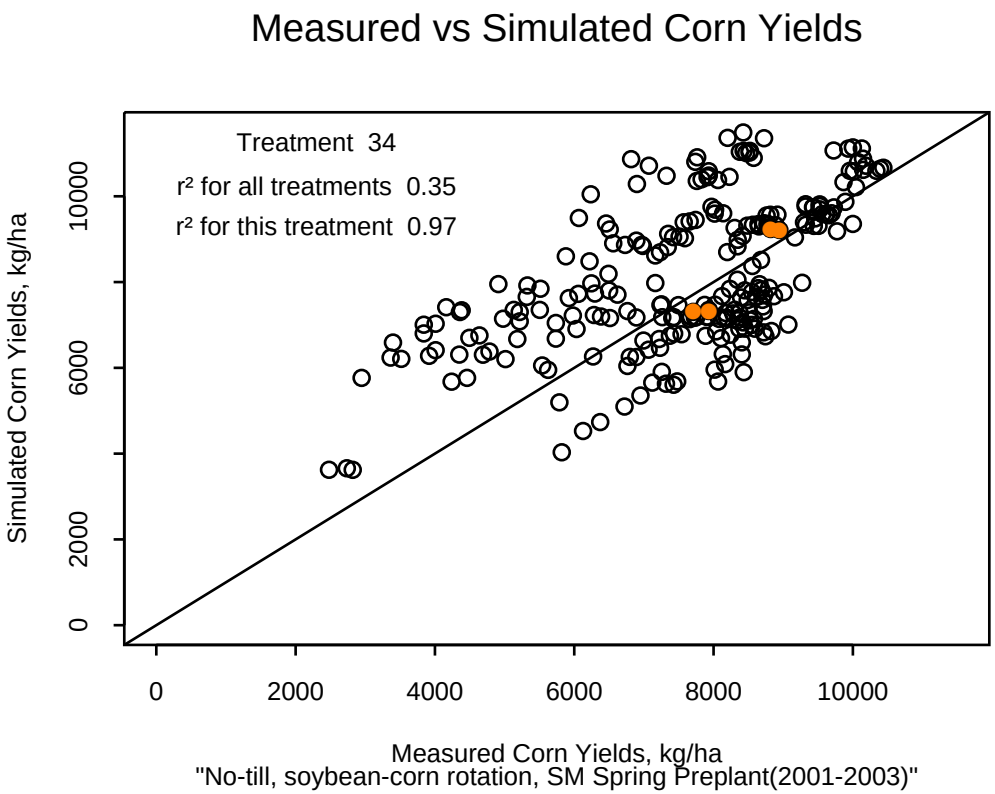

Measured vs Simulated Corn Yields
Treatment 29
r² for all treatments 0.35
r² for this treatment 0.03
Simulated Corn Yields, kg/ha
0
2000
6000
10000
0
2000
4000
6000
8000
10000
Measured Corn Yields, kg/ha
"Chisel Plow, soybean-corn rotation, SM Fall and UAN Spring(2000-2003)"

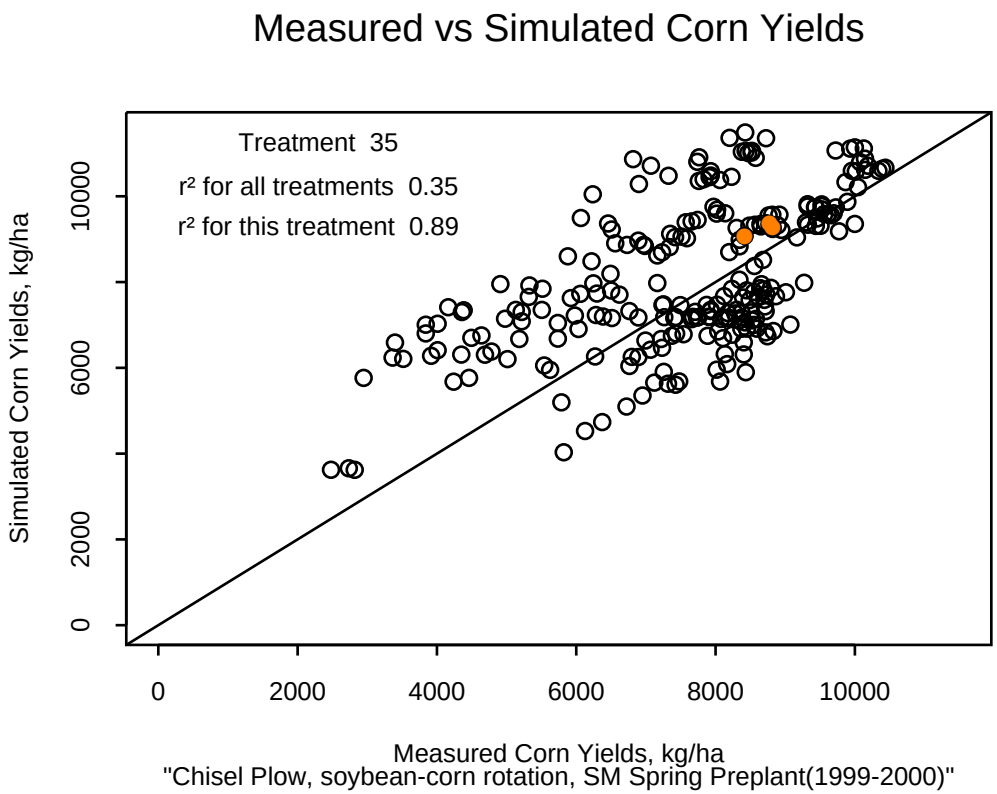

Measured vs Simulated Corn Yields
Treatment 30
r² for all treatments 0.35
r² for this treatment 0.91
Simulated Corn Yields, kg/ha
0
2000
6000
10000
0
2000
4000
6000
8000
10000
Measured Corn Yields, kg/ha
"Chisel Plow, corn-corn rotation, SM Fall, Corn and Soybean(2000)"

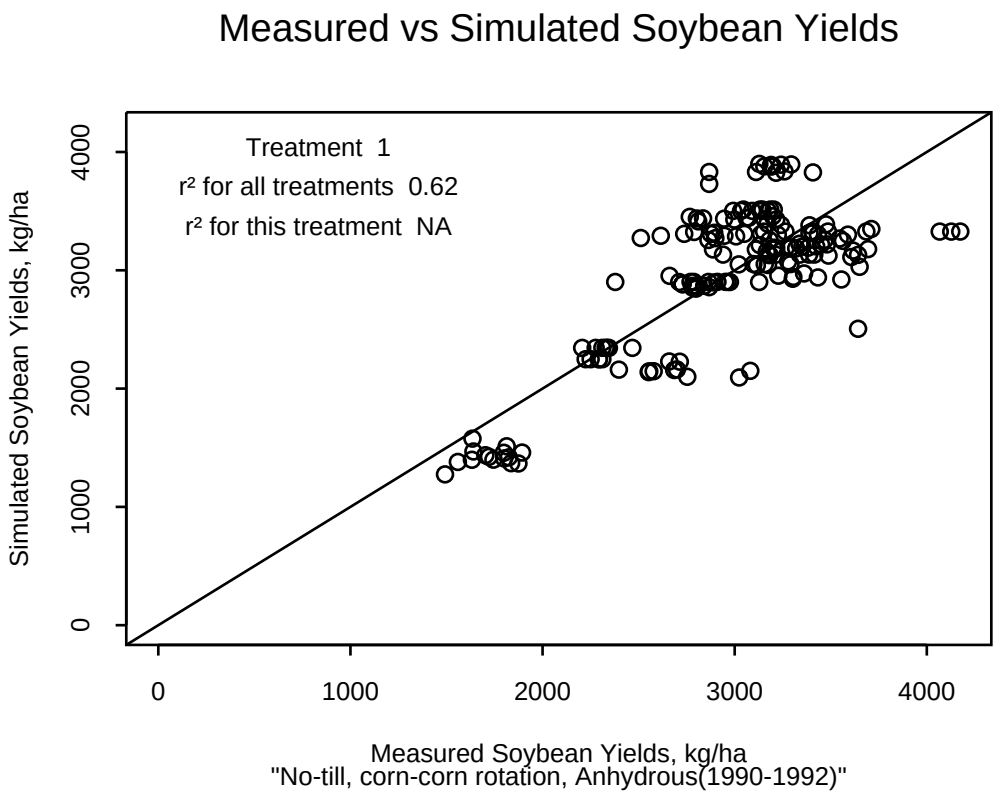

Measured vs Simulated Corn Yields
Treatment 31
r² for all treatments 0.35
r² for this treatment 0.73
Simulated Corn Yields, kg/ha
0
2000
6000
10000
0
2000
4000
6000
8000
10000
Measured Corn Yields, kg/ha
"Chisel Plow, corn-soybean rotation, SM Fall, Corn and Soybean(2001-2003)"

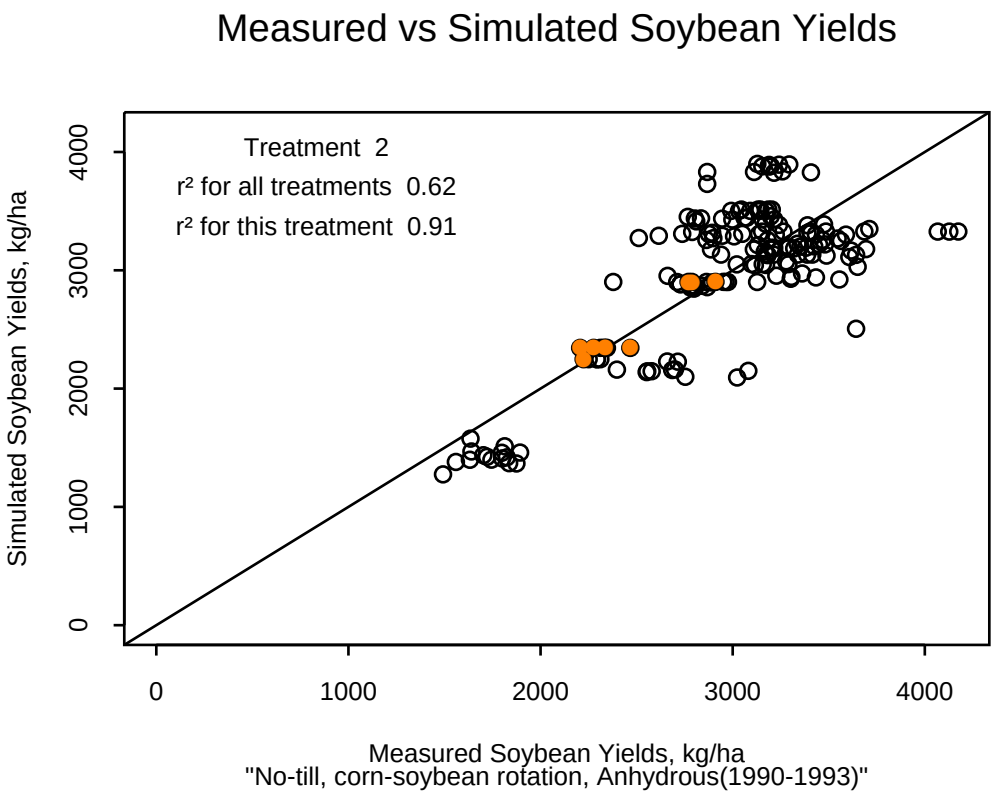

Measured vs Simulated Corn Yields
Treatment 32
r² for all treatments 0.35
r² for this treatment 0.79
Simulated Corn Yields, kg/ha
0
2000
6000
10000
0
2000
4000
6000
8000
10000
Measured Corn Yields, kg/ha
"Chisel Plow, soybean-corn rotation, SM Fall, Corn and Soybean(2001-2003)"

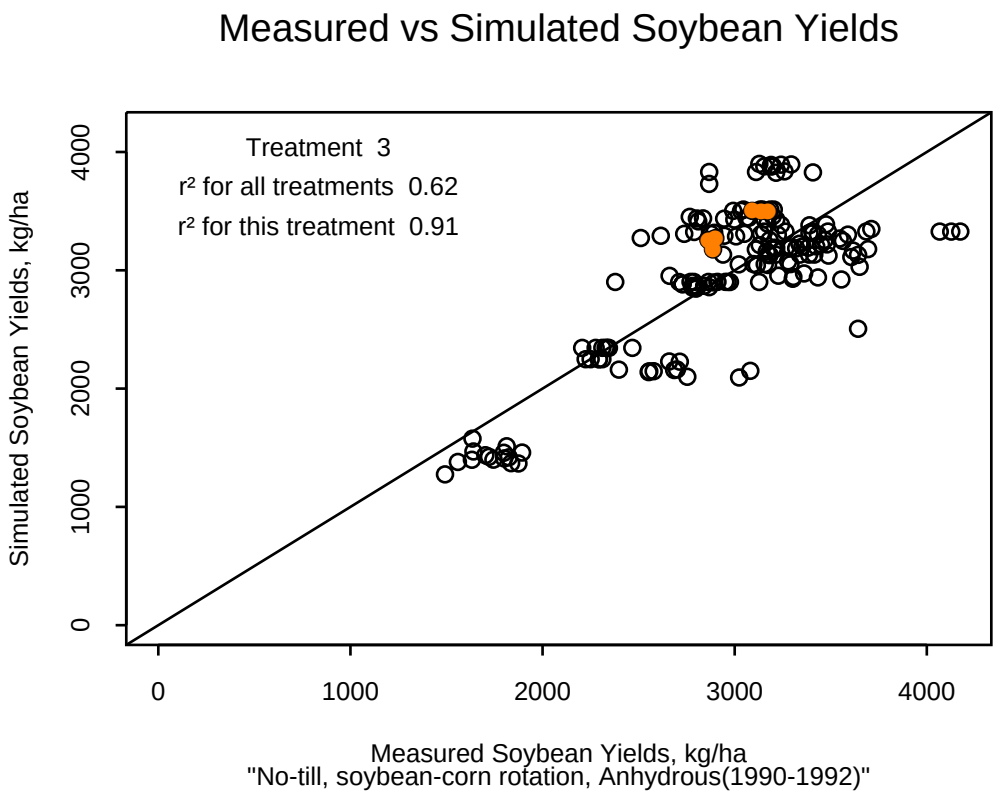

Measured vs Simulated Corn Yields
Treatment 33
r² for all treatments 0.35
r² for this treatment 0.91
Simulated Corn Yields, kg/ha
0
2000
6000
10000
0
2000
4000
6000
8000
10000
Measured Corn Yields, kg/ha
"No-till, corn-soybean rotation, SM Spring Preplant(2000-2003)"

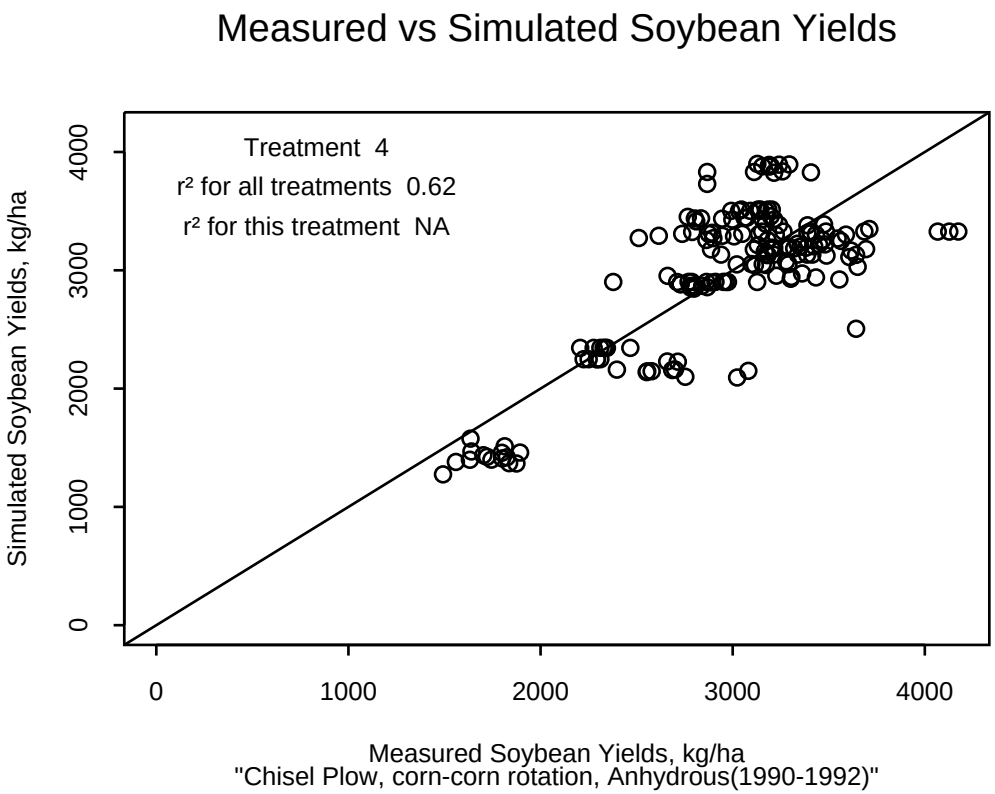

Measured vs Simulated Corn Yields
Treatment 34
r² for all treatments 0.35
r² for this treatment 0.97
Simulated Corn Yields, kg/ha
0
2000
6000
10000
0
2000
4000
6000
8000
10000
Measured Corn Yields, kg/ha
"No-till, soybean-corn rotation, SM Spring Preplant(2001-2003)"

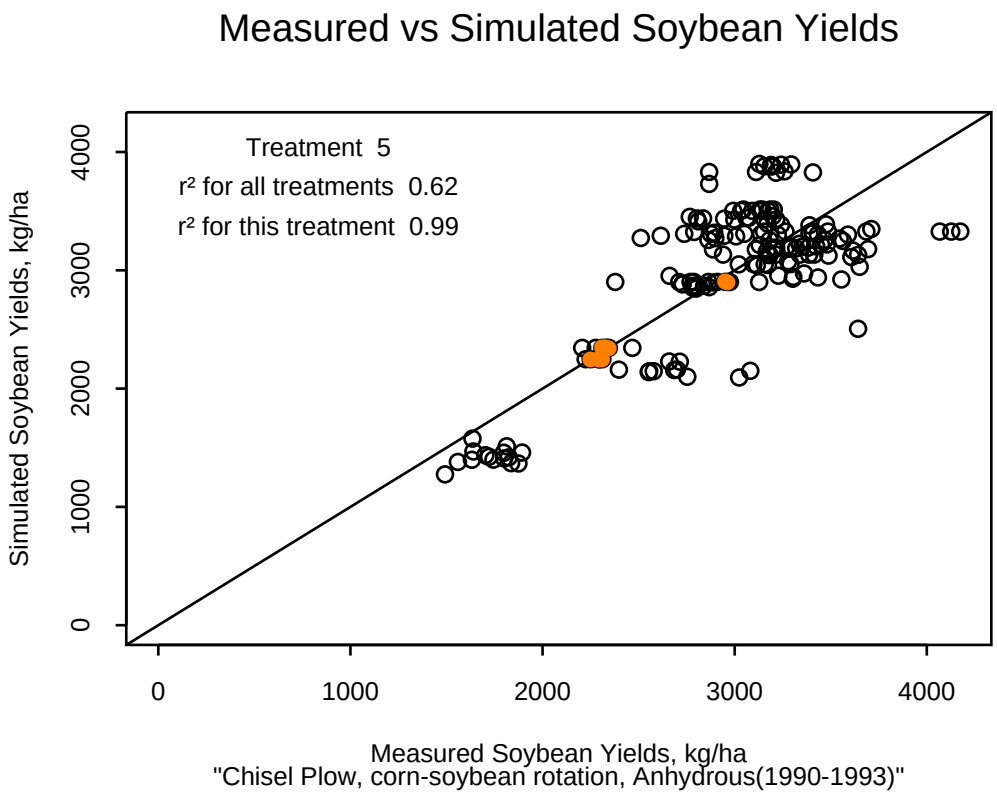

Measured vs Simulated Corn Yields
Treatment 35
r² for all treatments 0.35
r² for this treatment 0.89
Simulated Corn Yields, kg/ha
0
2000
6000
10000
0
2000
4000
6000
8000
10000
Measured Corn Yields, kg/ha
"Chisel Plow, soybean-corn rotation, SM Spring Preplant(1999-2000)"

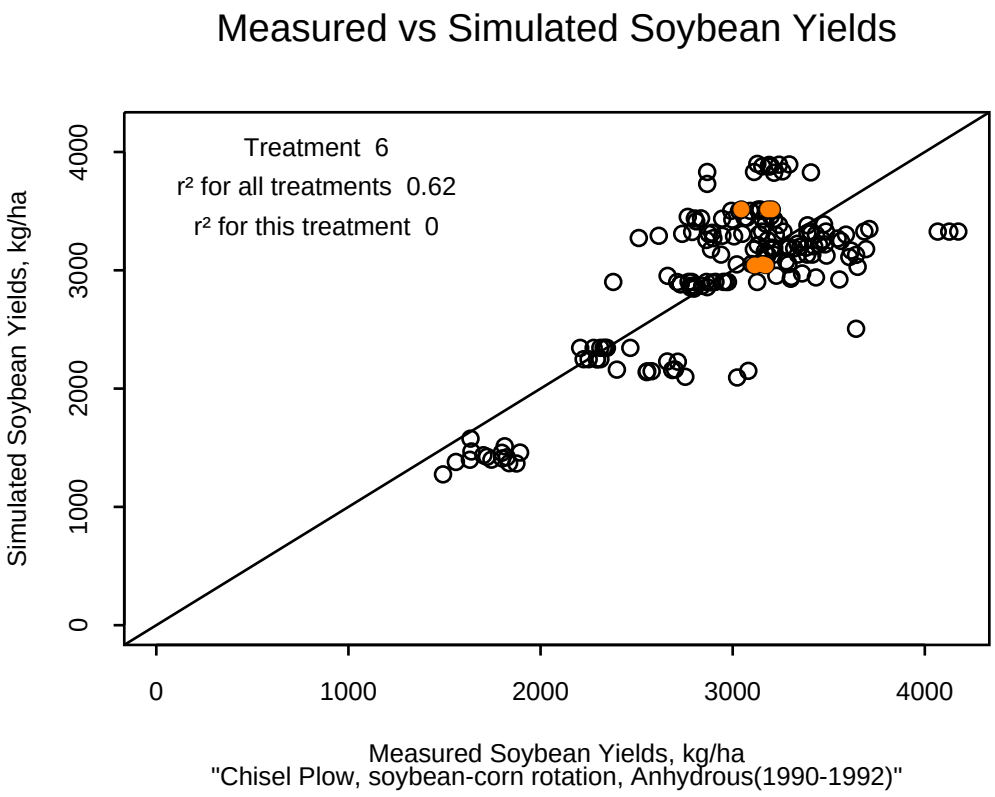

Measured vs Simulated Soybean Yields
Treatment 1
r² for all treatments 0.62
r² for this treatment NA
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
"No-till, corn-corn rotation, Anhydrous(1990-1992)"
0
1000
2000
3000
4000

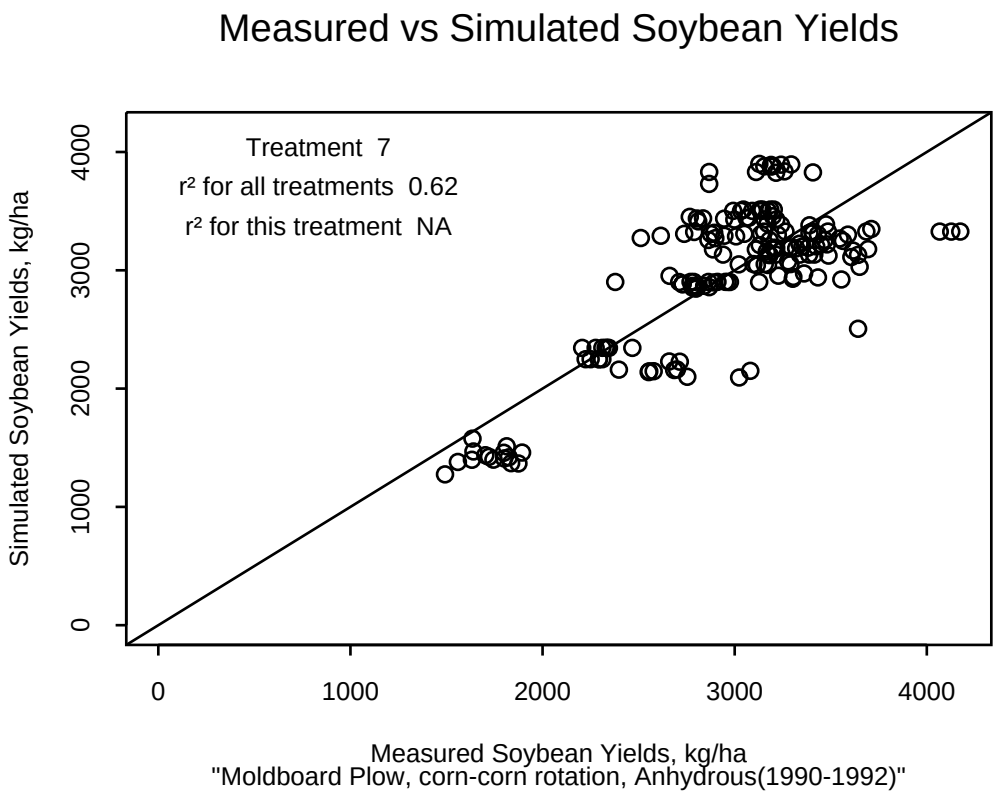

Measured vs Simulated Soybean Yields
Treatment 2
r² for all treatments 0.62
r² for this treatment 0.91
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
"No-till, corn-soybean rotation, Anhydrous(1990-1993)"
0
1000
2000
3000
4000

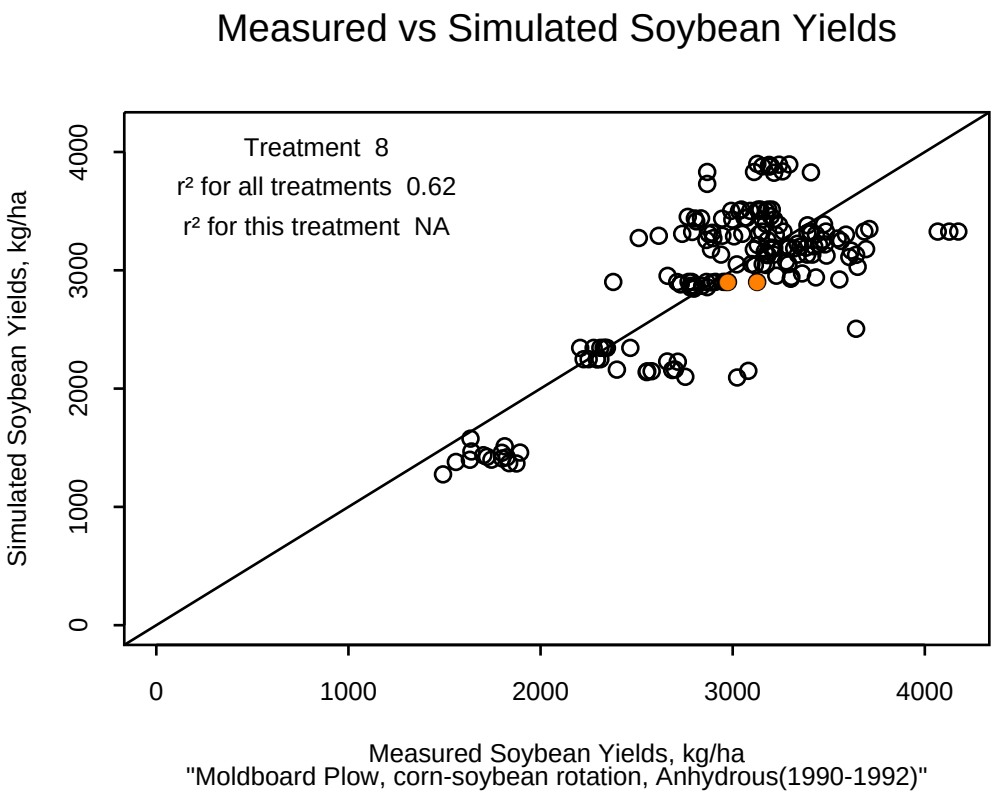

Measured vs Simulated Soybean Yields
Treatment 3
r² for all treatments 0.62
r² for this treatment 0.91
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
"No-till, soybean-corn rotation, Anhydrous(1990-1992)"
0
1000
2000
3000
4000

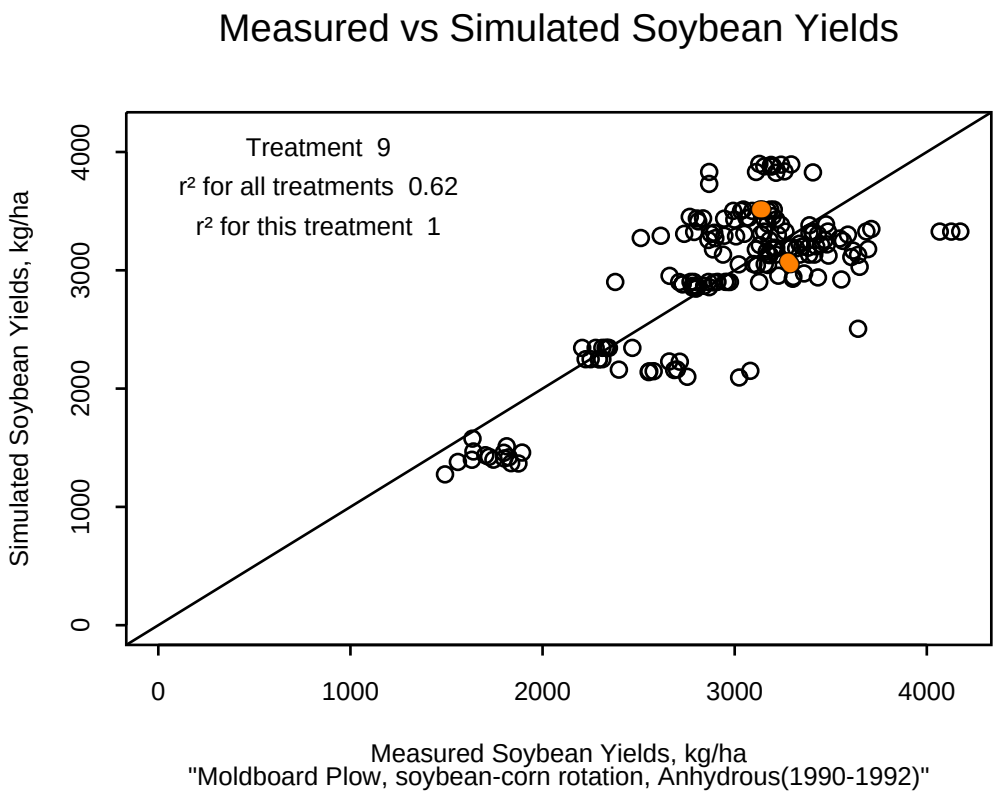

Measured vs Simulated Soybean Yields
Treatment 4
r² for all treatments 0.62
r² for this treatment NA
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
"Chisel Plow, corn-corn rotation, Anhydrous(1990-1992)"
0
1000
2000
3000
4000

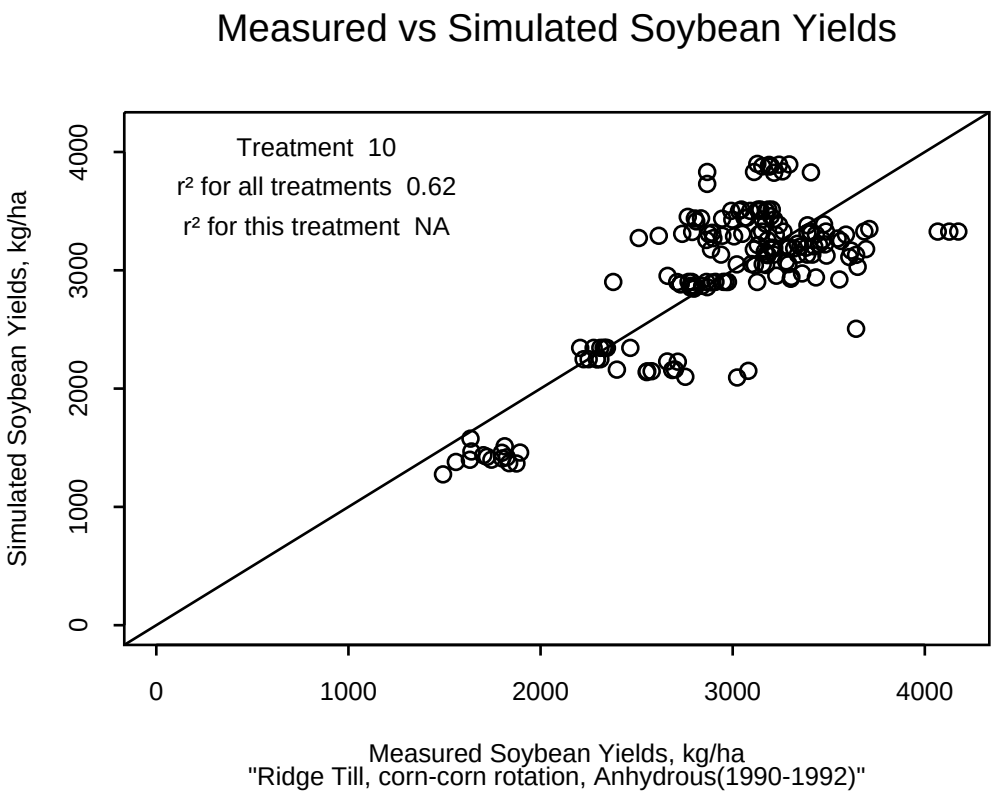

Measured vs Simulated Soybean Yields
Treatment 5
r² for all treatments 0.62
r² for this treatment 0.99
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
"Chisel Plow, corn-soybean rotation, Anhydrous(1990-1993)"
0
1000
2000
3000
4000

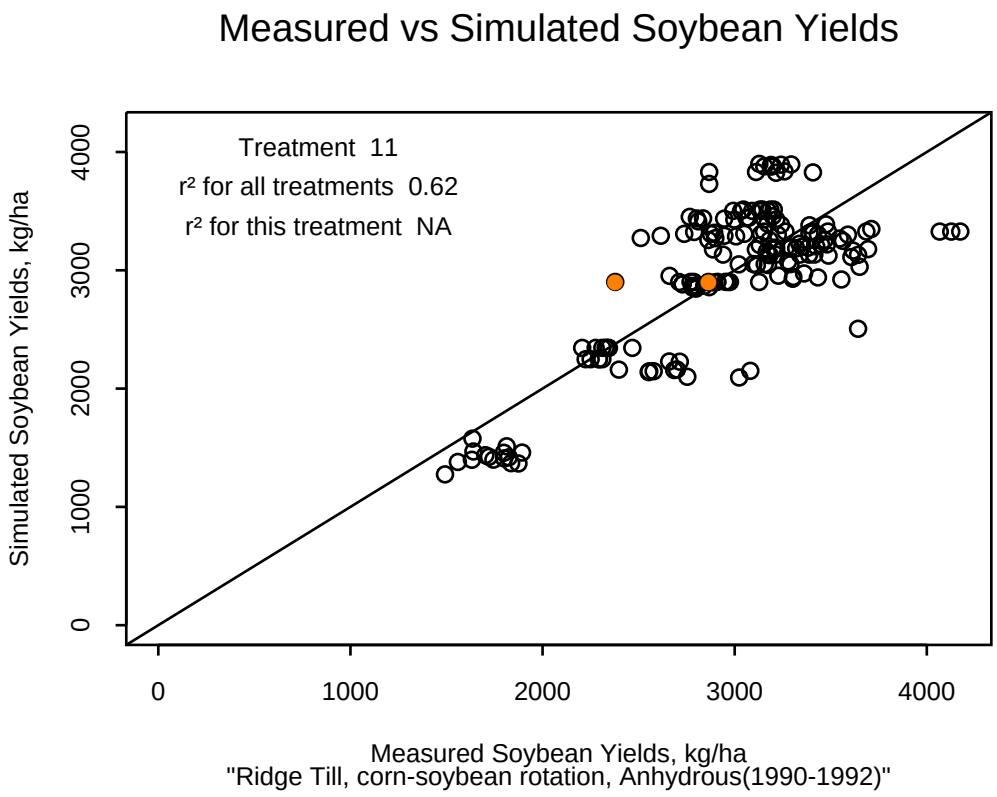

Measured vs Simulated Soybean Yields
Treatment 6
r² for all treatments 0.62
r² for this treatment 0
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
"Chisel Plow, soybean-corn rotation, Anhydrous(1990-1992)"
0
1000
2000
3000
4000

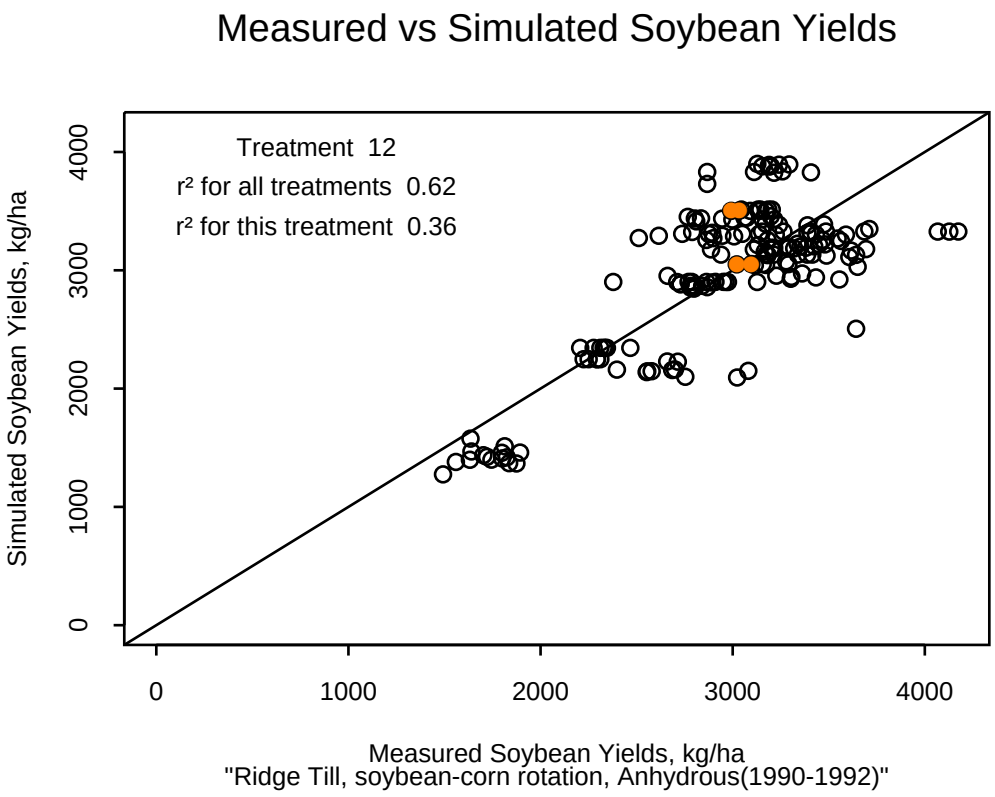

Measured vs Simulated Soybean Yields
Treatment 7
r² for all treatments 0.62
r² for this treatment NA
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
"Moldboard Plow, corn-corn rotation, Anhydrous(1990-1992)"
0
1000
2000
3000
4000

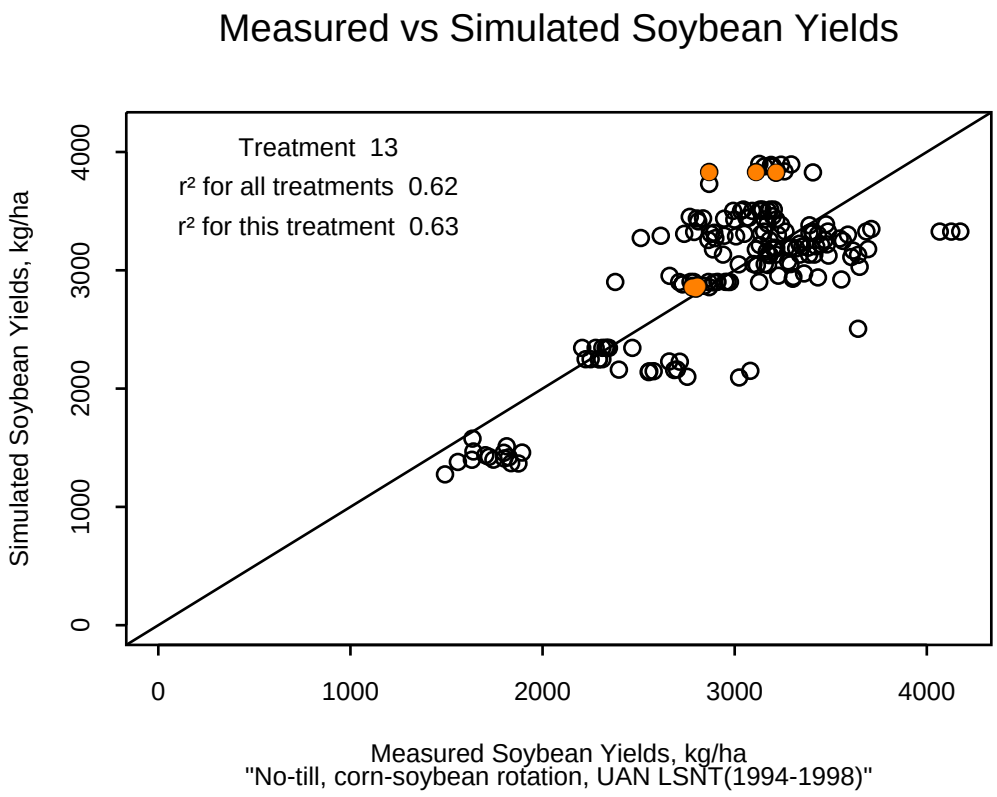

Measured vs Simulated Soybean Yields
Treatment 8
r² for all treatments 0.62
r² for this treatment NA
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
"Moldboard Plow, corn-soybean rotation, Anhydrous(1990-1992)"
0
1000
2000
3000
4000

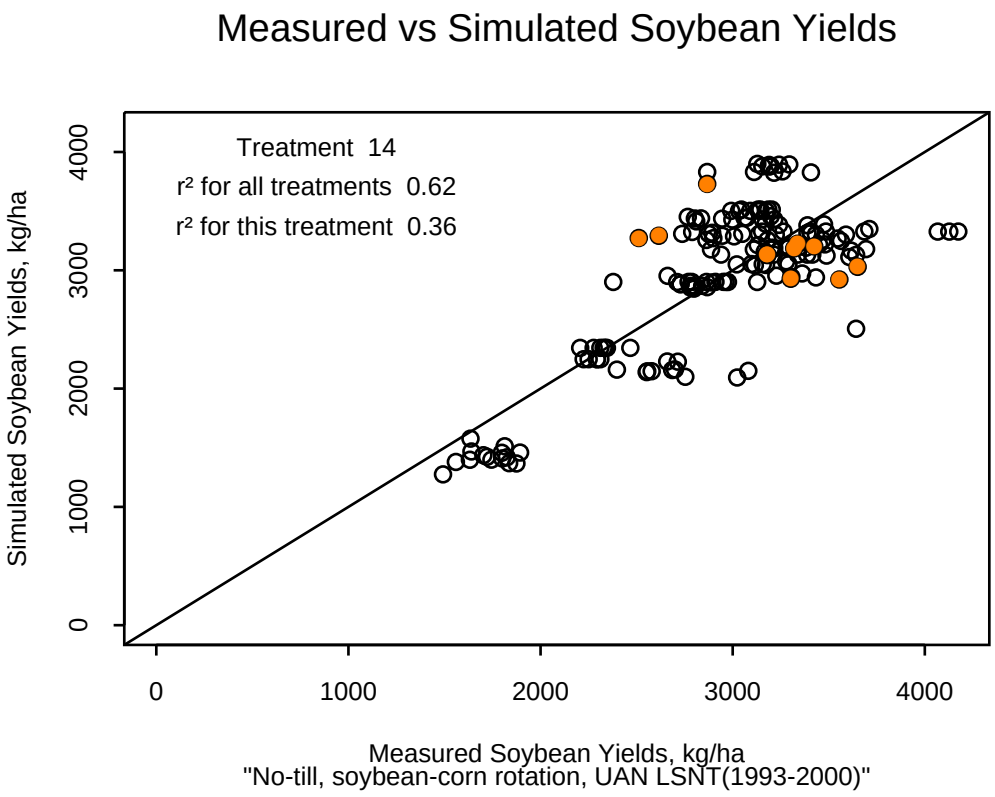

Measured vs Simulated Soybean Yields
Treatment 9
r² for all treatments 0.62
r² for this treatment 1
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
"Moldboard Plow, soybean-corn rotation, Anhydrous(1990-1992)"
0
1000
2000
3000
4000

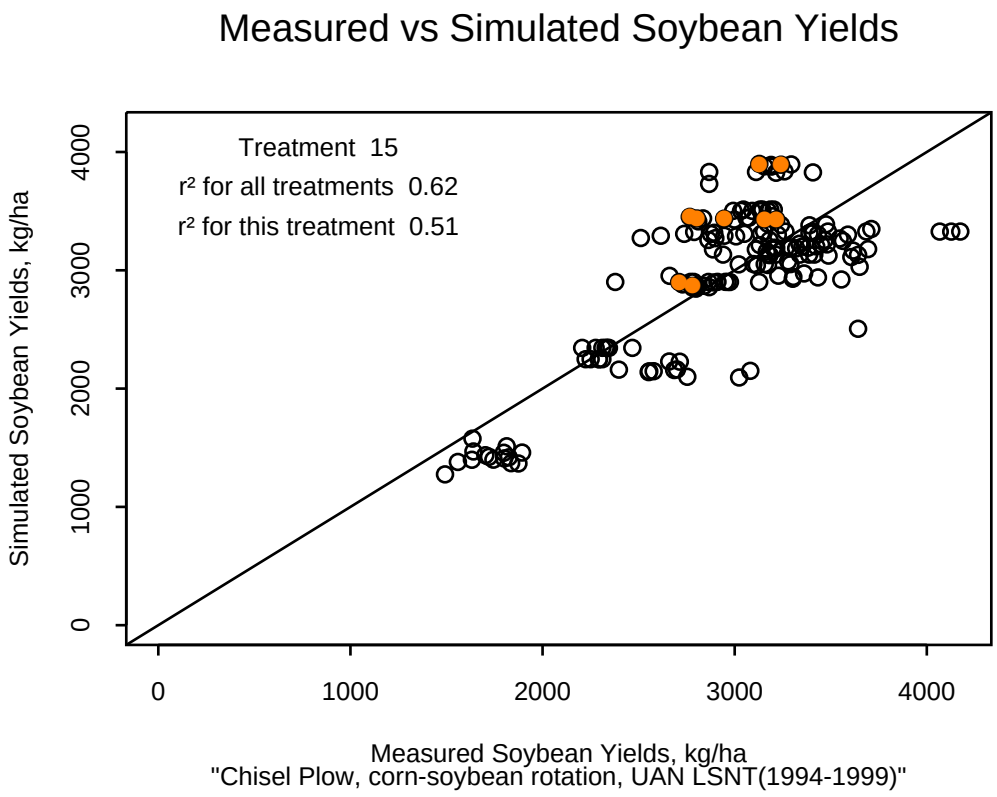

Measured vs Simulated Soybean Yields
Treatment 10
r² for all treatments 0.62
r² for this treatment NA
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
"Ridge Till, corn-corn rotation, Anhydrous(1990-1992)"
0
1000
2000
3000
4000

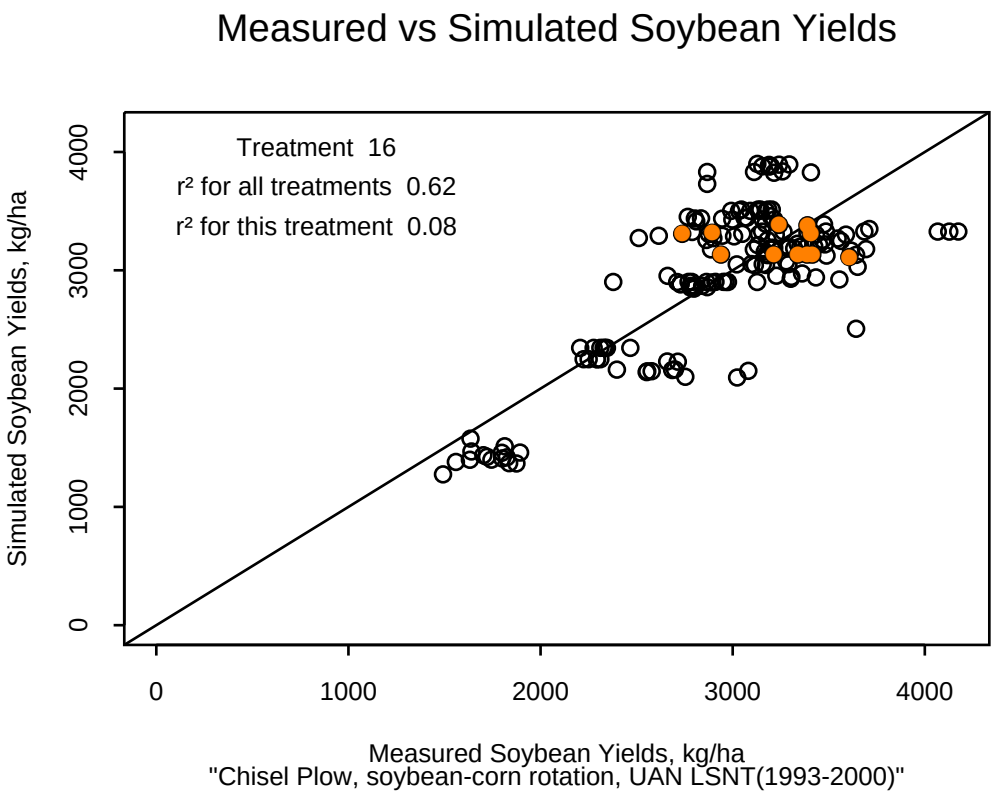

Measured vs Simulated Soybean Yields
Treatment 11
r² for all treatments 0.62
r² for this treatment NA
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
"Ridge Till, corn-soybean rotation, Anhydrous(1990-1992)"
0
1000
2000
3000
4000

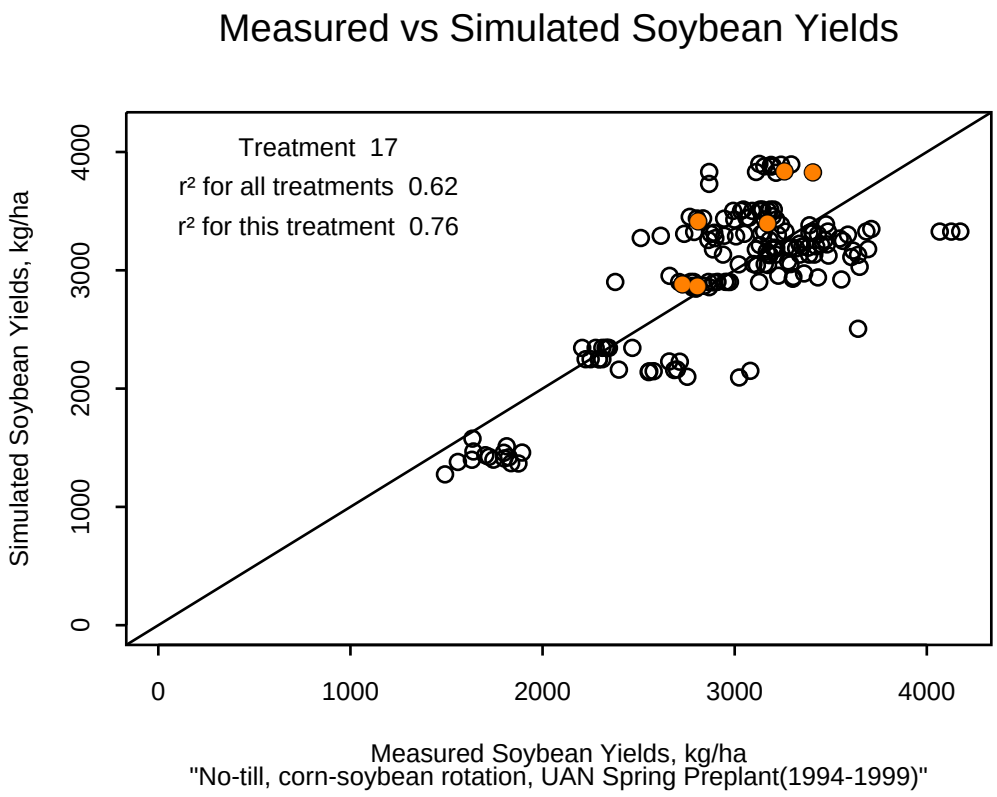

Measured vs Simulated Soybean Yields
Treatment 12
r² for all treatments 0.62
r² for this treatment 0.36
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
"Ridge Till, soybean-corn rotation, Anhydrous(1990-1992)"
0
1000
2000
3000
4000

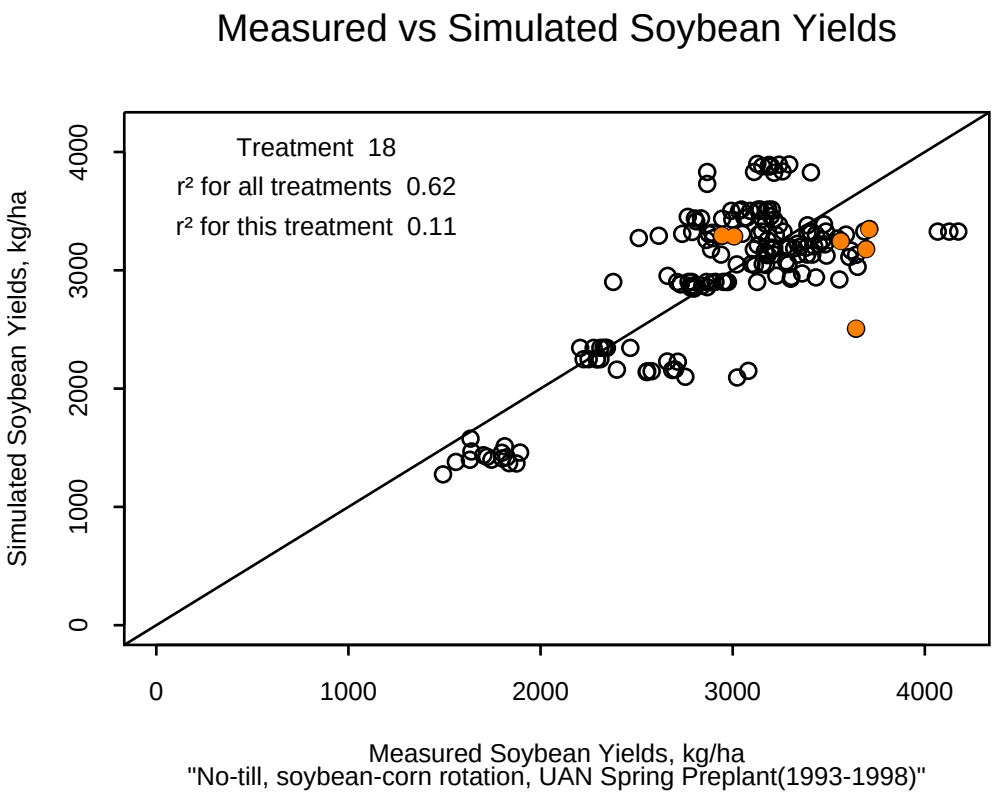

Measured vs Simulated Soybean Yields
Treatment 13
r² for all treatments 0.62
r² for this treatment 0.63
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
"No-till, corn-soybean rotation, UAN LSNT(1994-1998)"
0
1000
2000
3000
4000

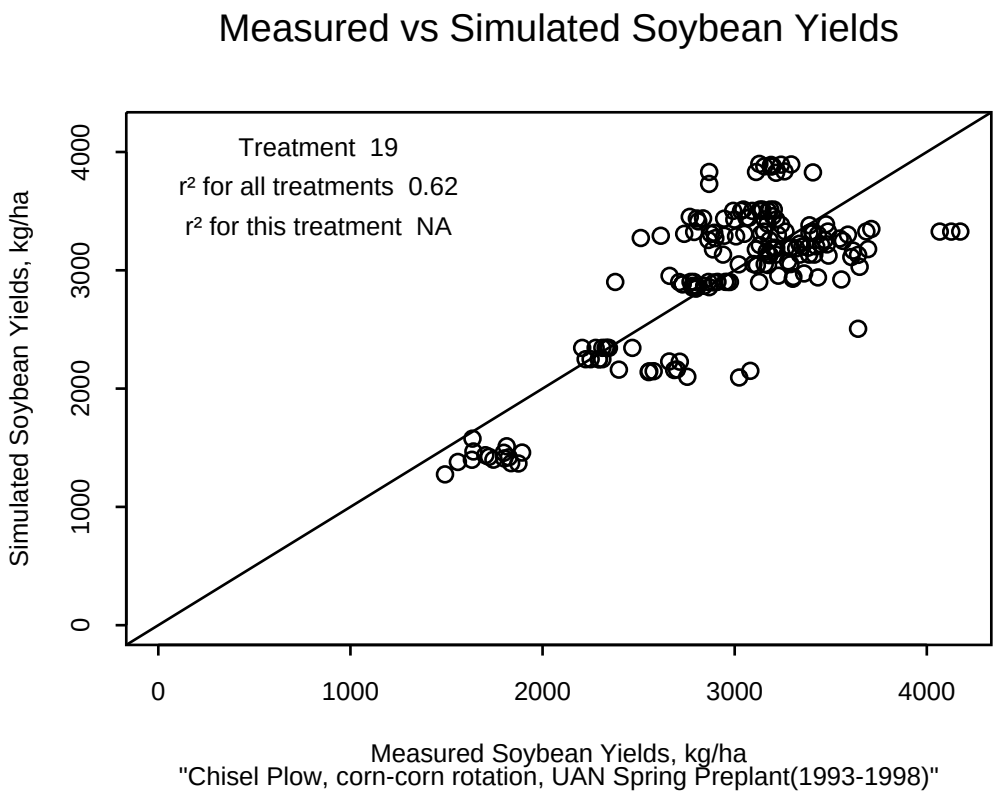

Measured vs Simulated Soybean Yields
Treatment 14
r² for all treatments 0.62
r² for this treatment 0.36
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
"No-till, soybean-corn rotation, UAN LSNT(1993-2000)"
0
1000
2000
3000
4000

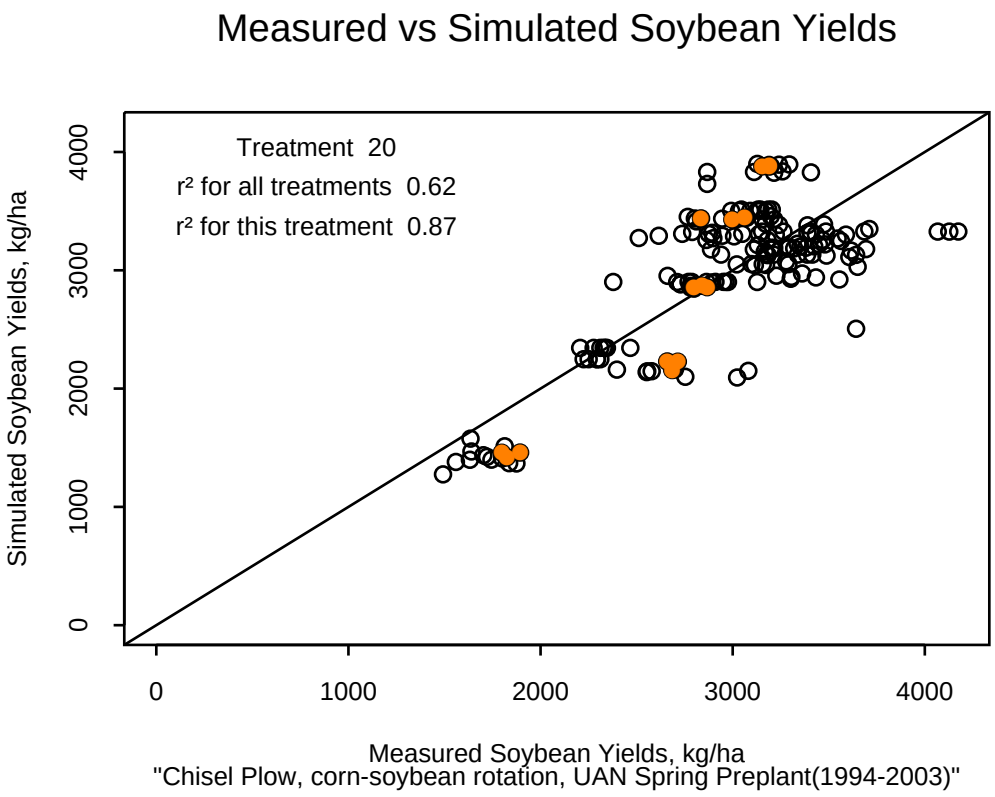

Measured vs Simulated Soybean Yields
Treatment 15
r² for all treatments 0.62
r² for this treatment 0.51
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
"Chisel Plow, corn-soybean rotation, UAN LSNT(1994-1999)"
0
1000
2000
3000
4000

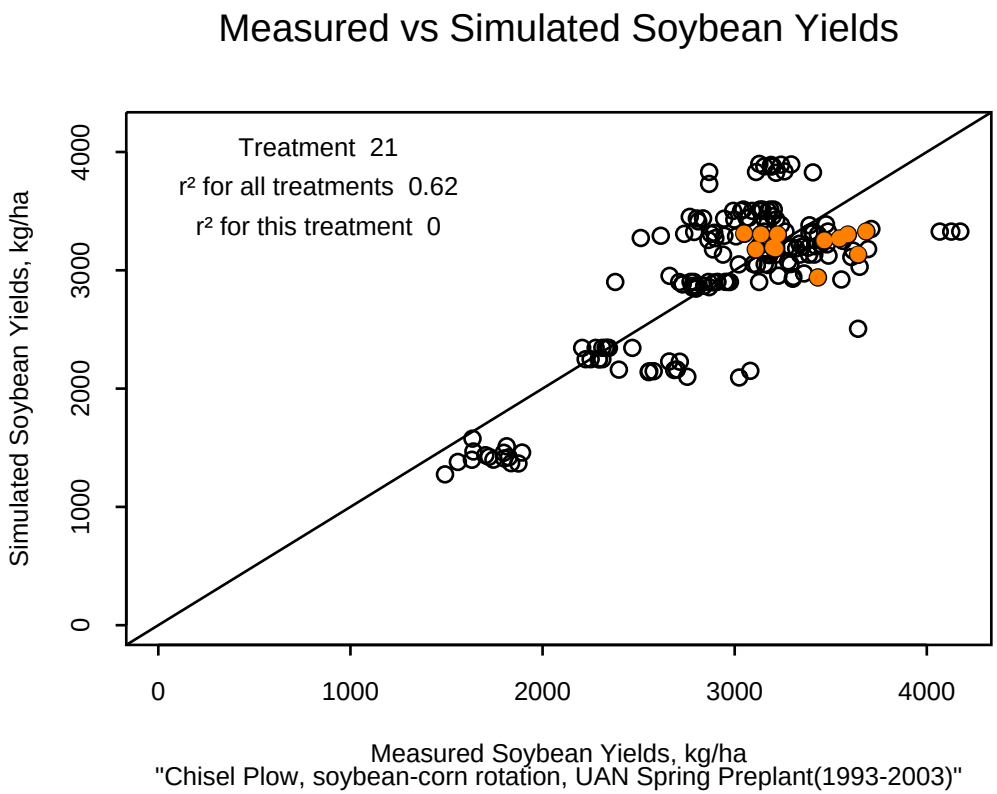

Measured vs Simulated Soybean Yields
Treatment 16
r² for all treatments 0.62
r² for this treatment 0.08
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
"Chisel Plow, soybean-corn rotation, UAN LSNT(1993-2000)"
0
1000
2000
3000
4000

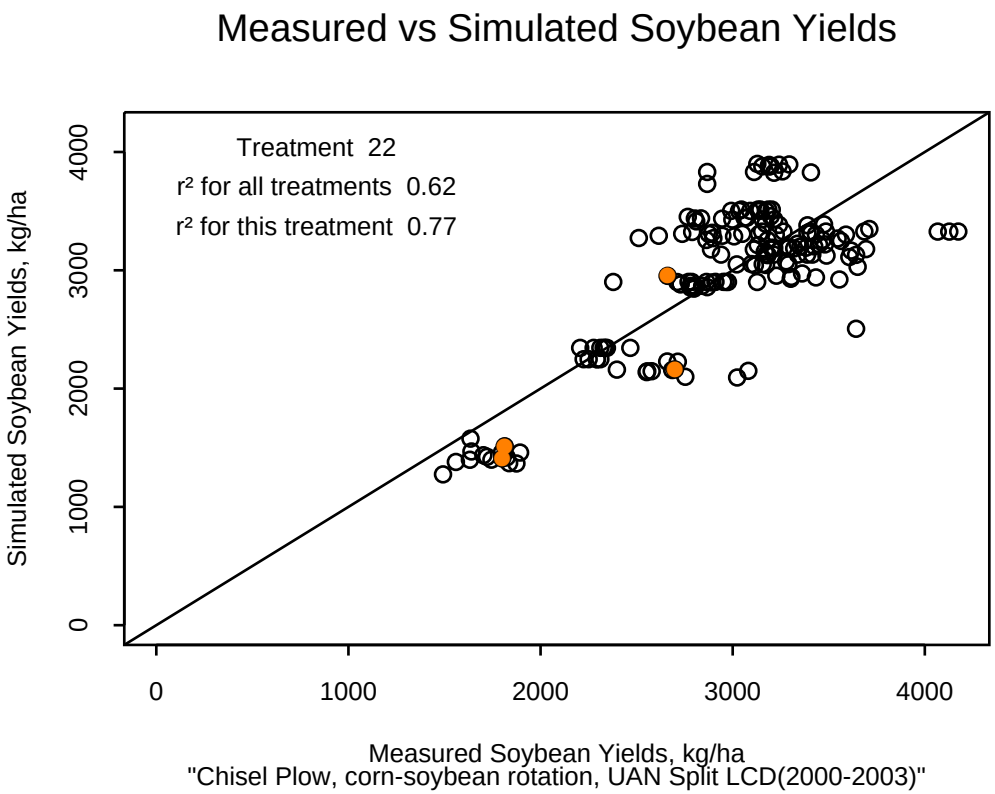

Measured vs Simulated Soybean Yields
Treatment 17
r² for all treatments 0.62
r² for this treatment 0.76
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
"No-till, corn-soybean rotation, UAN Spring Preplant(1994-1999)"

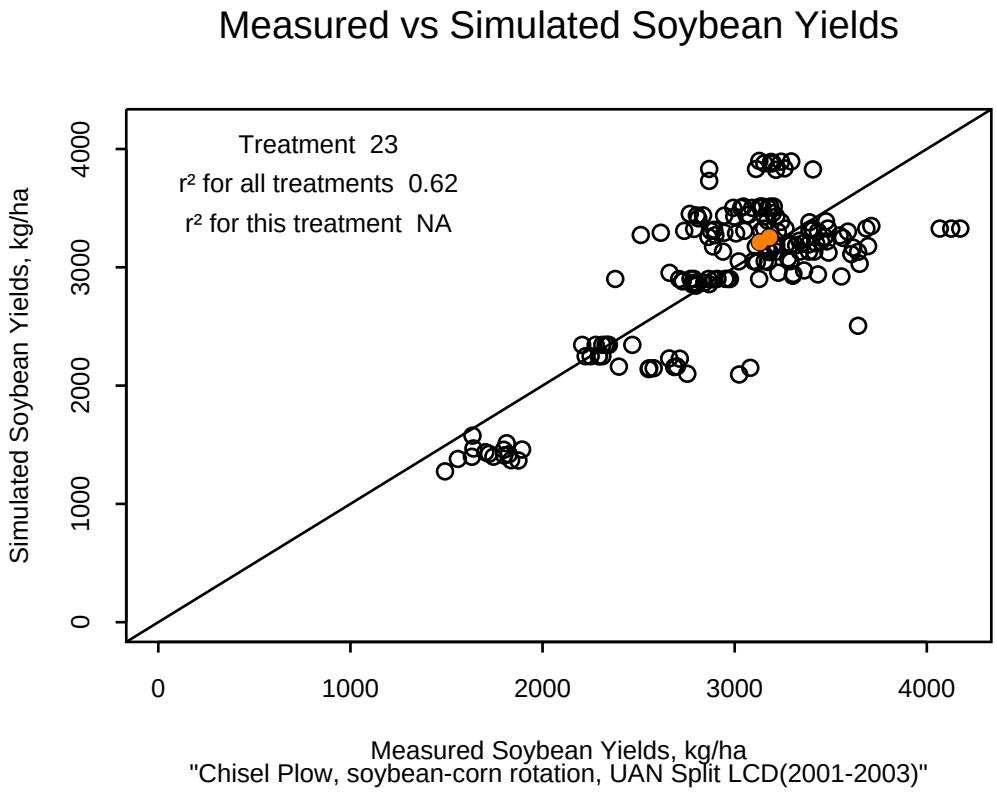

Measured vs Simulated Soybean Yields
Treatment 18
r² for all treatments 0.62
r² for this treatment 0.11
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
"No-till, soybean-corn rotation, UAN Spring Preplant(1993-1998)"

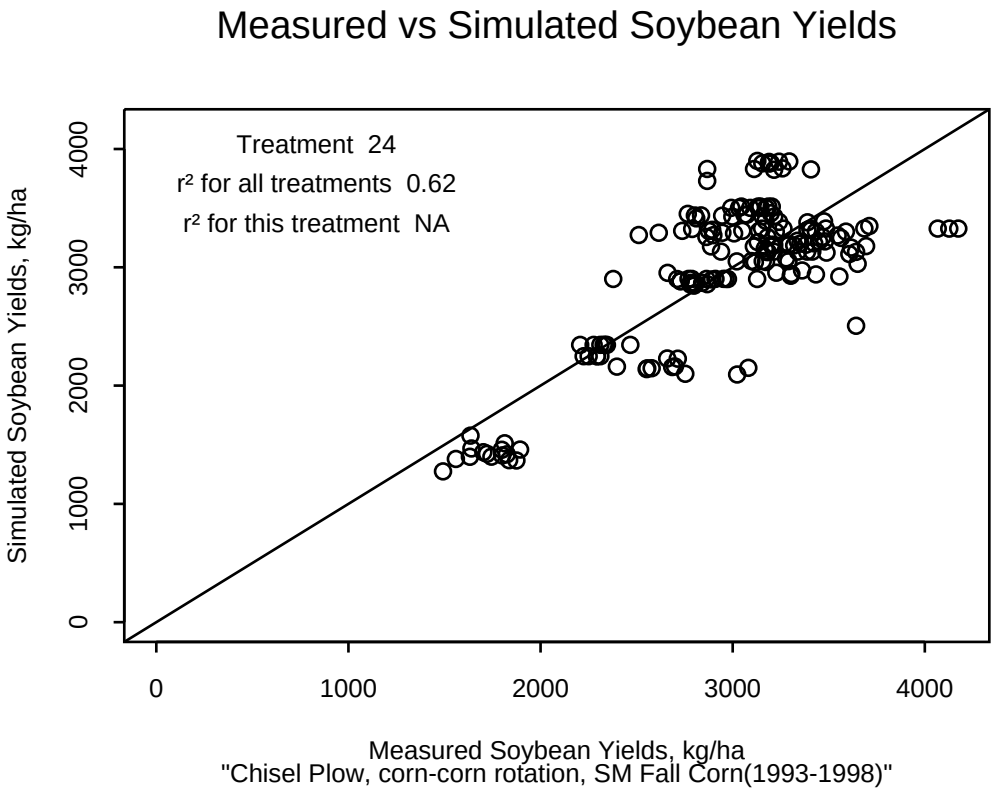

Measured vs Simulated Soybean Yields
Treatment 19
r² for all treatments 0.62
r² for this treatment NA
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
"Chisel Plow, corn-corn rotation, UAN Spring Preplant(1993-1998)"

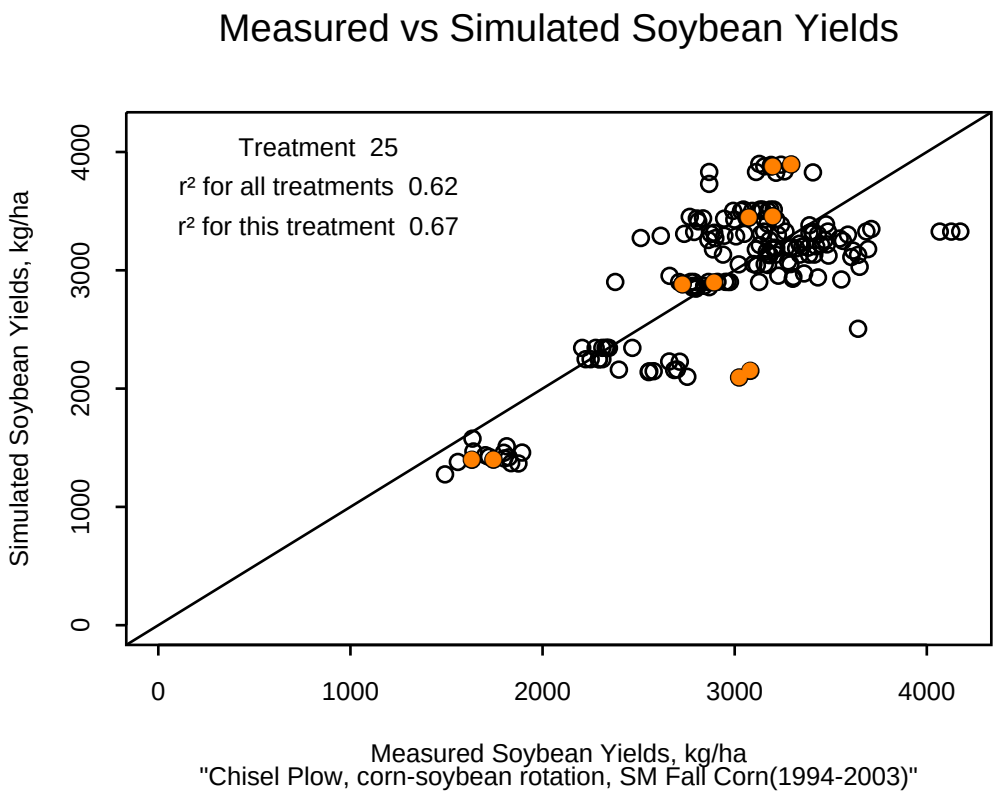

Measured vs Simulated Soybean Yields
Treatment 20
r² for all treatments 0.62
r² for this treatment 0.87
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
"Chisel Plow, corn-soybean rotation, UAN Spring Preplant(1994-2003)"

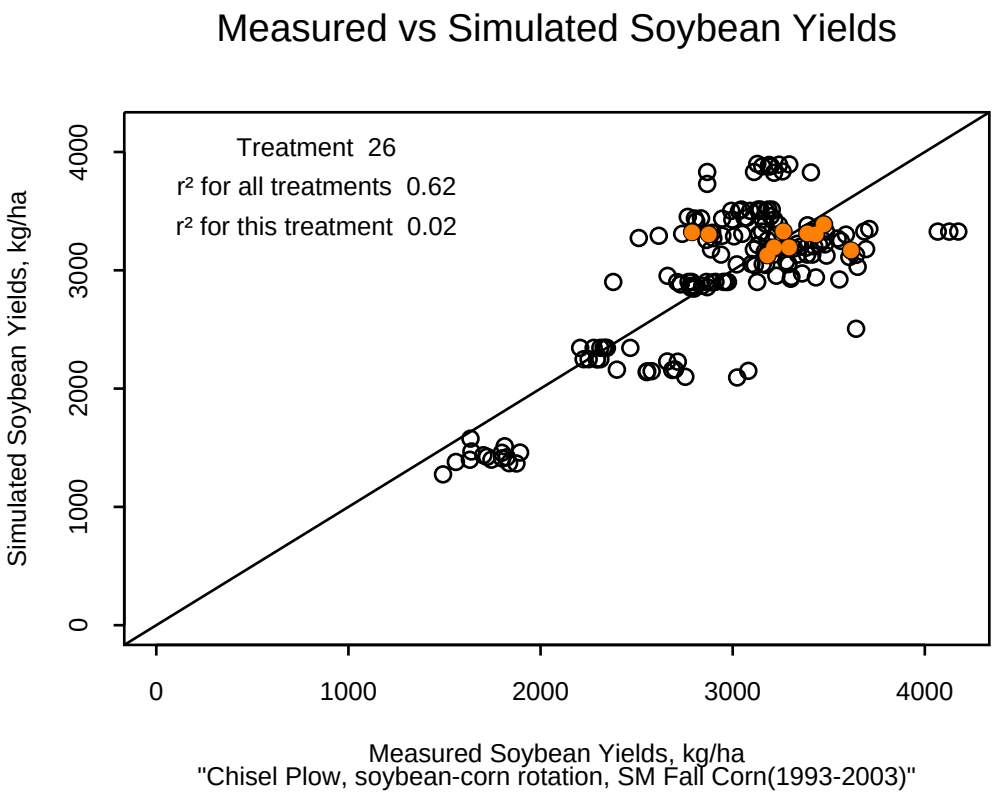

Measured vs Simulated Soybean Yields
Treatment 21
r² for all treatments 0.62
r² for this treatment 0
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
"Chisel Plow, soybean-corn rotation, UAN Spring Preplant(1993-2003)"
0
1000
2000
3000
4000

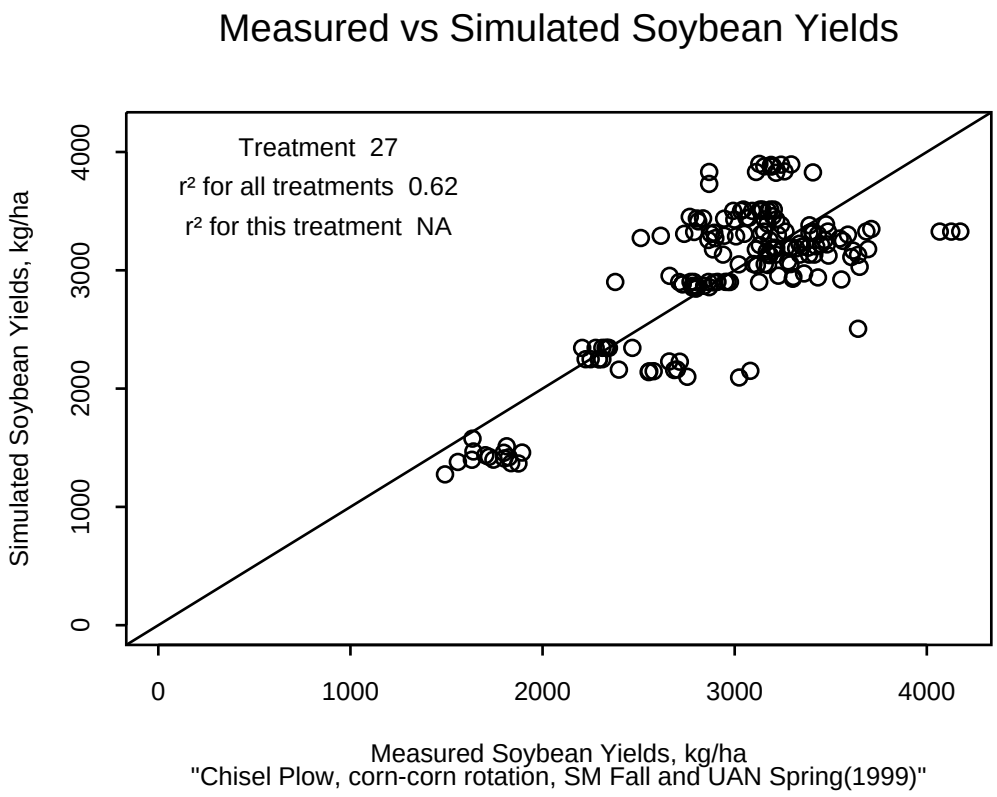

Measured vs Simulated Soybean Yields
Treatment 22
r² for all treatments 0.62
r² for this treatment 0.77
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
"Chisel Plow, corn-soybean rotation, UAN Split LCD(2000-2003)"
0
1000
2000
3000
4000

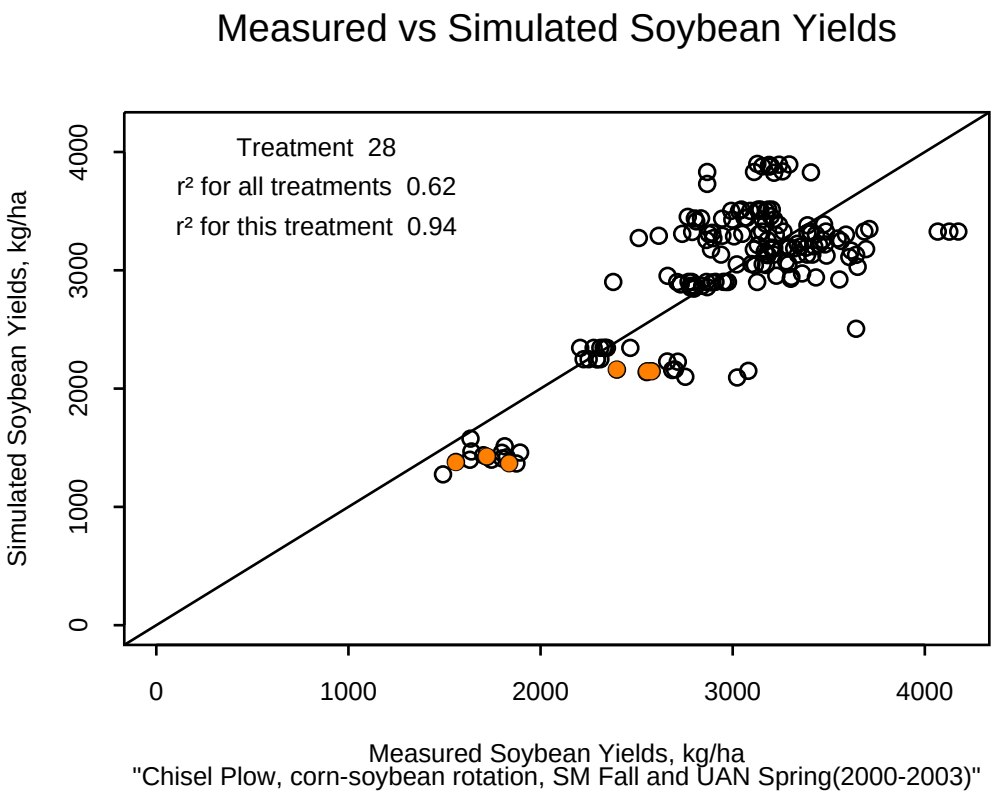

Measured vs Simulated Soybean Yields
Treatment 23
r² for all treatments 0.62
r² for this treatment NA
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
"Chisel Plow, soybean-corn rotation, UAN Split LCD(2001-2003)"
0
1000
2000
3000
4000

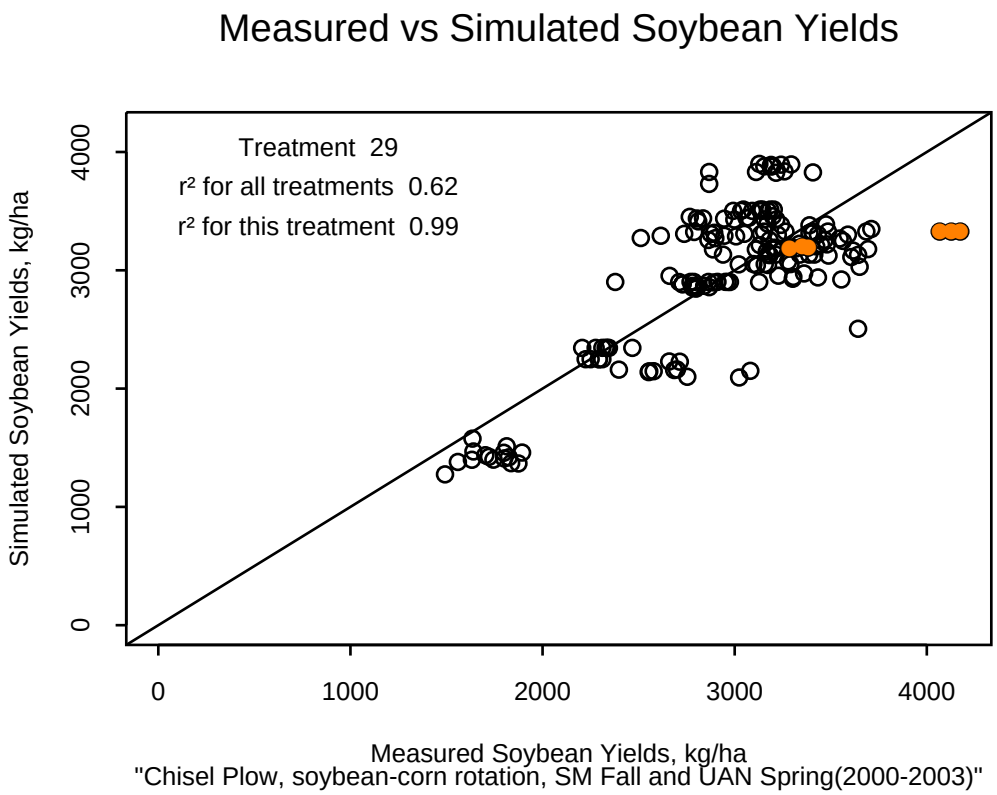

Measured vs Simulated Soybean Yields
Treatment 24
r² for all treatments 0.62
r² for this treatment NA
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
"Chisel Plow, corn-corn rotation, SM Fall Corn(1993-1998)"
0
1000
2000
3000
4000

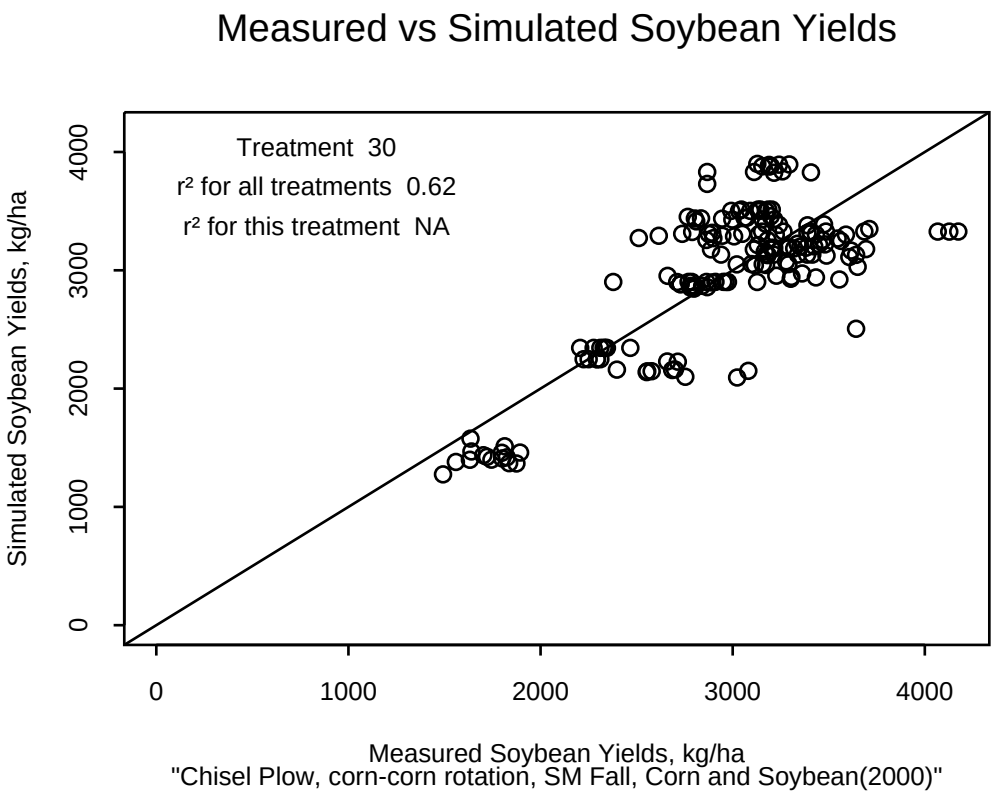

Measured vs Simulated Soybean Yields
Treatment 25
r² for all treatments 0.62
r² for this treatment 0.67
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
"Chisel Plow, corn-soybean rotation, SM Fall Corn(1994-2003)"

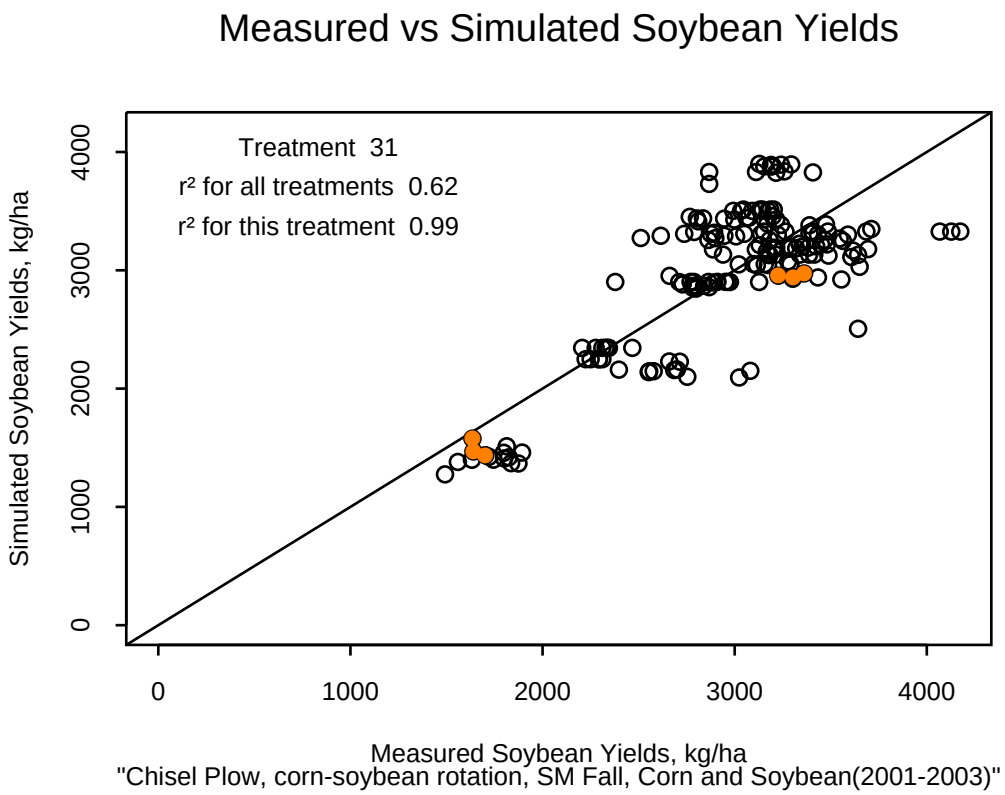

Measured vs Simulated Soybean Yields
Treatment 26
r² for all treatments 0.62
r² for this treatment 0.02
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
"Chisel Plow, soybean-corn rotation, SM Fall Corn(1993-2003)"

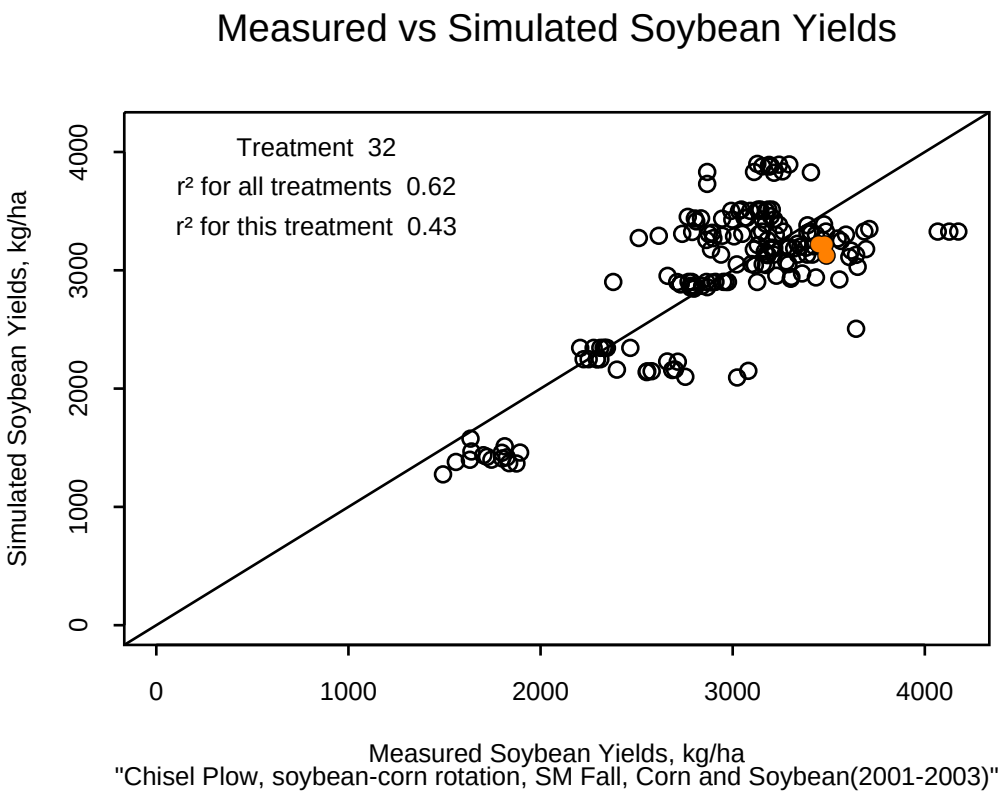

Measured vs Simulated Soybean Yields
Treatment 27
r² for all treatments 0.62
r² for this treatment NA
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
"Chisel Plow, corn-corn rotation, SM Fall and UAN Spring(1999)"

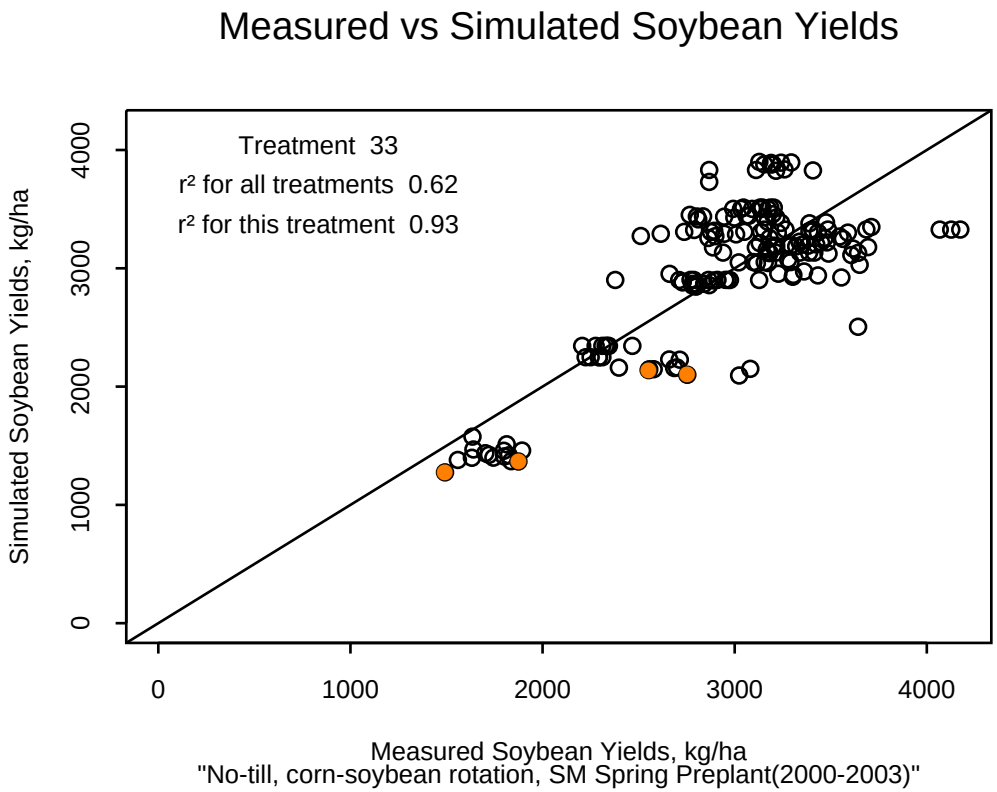

Measured vs Simulated Soybean Yields
Treatment 28
r² for all treatments 0.62
r² for this treatment 0.94
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
"Chisel Plow, corn-soybean rotation, SM Fall and UAN Spring(2000-2003)"

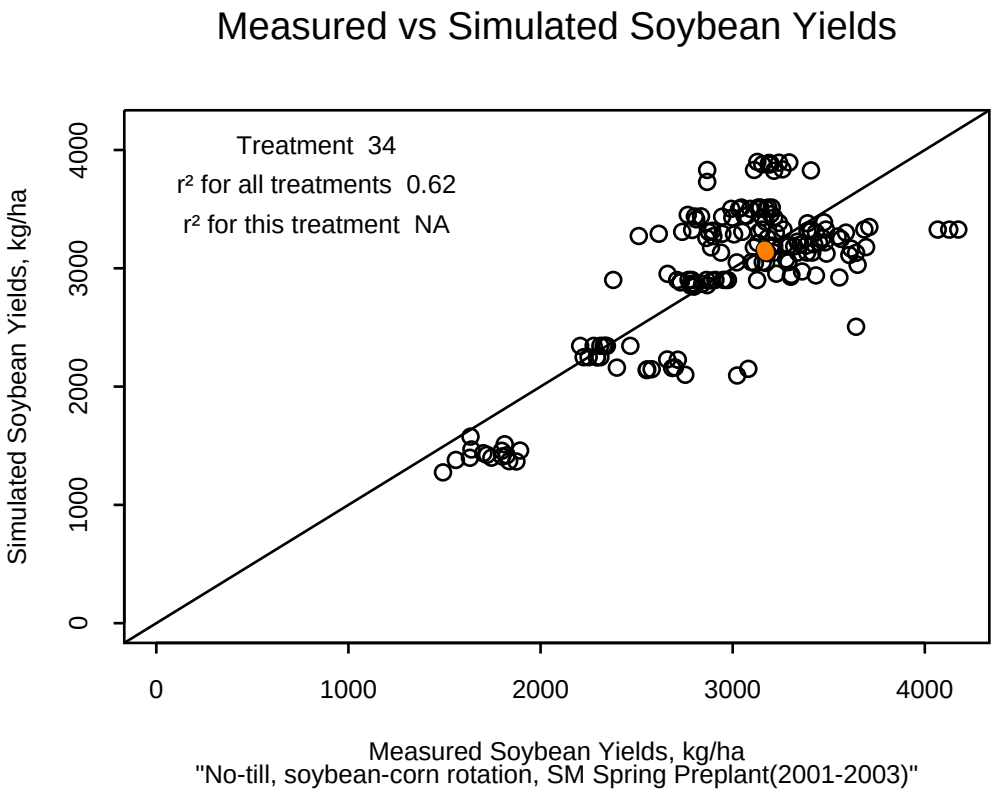

Measured vs Simulated Soybean Yields
Treatment 29
r² for all treatments 0.62
r² for this treatment 0.99
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
"Chisel Plow, soybean-corn rotation, SM Fall and UAN Spring(2000-2003)"

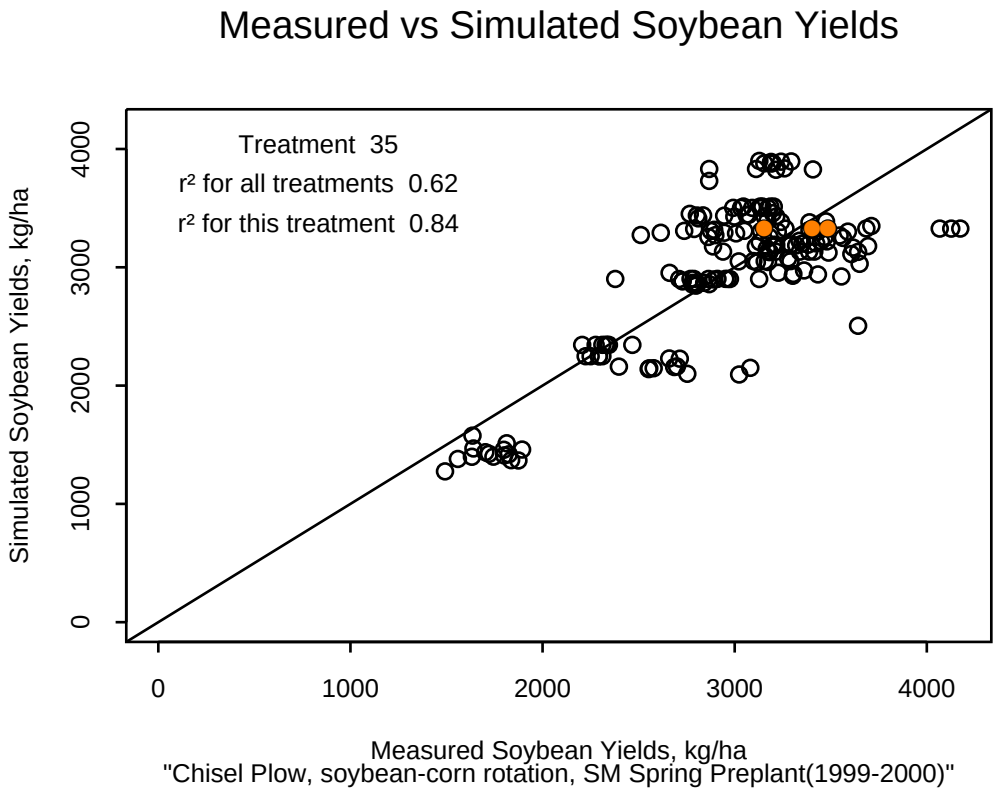

Measured vs Simulated Soybean Yields
Treatment 30
r² for all treatments 0.62
r² for this treatment NA
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
"Chisel Plow, corn-corn rotation, SM Fall, Corn and Soybean(2000)"

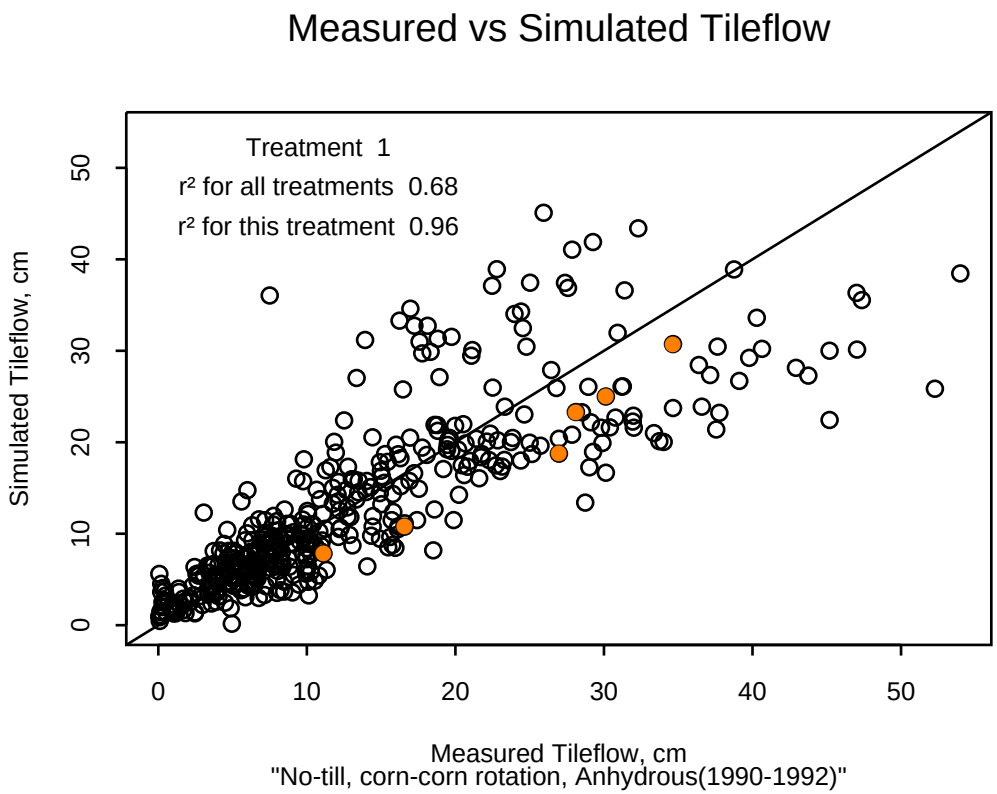

Measured vs Simulated Soybean Yields
Treatment 31
r² for all treatments 0.62
r² for this treatment 0.99
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
"Chisel Plow, corn-soybean rotation, SM Fall, Corn and Soybean(2001-2003)"

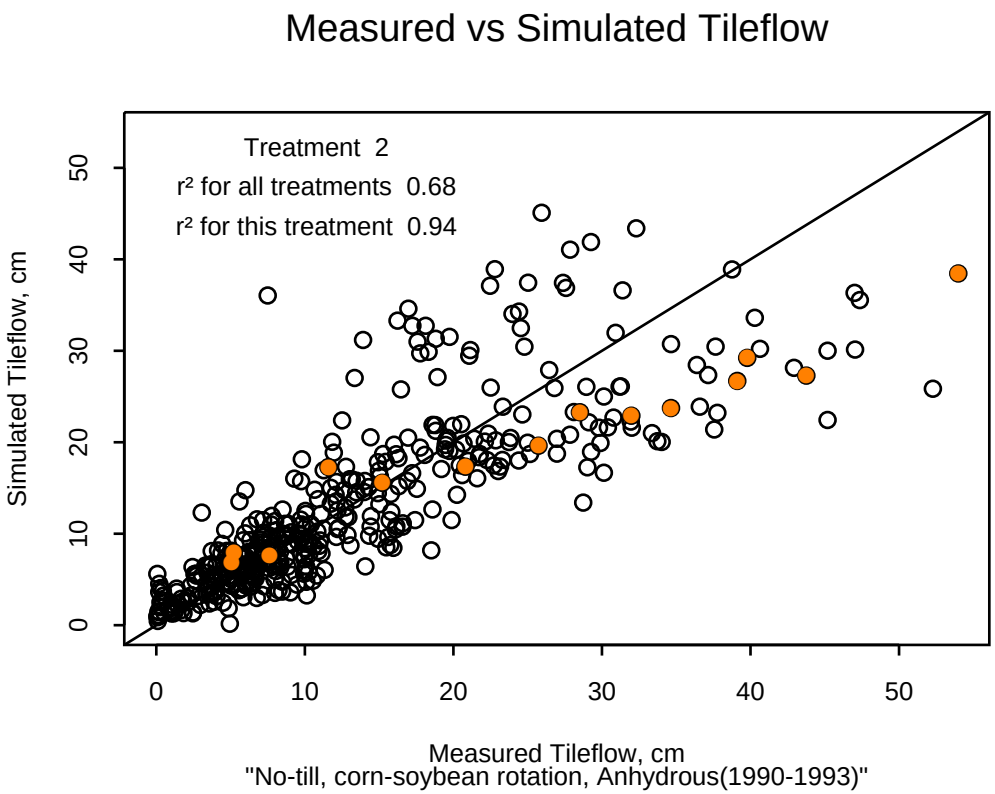

Measured vs Simulated Soybean Yields
Treatment 32
r² for all treatments 0.62
r² for this treatment 0.43
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
"Chisel Plow, soybean-corn rotation, SM Fall, Corn and Soybean(2001-2003)"

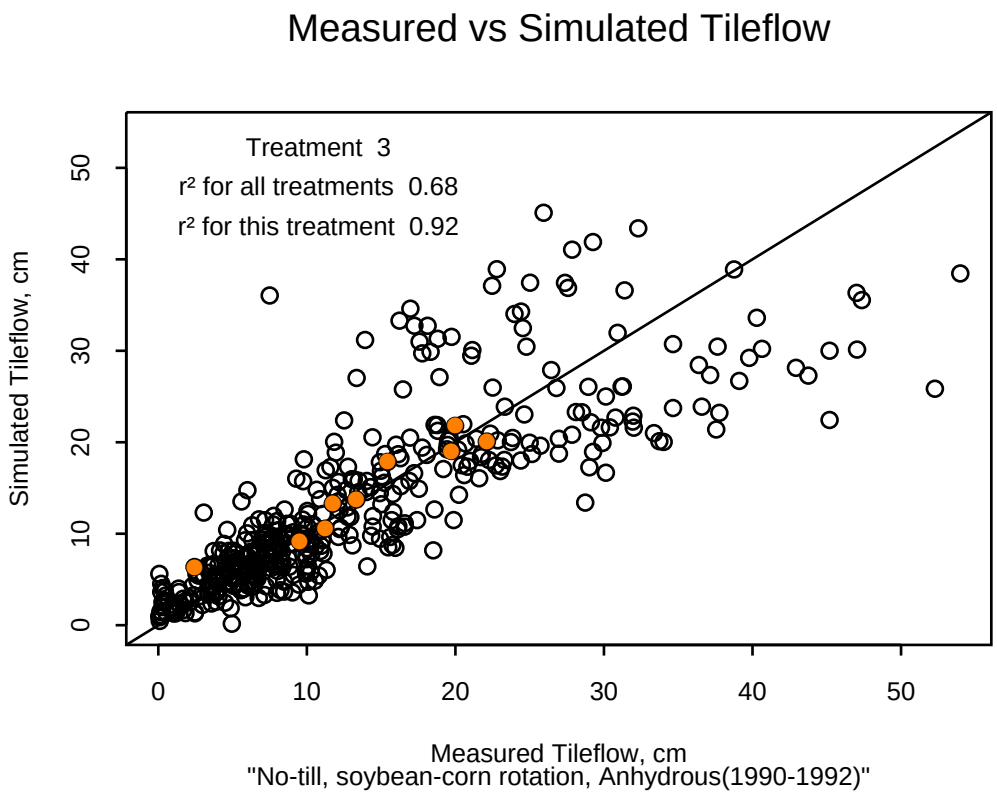

Measured vs Simulated Soybean Yields
Treatment 33
r² for all treatments 0.62
r² for this treatment 0.93
Simulated Soybean Yields, kg/ha
0
1000
2000
3000
4000
Measured Soybean Yields, kg/ha
"No-till, corn-soybean rotation, SM Spring Preplant(2000-2003)"

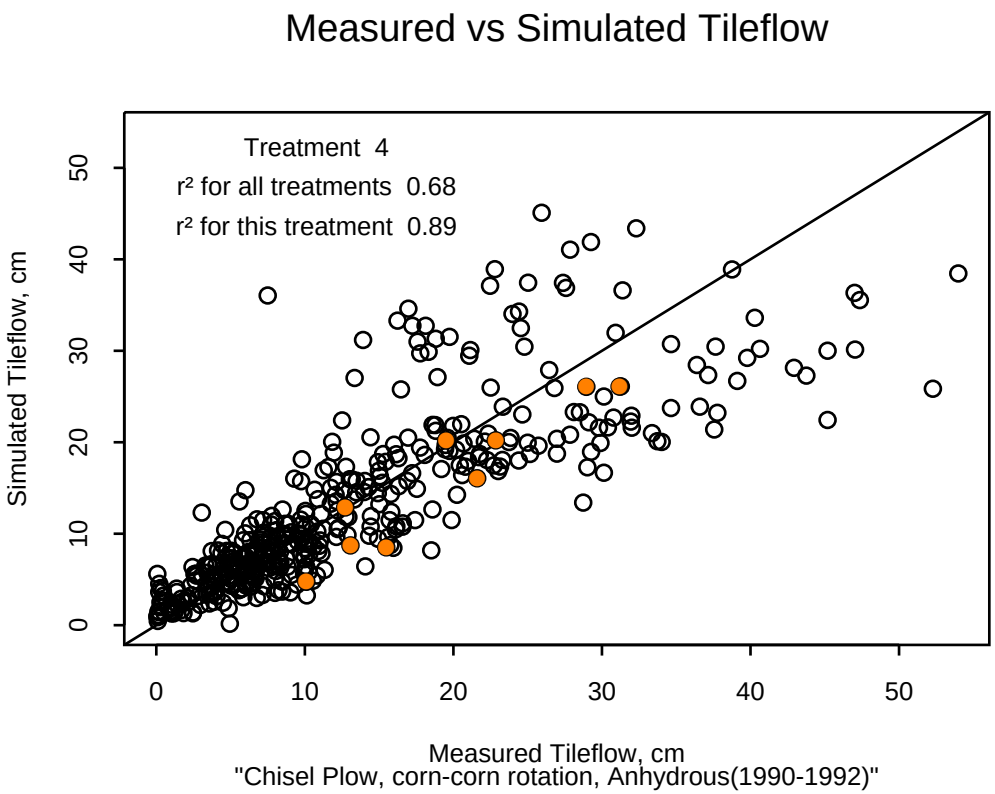

Measured vs Simulated Soybean Yields
Treatment 34
r² for all treatments 0.62
r² for this treatment NA
Simulated Soybean Yields, kg/ha
0
1000
2000
3000
4000
Measured Soybean Yields, kg/ha
"No-till, soybean-corn rotation, SM Spring Preplant(2001-2003)"

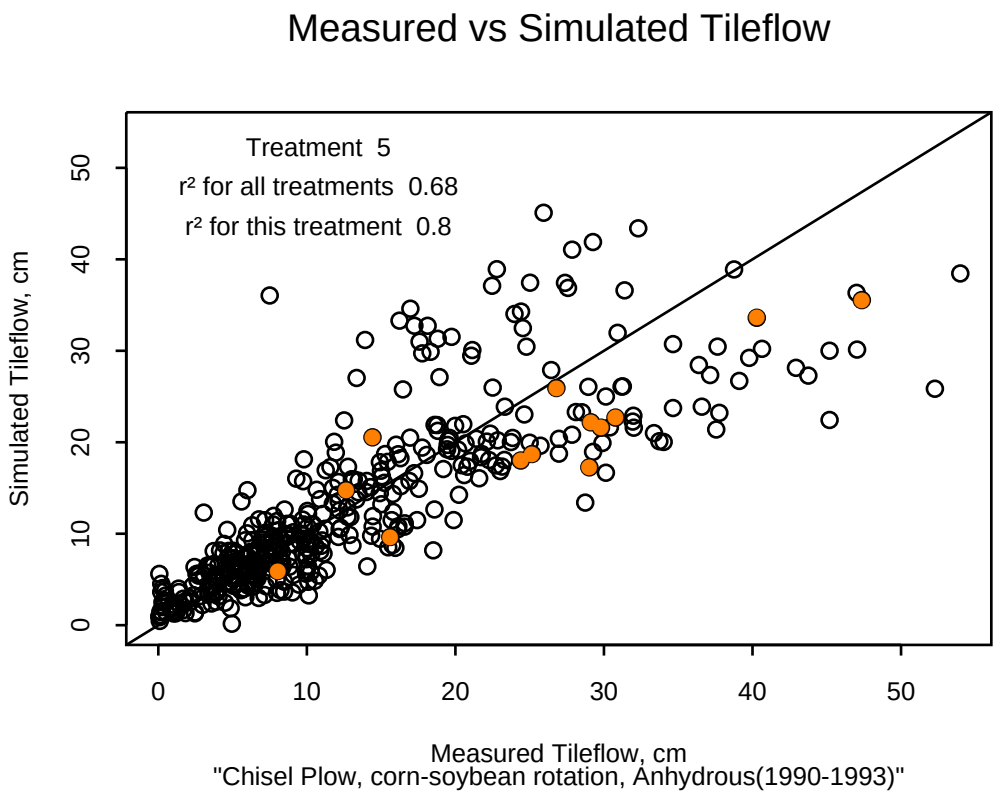

Measured vs Simulated Soybean Yields
Treatment 35
r² for all treatments 0.62
r² for this treatment 0.84
Simulated Soybean Yields, kg/ha
0
1000
2000
3000
4000
Measured Soybean Yields, kg/ha
"Chisel Plow, soybean-corn rotation, SM Spring Preplant(1999-2000)"

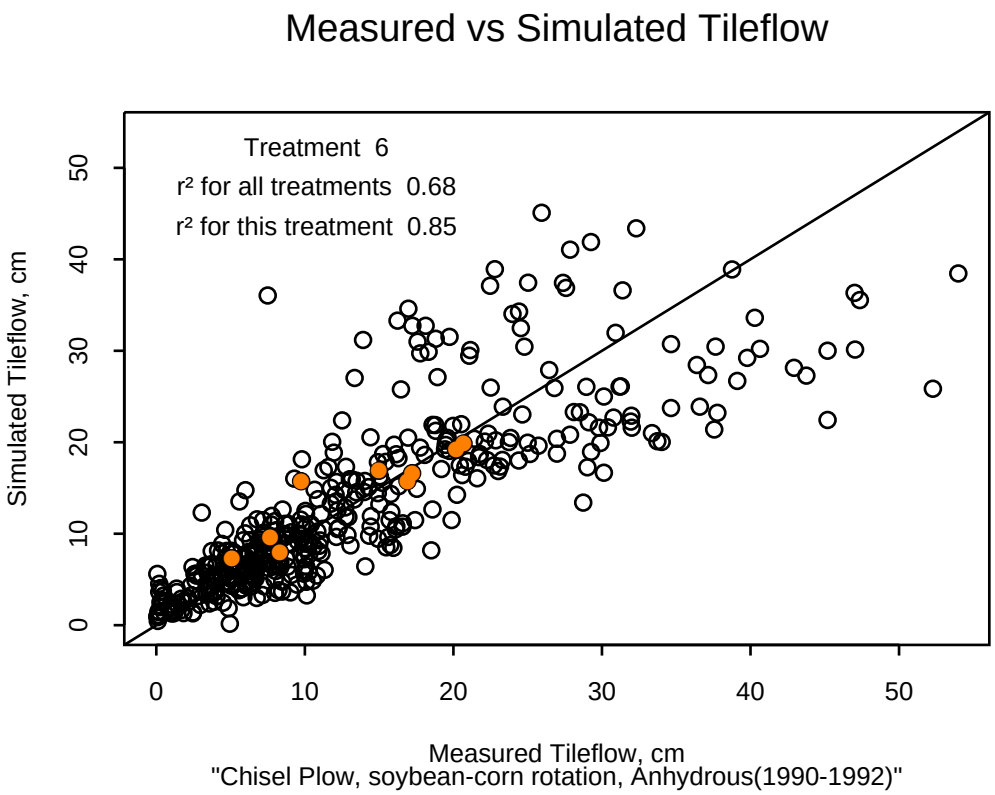

Measured vs Simulated Tileflow
Treatment 1
r² for all treatments 0.68
r² for this treatment 0.96
Simulated Tileflow, cm
Measured Tileflow, cm
"No-till, corn-corn rotation, Anhydrous(1990-1992)"

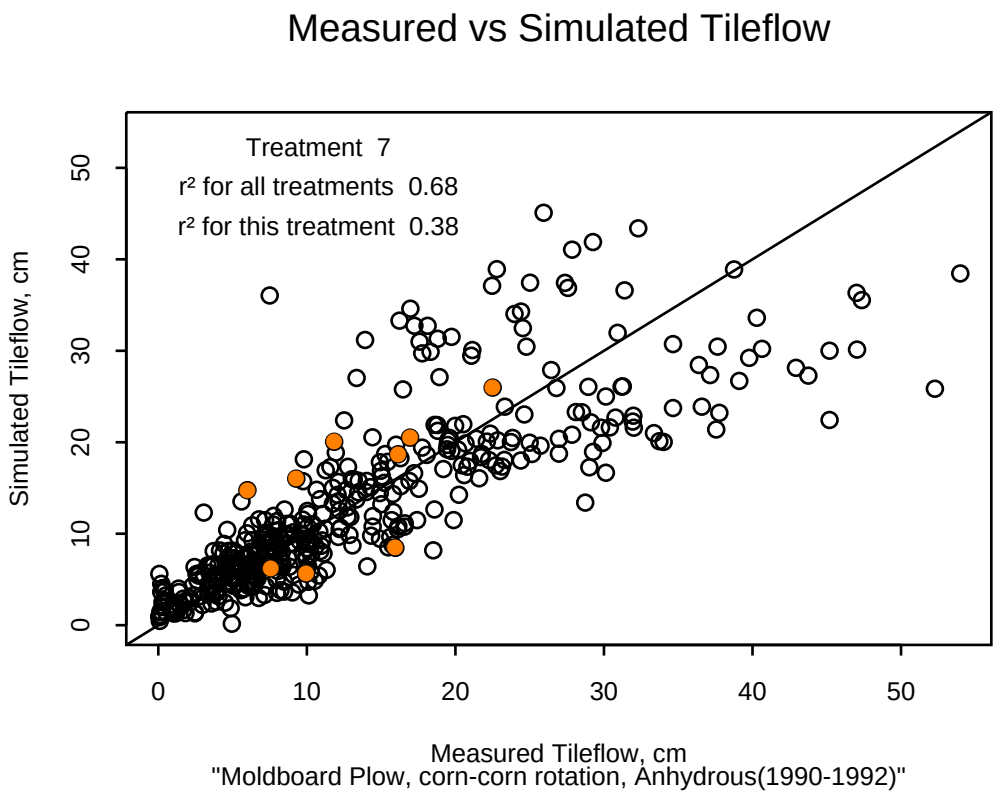

Measured vs Simulated Tileflow
Treatment 2
r² for all treatments 0.68
r² for this treatment 0.94
Simulated Tileflow, cm
Measured Tileflow, cm
"No-till, corn-soybean rotation, Anhydrous(1990-1993)"

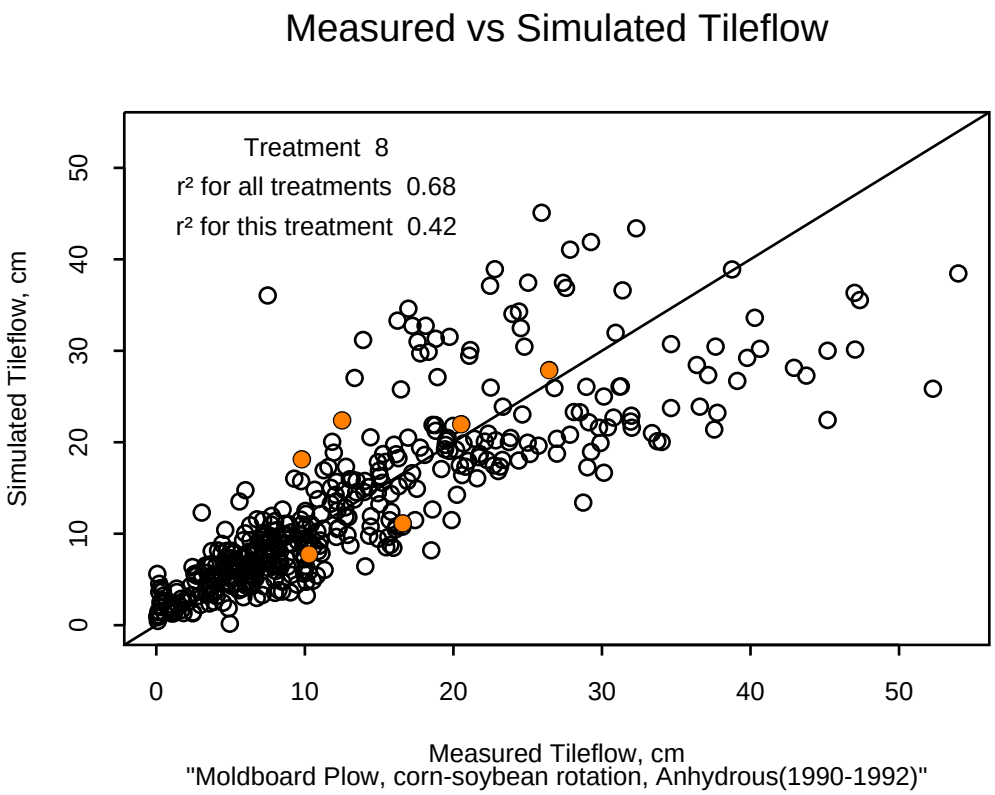

Measured vs Simulated Tileflow
Treatment 3
r² for all treatments 0.68
r² for this treatment 0.92
Simulated Tileflow, cm
Measured Tileflow, cm
"No-till, soybean-corn rotation, Anhydrous(1990-1992)"

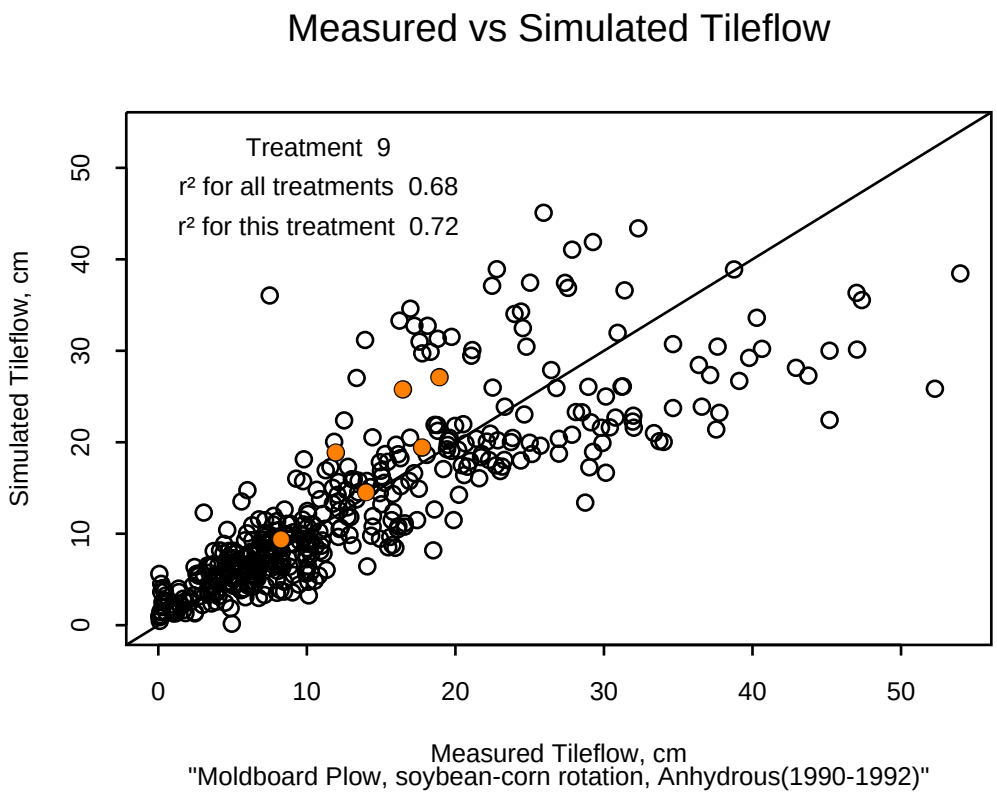

Measured vs Simulated Tileflow
Treatment 4
r² for all treatments 0.68
r² for this treatment 0.89
Simulated Tileflow, cm
Measured Tileflow, cm
"Chisel Plow, corn-corn rotation, Anhydrous(1990-1992)"

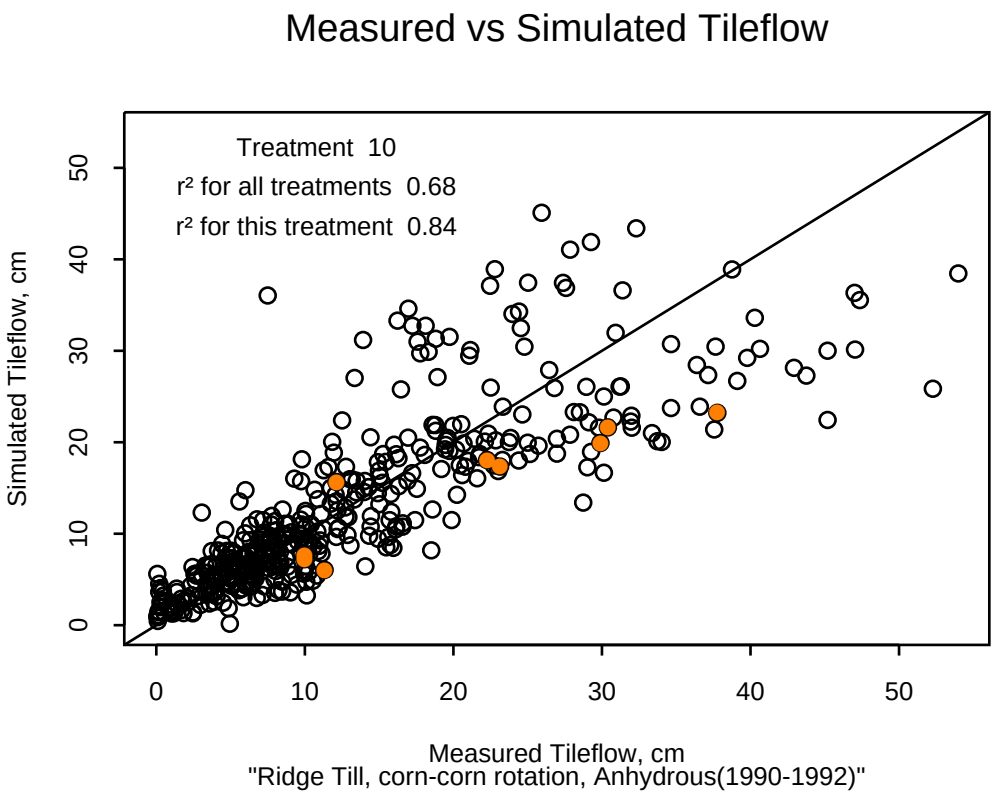

Measured vs Simulated Tileflow
Treatment 5
r² for all treatments 0.68
r² for this treatment 0.8
Simulated Tileflow, cm
Measured Tileflow, cm
"Chisel Plow, corn-soybean rotation, Anhydrous(1990-1993)"

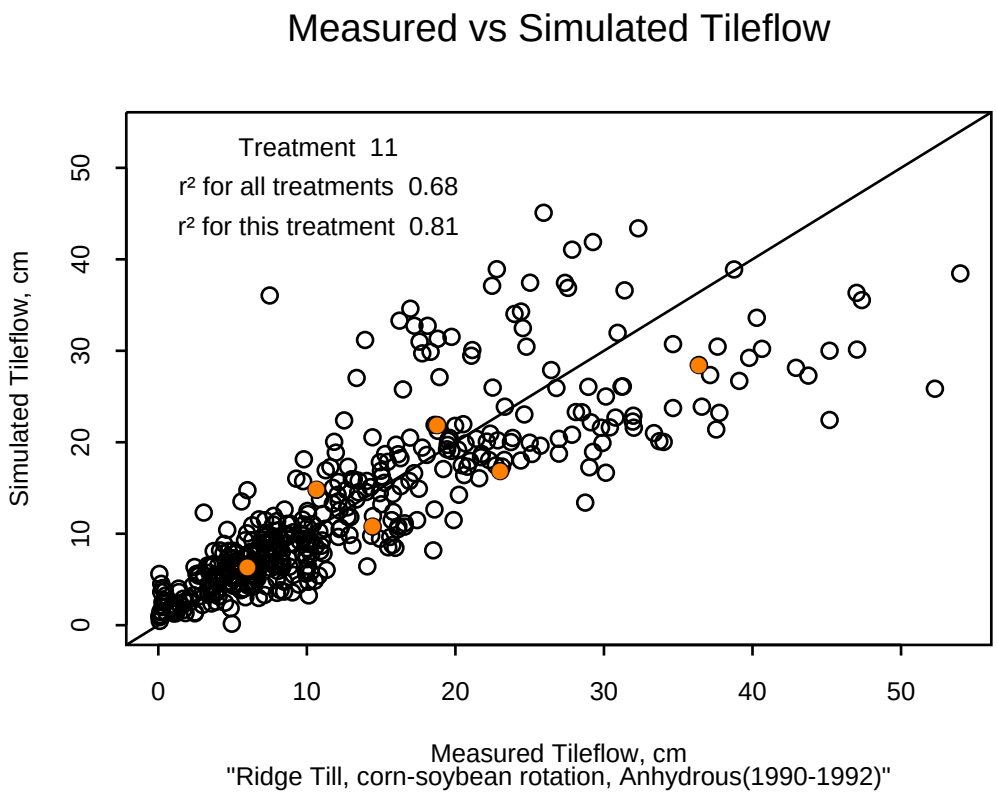

Measured vs Simulated Tileflow
Treatment 6
r² for all treatments 0.68
r² for this treatment 0.85
Simulated Tileflow, cm
Measured Tileflow, cm
"Chisel Plow, soybean-corn rotation, Anhydrous(1990-1992)"

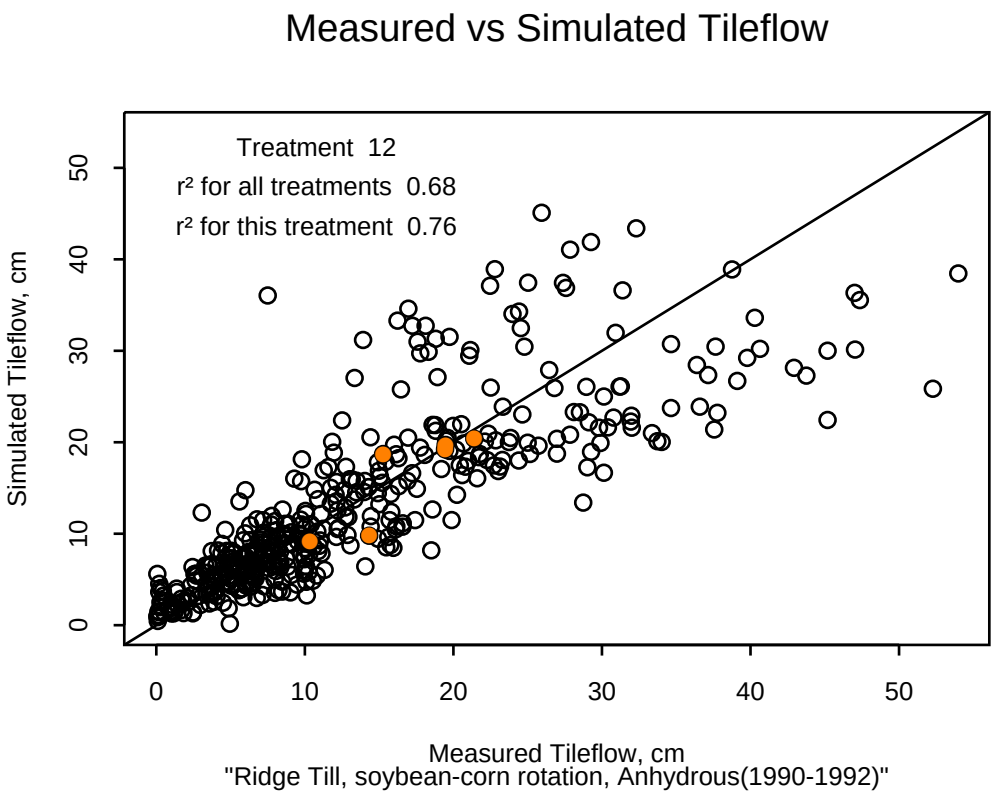

Measured vs Simulated Tileflow
Treatment 7
r² for all treatments 0.68
r² for this treatment 0.38
Simulated Tileflow, cm
Measured Tileflow, cm
"Moldboard Plow, corn-corn rotation, Anhydrous(1990-1992)"

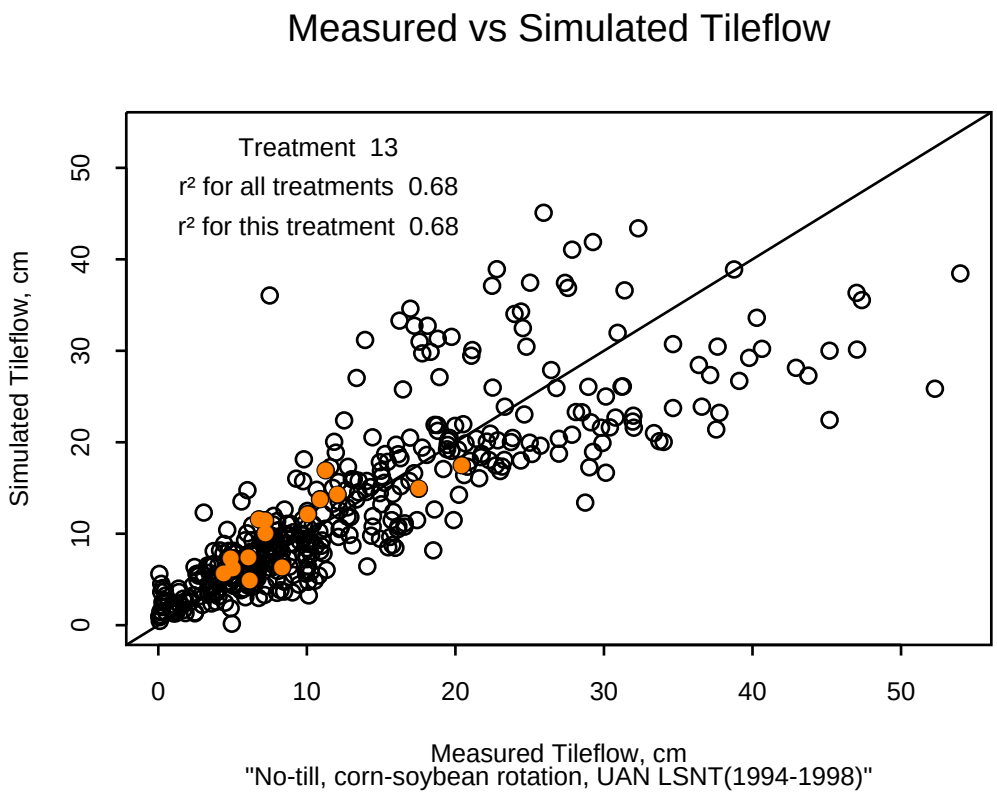

Measured vs Simulated Tileflow
Treatment 8
r² for all treatments 0.68
r² for this treatment 0.42
Simulated Tileflow, cm
Measured Tileflow, cm
"Moldboard Plow, corn-soybean rotation, Anhydrous(1990-1992)"

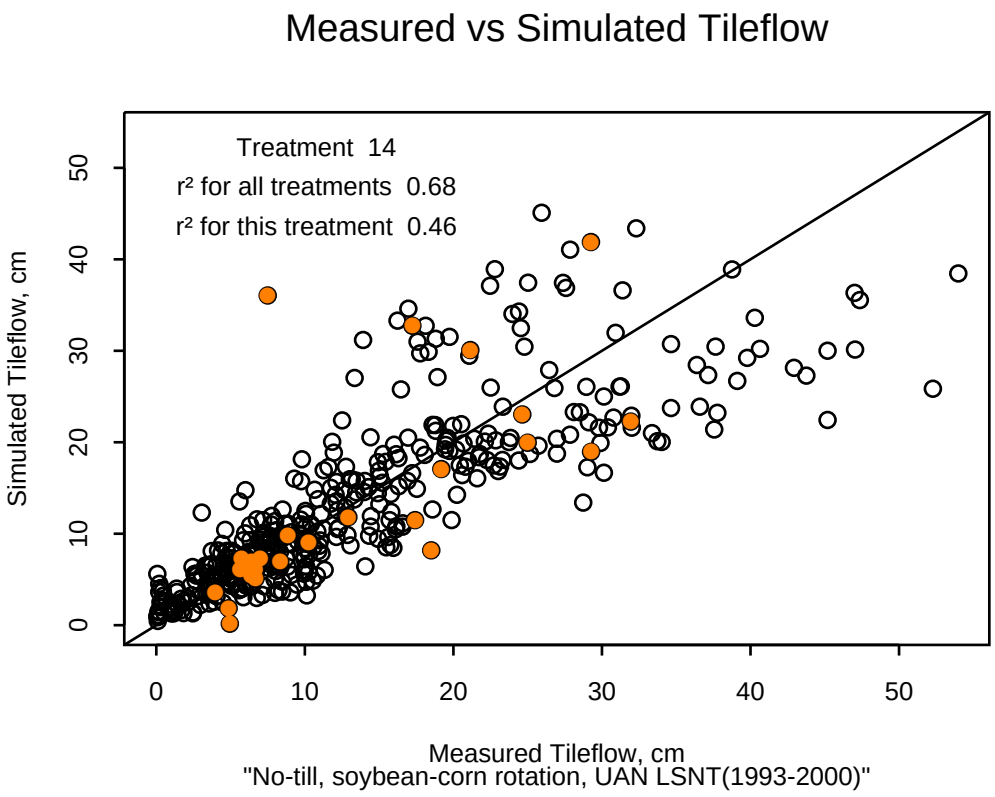

Measured vs Simulated Tileflow
Treatment 9
r² for all treatments 0.68
r² for this treatment 0.72
Simulated Tileflow, cm
Measured Tileflow, cm
"Moldboard Plow, soybean-corn rotation, Anhydrous(1990-1992)"

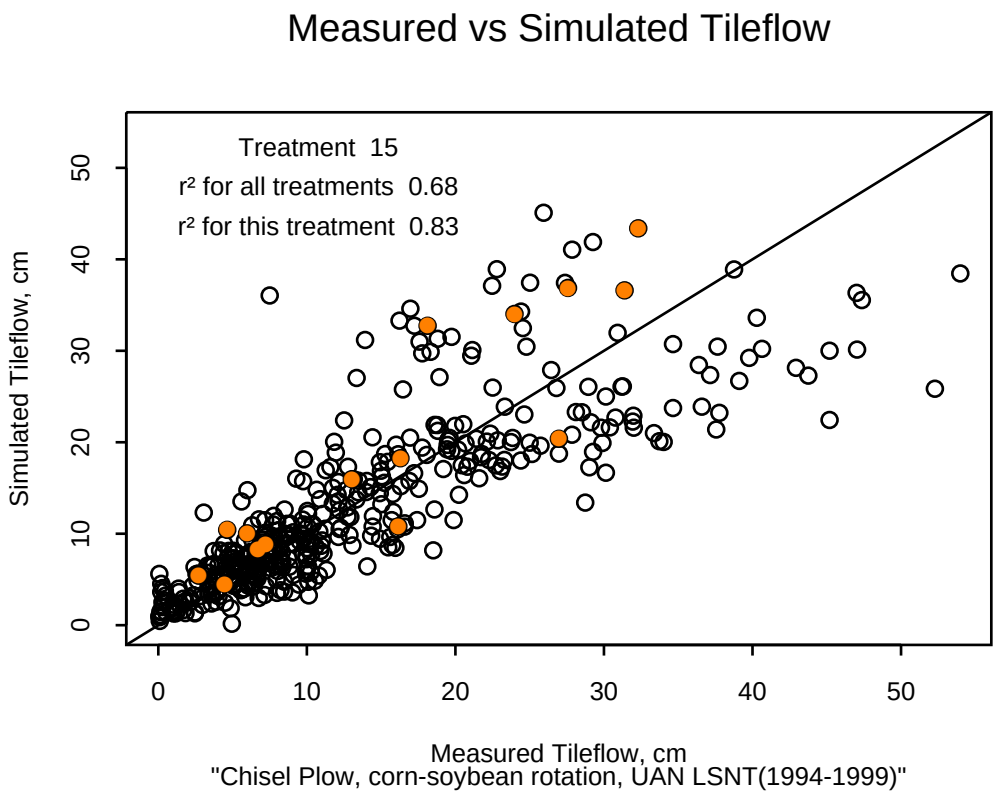

Measured vs Simulated Tileflow
Treatment 10
r² for all treatments 0.68
r² for this treatment 0.84
Simulated Tileflow, cm
Measured Tileflow, cm
"Ridge Till, corn-corn rotation, Anhydrous(1990-1992)"

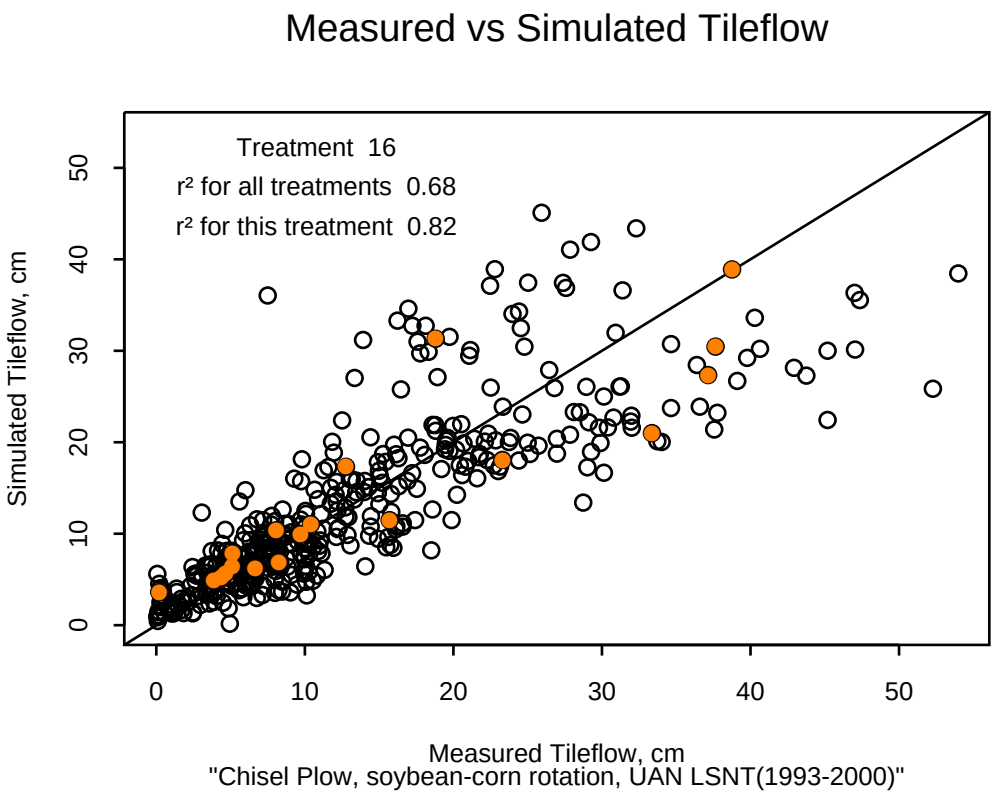

Measured vs Simulated Tileflow
Treatment 11
r² for all treatments 0.68
r² for this treatment 0.81
Simulated Tileflow, cm
Measured Tileflow, cm
"Ridge Till, corn-soybean rotation, Anhydrous(1990-1992)"

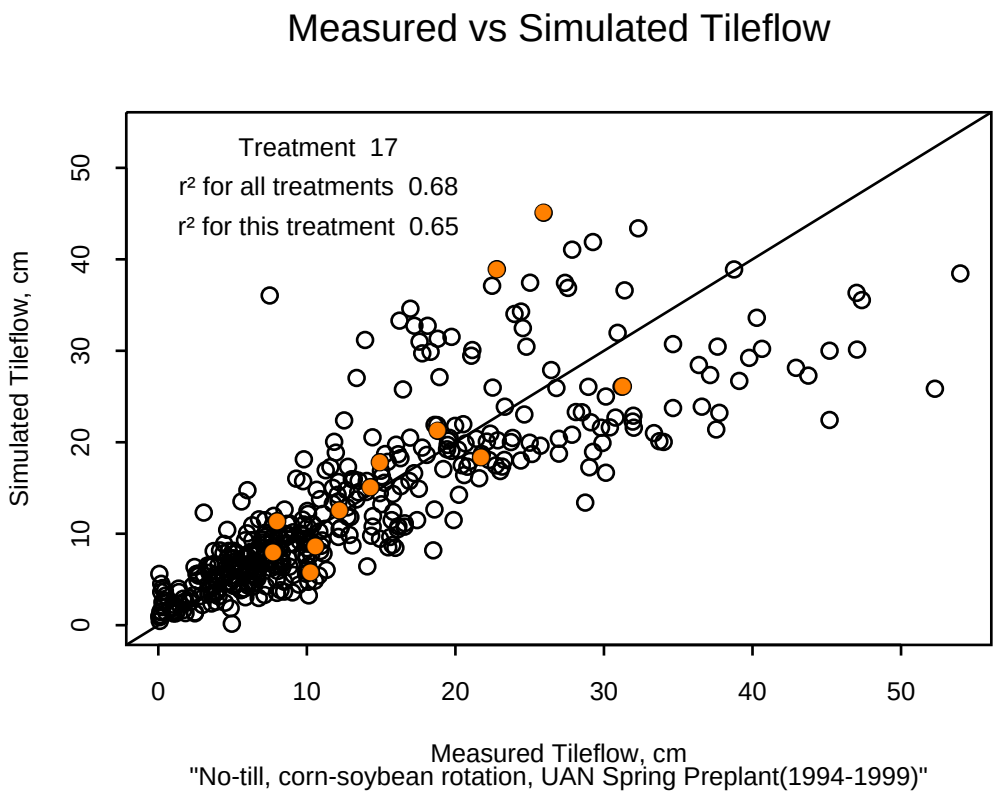

Measured vs Simulated Tileflow
Treatment 12
r² for all treatments 0.68
r² for this treatment 0.76
Simulated Tileflow, cm
Measured Tileflow, cm
"Ridge Till, soybean-corn rotation, Anhydrous(1990-1992)"

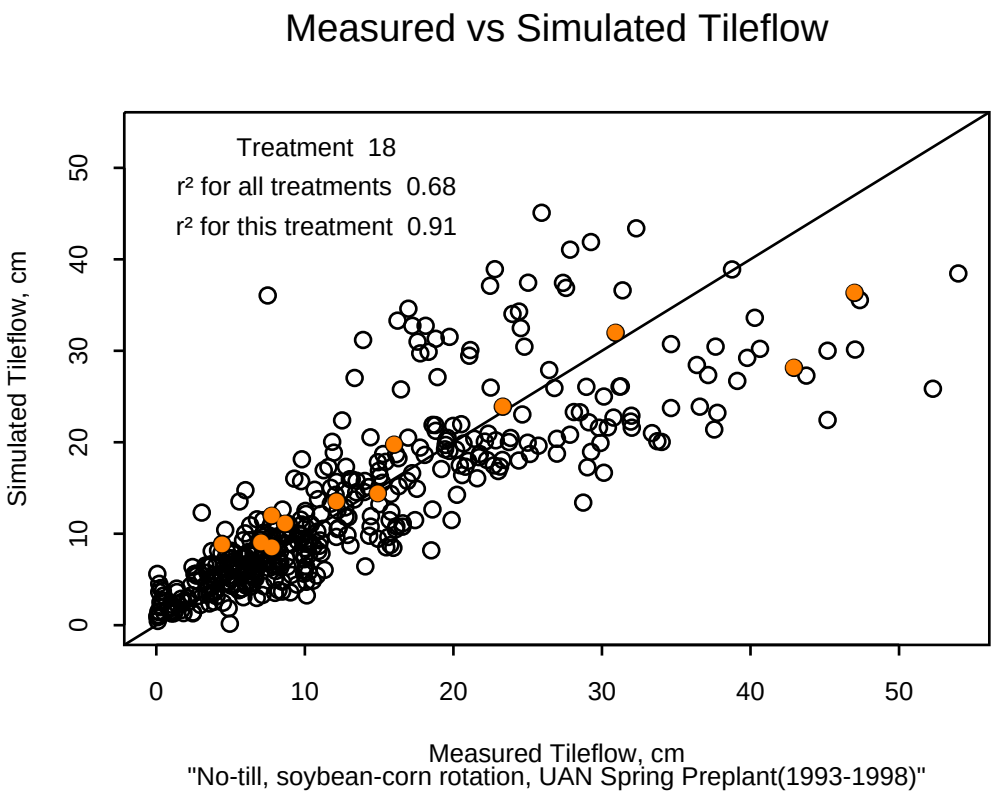

Measured vs Simulated Tileflow
Treatment 13
r² for all treatments 0.68
r² for this treatment 0.68
Simulated Tileflow, cm
Measured Tileflow, cm
"No-till, corn-soybean rotation, UAN LSNT(1994-1998)"

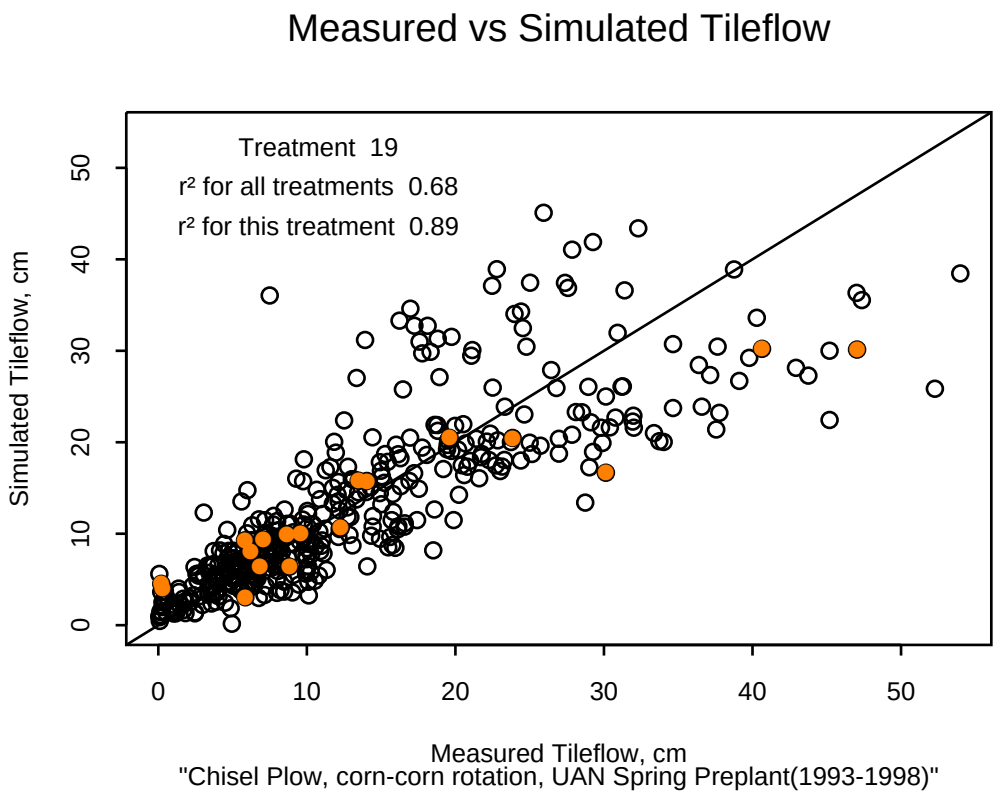

Measured vs Simulated Tileflow
Treatment 14
r² for all treatments 0.68
r² for this treatment 0.46
Simulated Tileflow, cm
Measured Tileflow, cm
"No-till, soybean-corn rotation, UAN LSNT(1993-2000)"

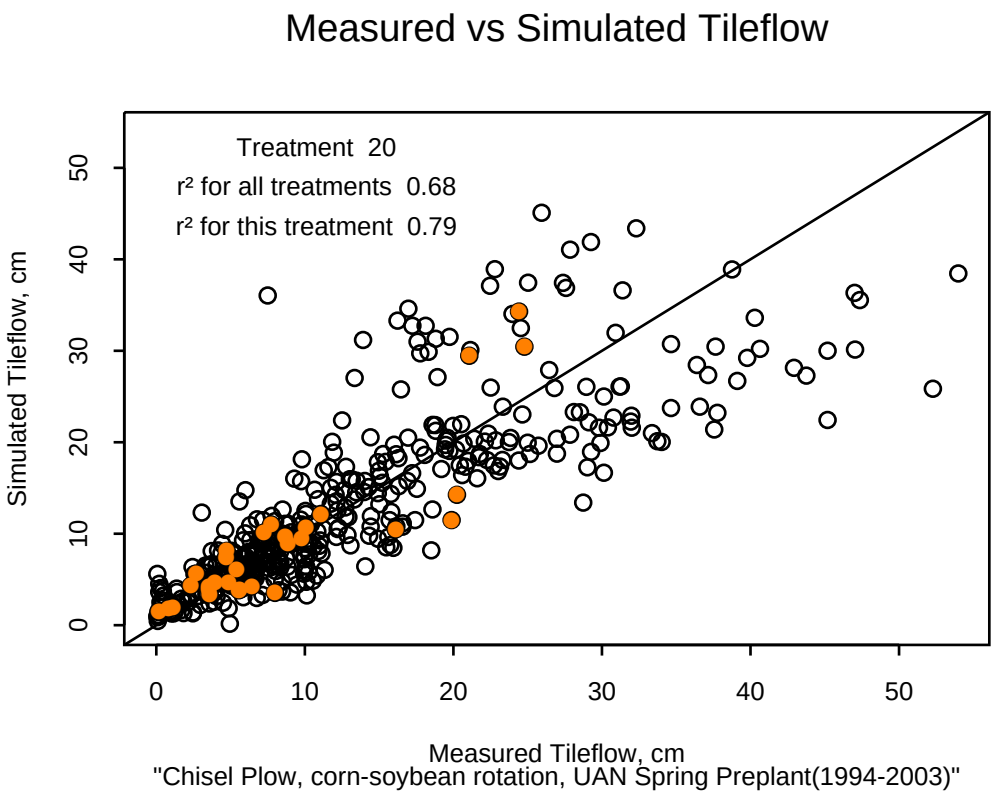

Measured vs Simulated Tileflow
Treatment 15
r² for all treatments 0.68
r² for this treatment 0.83
Simulated Tileflow, cm
Measured Tileflow, cm
"Chisel Plow, corn-soybean rotation, UAN LSNT(1994-1999)"

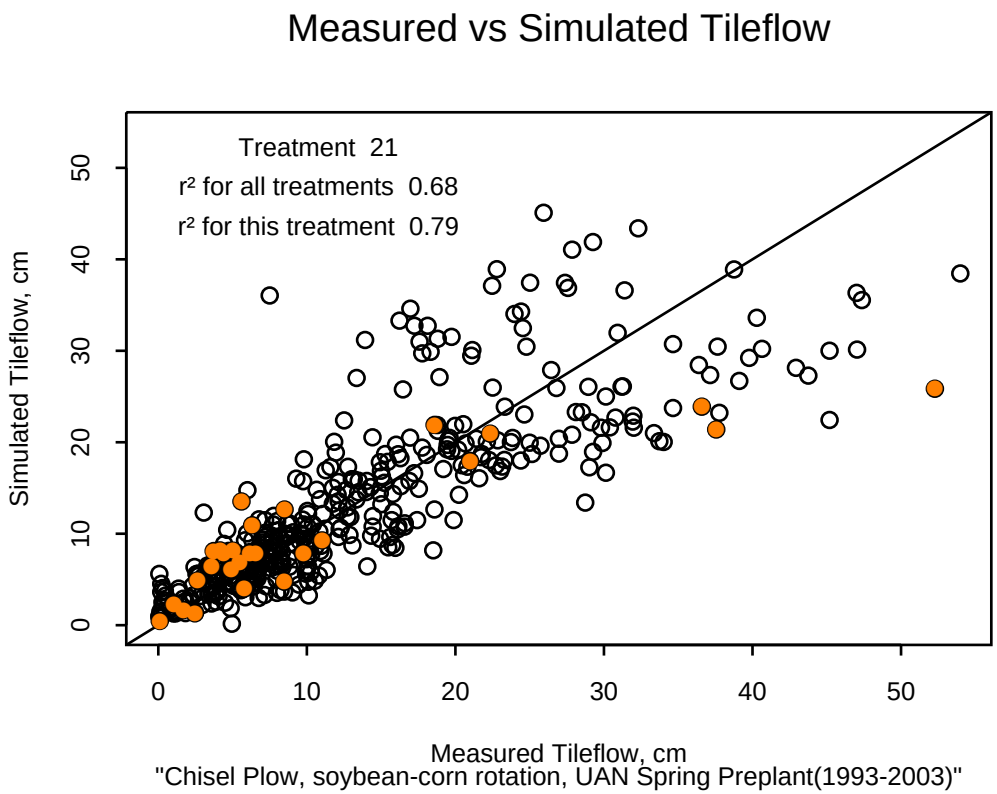

Measured vs Simulated Tileflow
Treatment 16
r² for all treatments 0.68
r² for this treatment 0.82
Simulated Tileflow, cm
Measured Tileflow, cm
"Chisel Plow, soybean-corn rotation, UAN LSNT(1993-2000)"

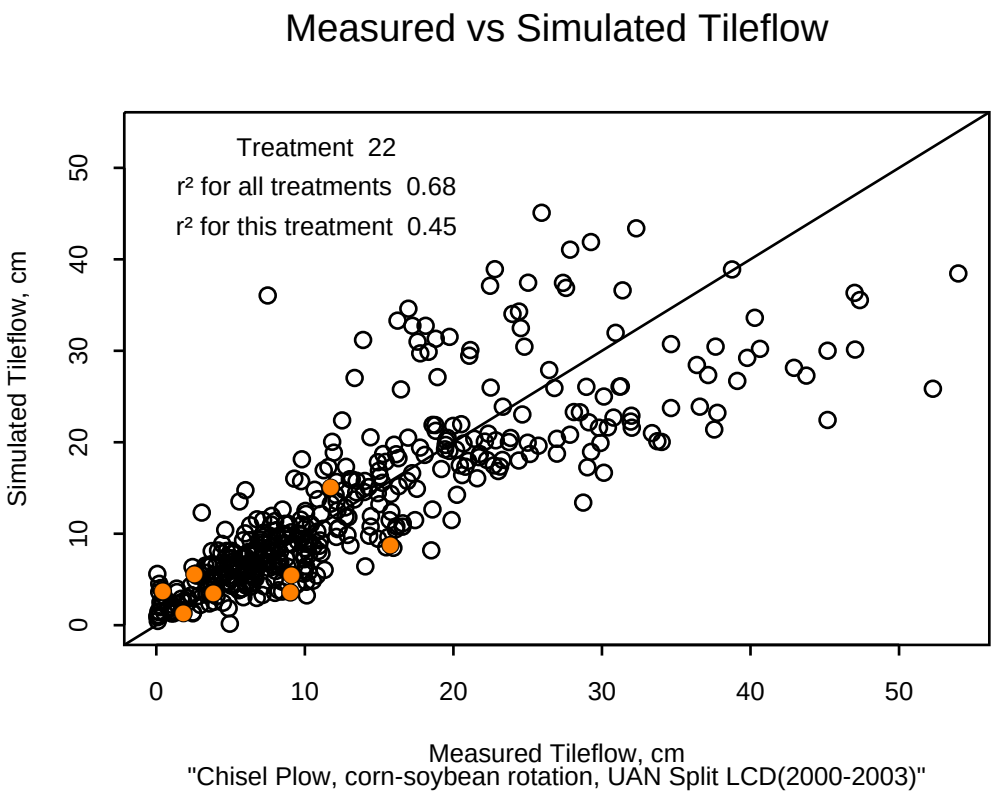

Measured vs Simulated Tileflow
Treatment 17
r² for all treatments 0.68
r² for this treatment 0.65
Simulated Tileflow, cm
Measured Tileflow, cm
"No-till, corn-soybean rotation, UAN Spring Preplant(1994-1999)"

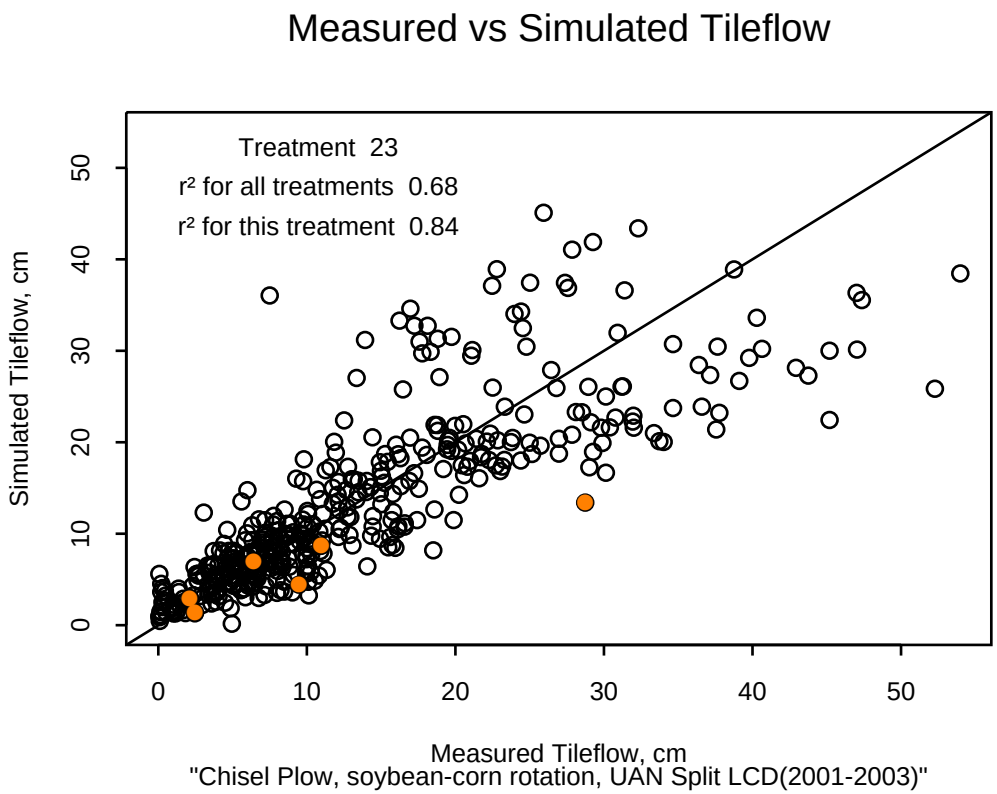

Measured vs Simulated Tileflow
Treatment 18
r² for all treatments 0.68
r² for this treatment 0.91
Simulated Tileflow, cm
Measured Tileflow, cm
"No-till, soybean-corn rotation, UAN Spring Preplant(1993-1998)"

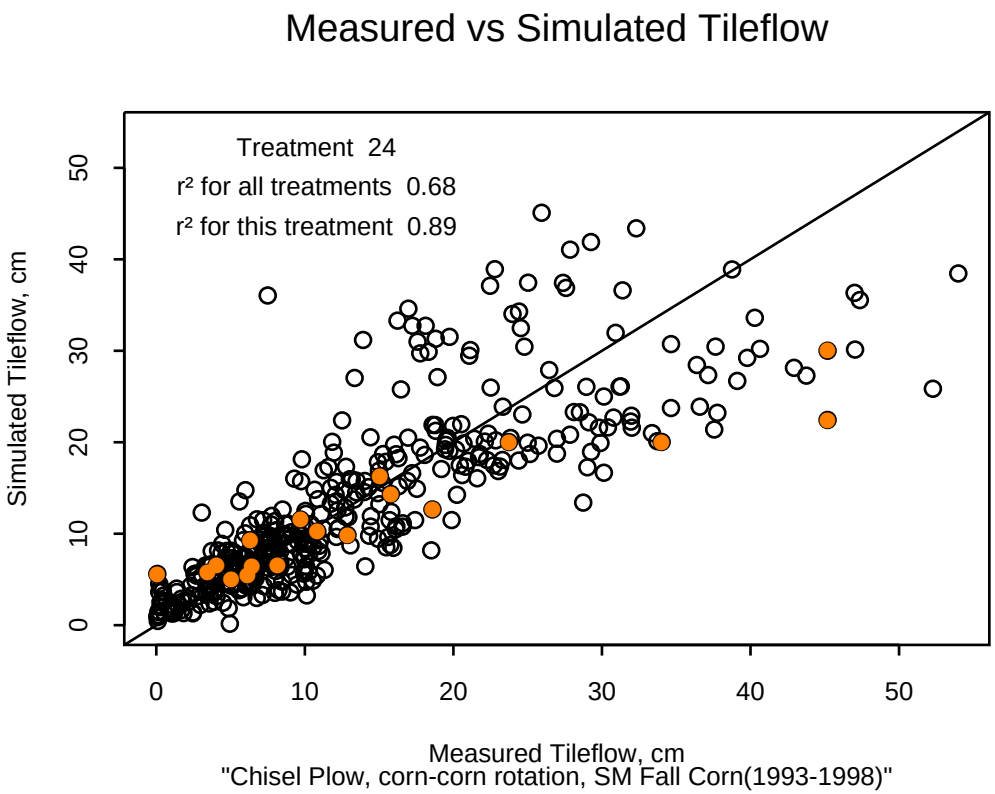

Measured vs Simulated Tileflow
Treatment 19
r² for all treatments 0.68
r² for this treatment 0.89
Simulated Tileflow, cm
Measured Tileflow, cm
"Chisel Plow, corn-corn rotation, UAN Spring Preplant(1993-1998)"

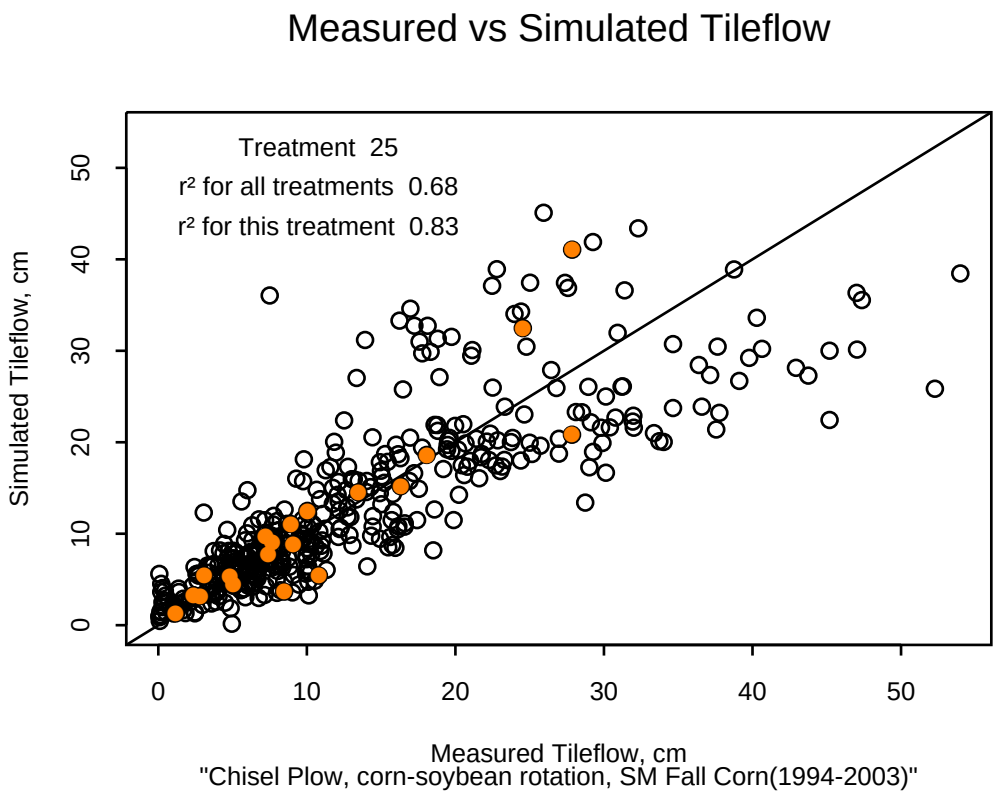

Measured vs Simulated Tileflow
Treatment 20
r² for all treatments 0.68
r² for this treatment 0.79
Simulated Tileflow, cm
Measured Tileflow, cm
"Chisel Plow, corn-soybean rotation, UAN Spring Preplant(1994-2003)"

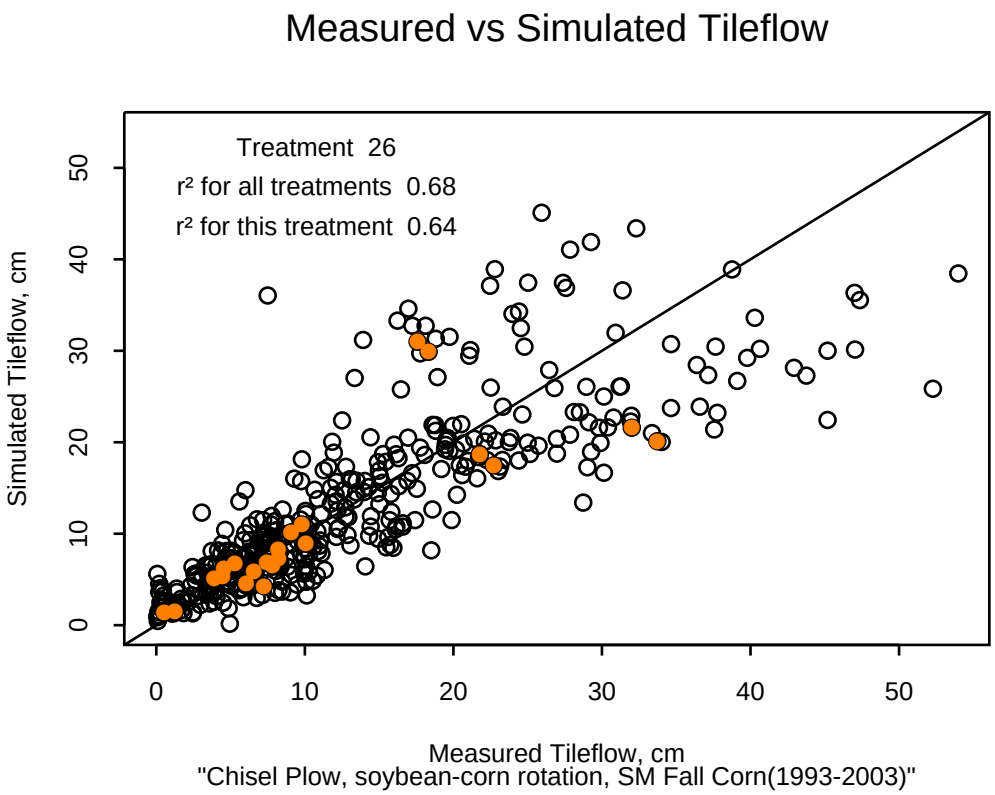

Measured vs Simulated Tileflow
Treatment 21
r² for all treatments 0.68
r² for this treatment 0.79
Simulated Tileflow, cm
Measured Tileflow, cm
"Chisel Plow, soybean-corn rotation, UAN Spring Preplant(1993-2003)"

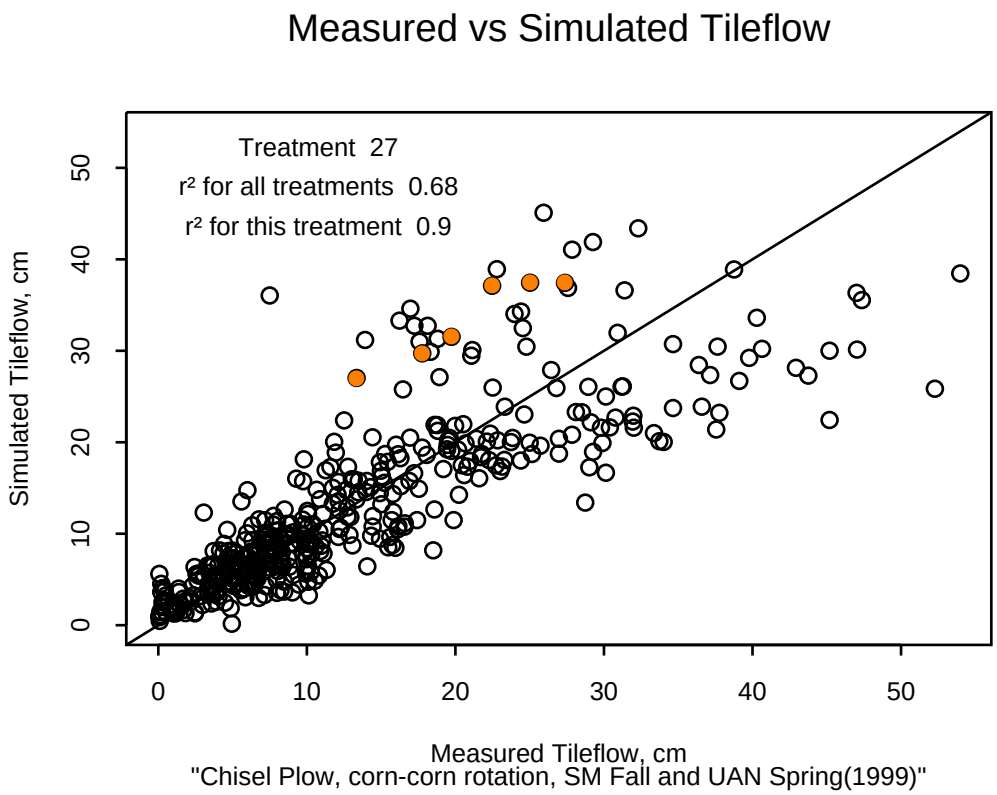

Measured vs Simulated Tileflow
Treatment 22
r² for all treatments 0.68
r² for this treatment 0.45
Simulated Tileflow, cm
Measured Tileflow, cm
"Chisel Plow, corn-soybean rotation, UAN Split LCD(2000-2003)"

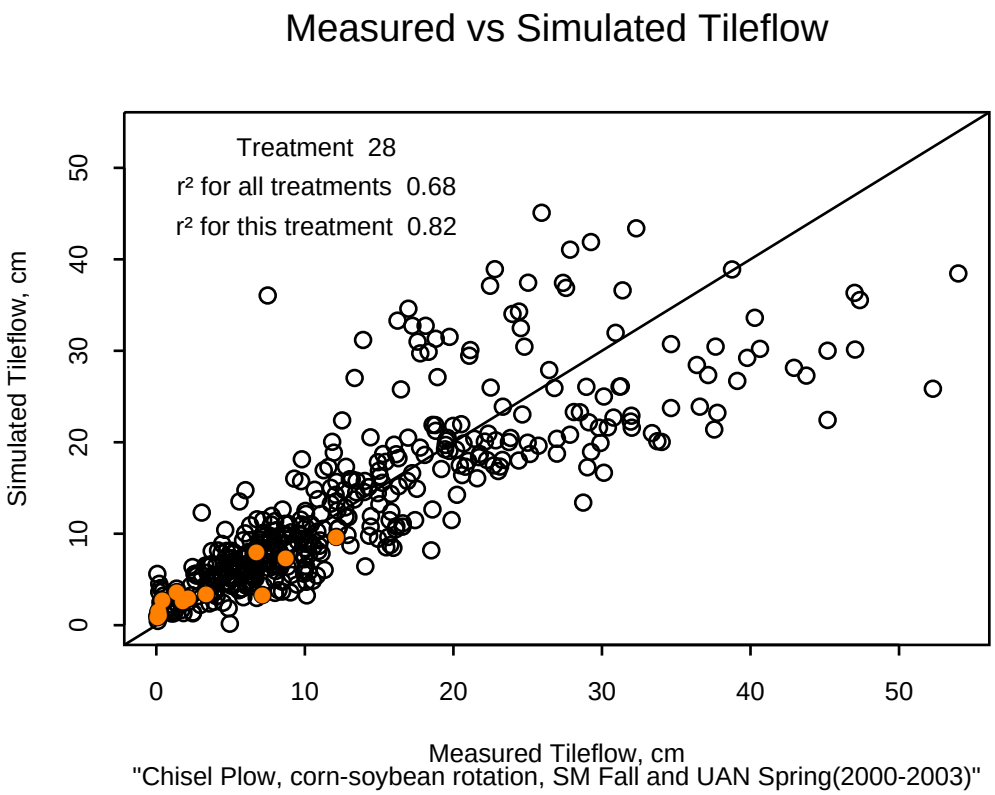

Measured vs Simulated Tileflow
Treatment 23
r² for all treatments 0.68
r² for this treatment 0.84
Simulated Tileflow, cm
Measured Tileflow, cm
"Chisel Plow, soybean-corn rotation, UAN Split LCD(2001-2003)"

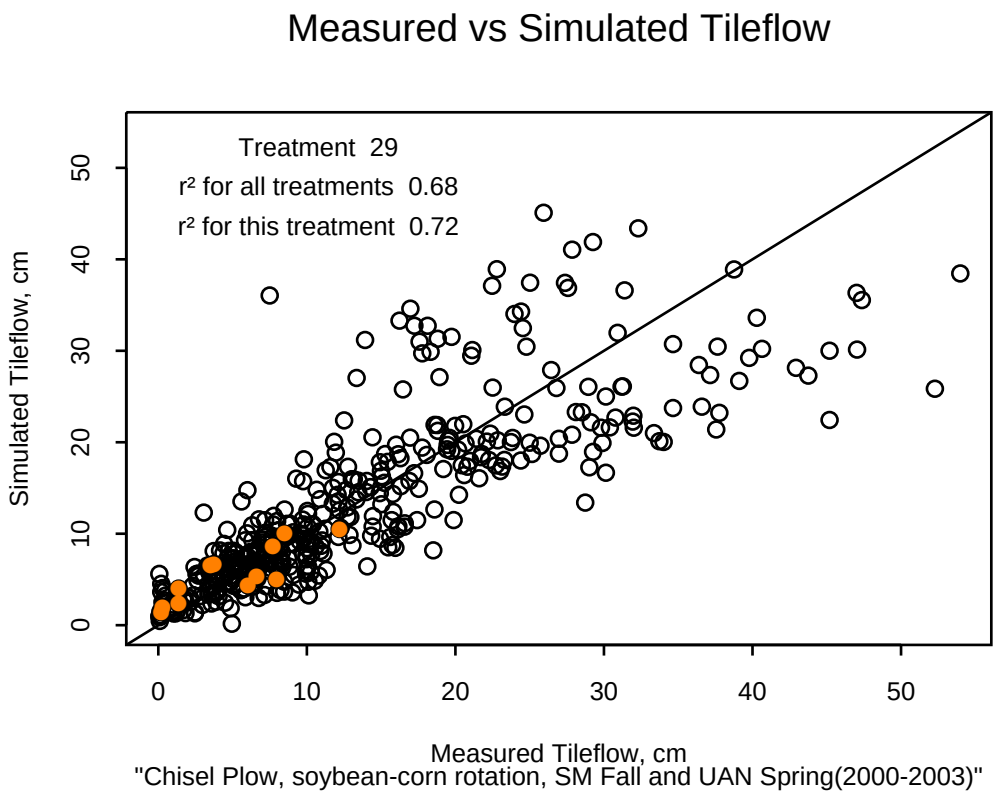

Measured vs Simulated Tileflow
Treatment 24
r² for all treatments 0.68
r² for this treatment 0.89
Simulated Tileflow, cm
Measured Tileflow, cm
"Chisel Plow, corn-corn rotation, SM Fall Corn(1993-1998)"

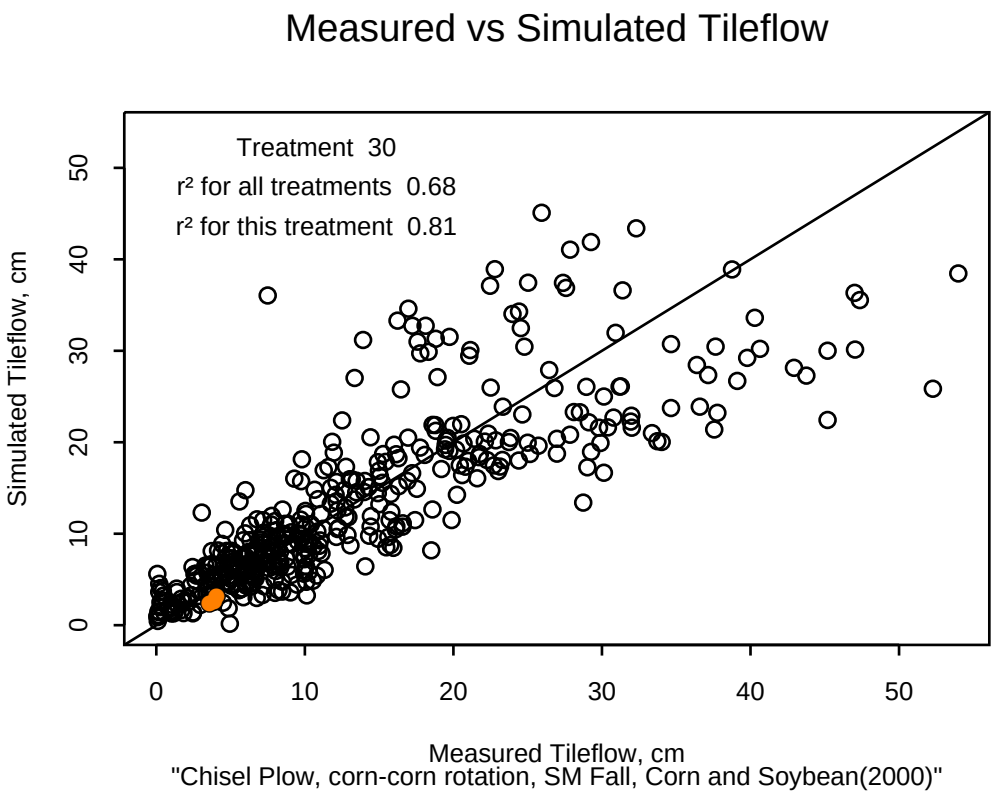

Measured vs Simulated Tileflow
Treatment 25
r² for all treatments 0.68
r² for this treatment 0.83
Simulated Tileflow, cm
Measured Tileflow, cm
"Chisel Plow, corn-soybean rotation, SM Fall Corn(1994-2003)"

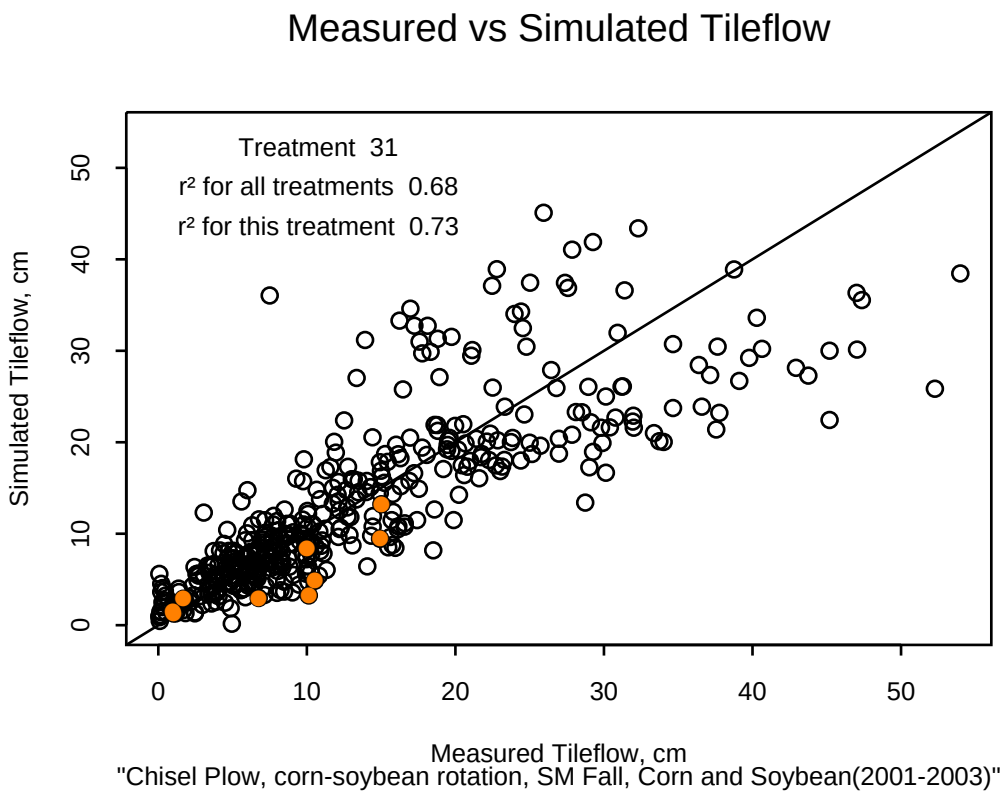

Measured vs Simulated Tileflow
Treatment 26
r² for all treatments 0.68
r² for this treatment 0.64
Simulated Tileflow, cm
Measured Tileflow, cm
"Chisel Plow, soybean-corn rotation, SM Fall Corn(1993-2003)"

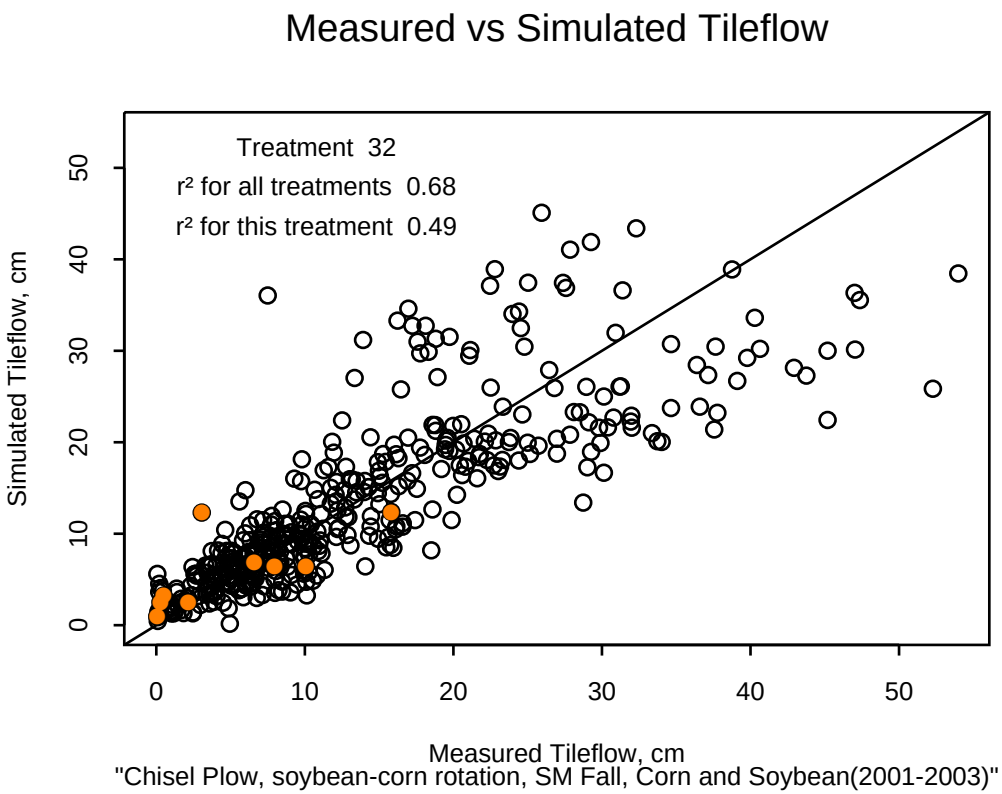

Measured vs Simulated Tileflow
Treatment 27
r² for all treatments 0.68
r² for this treatment 0.9
Simulated Tileflow, cm
Measured Tileflow, cm
"Chisel Plow, corn-corn rotation, SM Fall and UAN Spring(1999)"

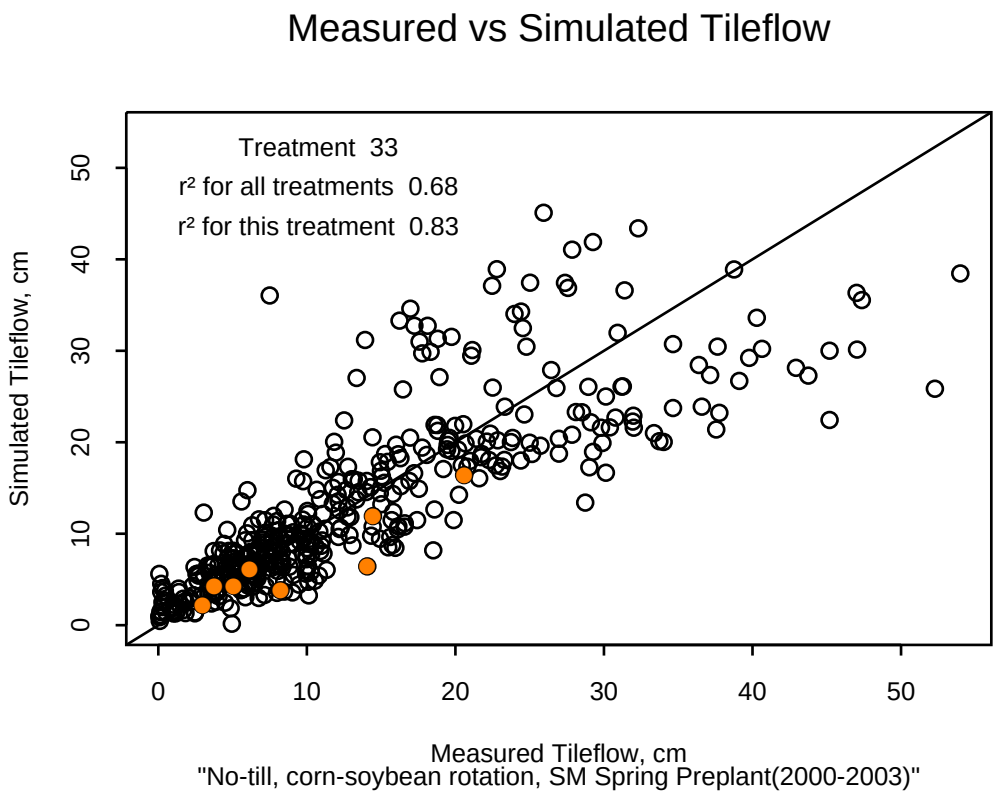

Measured vs Simulated Tileflow
Treatment 28
r² for all treatments 0.68
r² for this treatment 0.82
Simulated Tileflow, cm
Measured Tileflow, cm
"Chisel Plow, corn-soybean rotation, SM Fall and UAN Spring(2000-2003)"

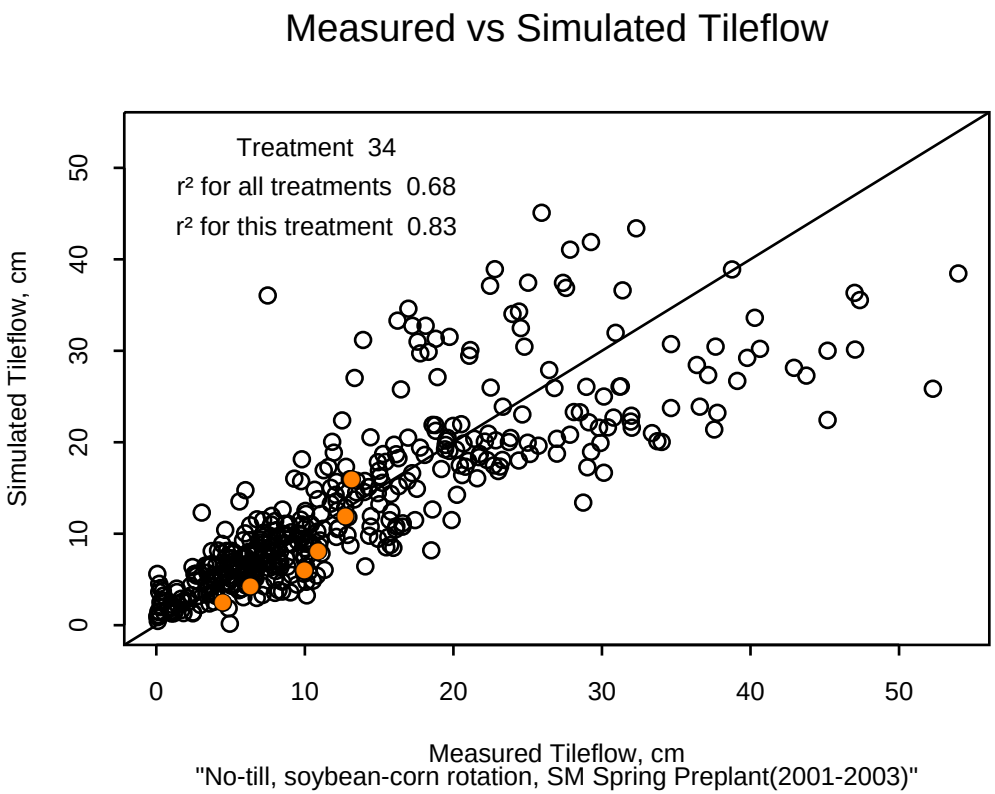

Measured vs Simulated Tileflow
Treatment 29
r² for all treatments 0.68
r² for this treatment 0.72
Simulated Tileflow, cm
Measured Tileflow, cm
"Chisel Plow, soybean-corn rotation, SM Fall and UAN Spring(2000-2003)"

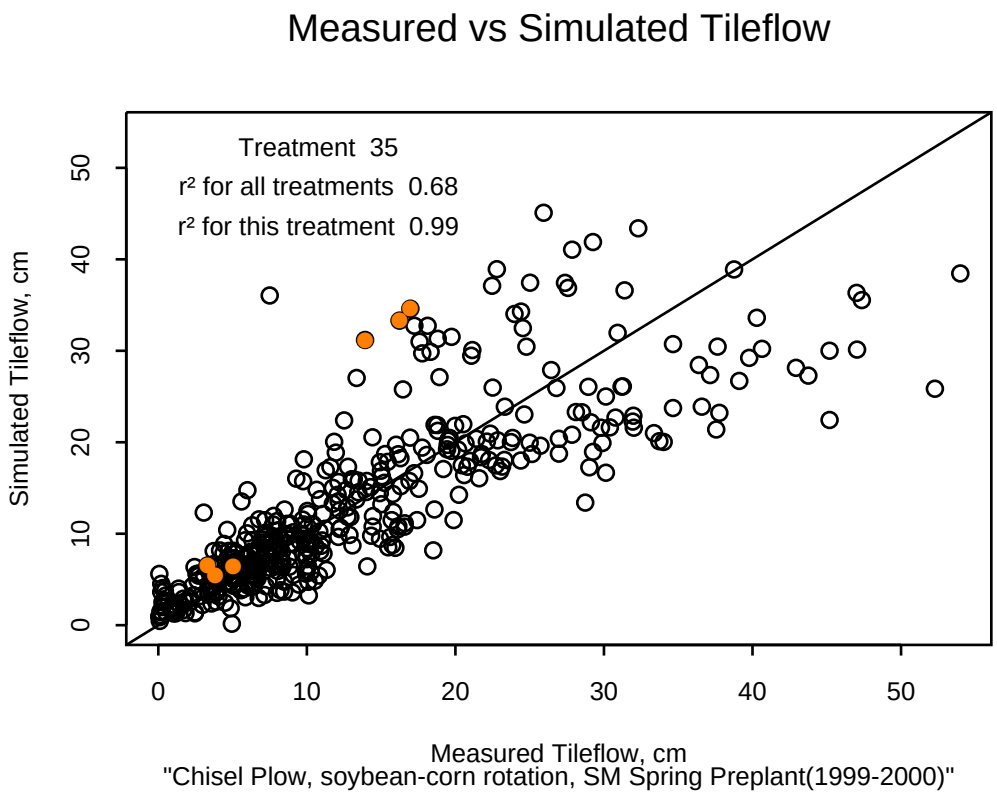

Measured vs Simulated Tileflow
Treatment 30
r² for all treatments 0.68
r² for this treatment 0.81
Simulated Tileflow, cm
Measured Tileflow, cm
"Chisel Plow, corn-corn rotation, SM Fall, Corn and Soybean(2000)"

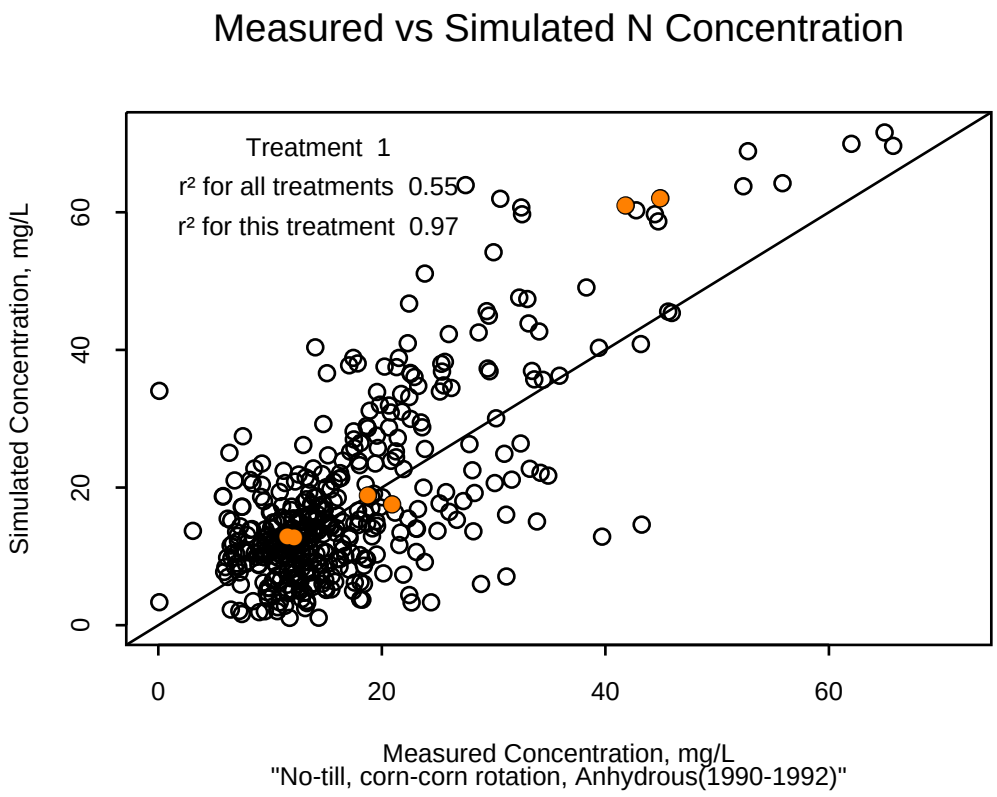

Measured vs Simulated Tileflow
Treatment 31
r² for all treatments 0.68
r² for this treatment 0.73
Simulated Tileflow, cm
Measured Tileflow, cm
"Chisel Plow, corn-soybean rotation, SM Fall, Corn and Soybean(2001-2003)"

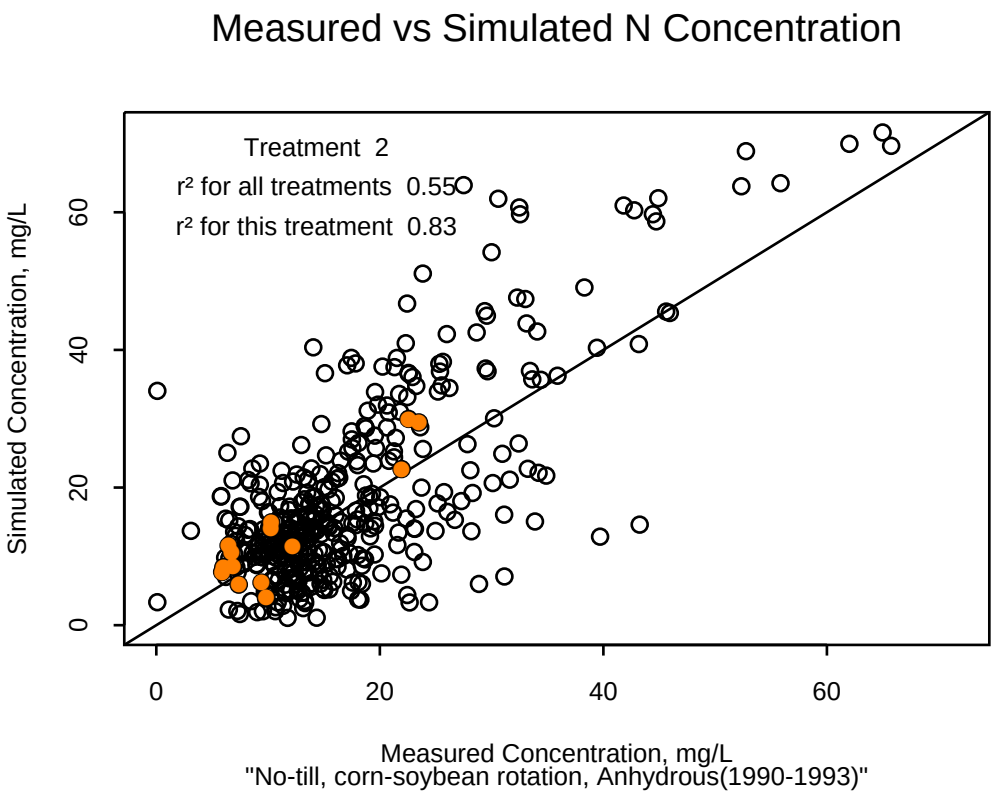

Measured vs Simulated Tileflow
Treatment 32
r² for all treatments 0.68
r² for this treatment 0.49
Simulated Tileflow, cm
Measured Tileflow, cm
"Chisel Plow, soybean-corn rotation, SM Fall, Corn and Soybean(2001-2003)"

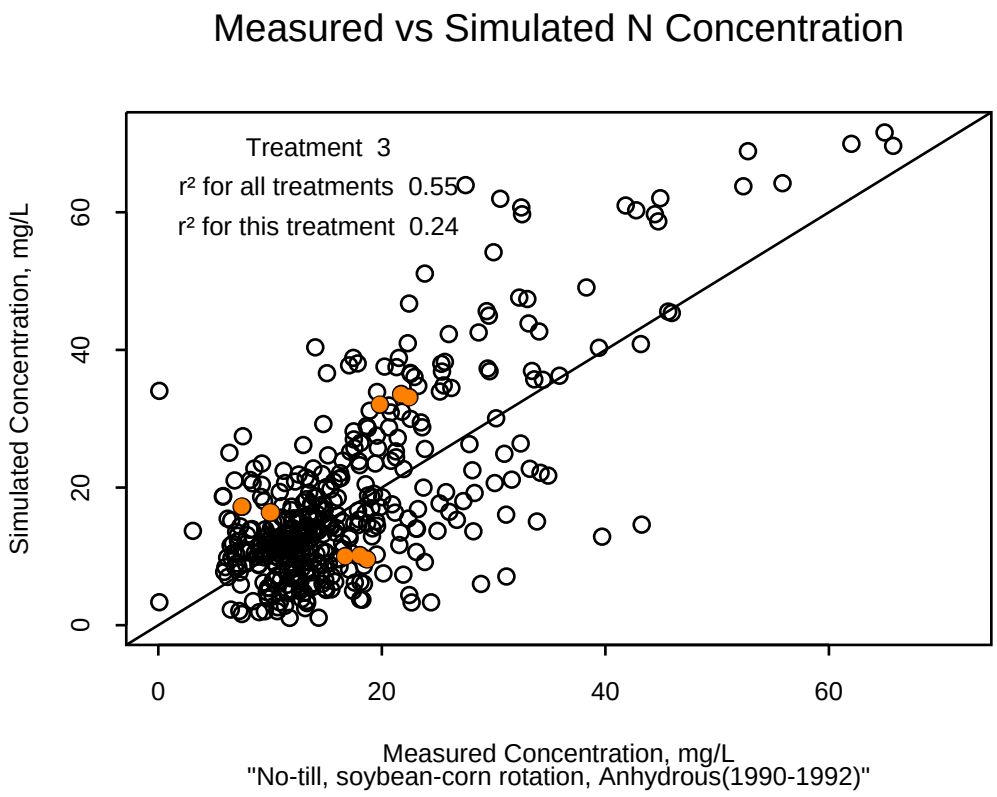

Measured vs Simulated Tileflow
Treatment 33
r² for all treatments 0.68
r² for this treatment 0.83
Simulated Tileflow, cm
Measured Tileflow, cm
"No-till, corn-soybean rotation, SM Spring Preplant(2000-2003)"

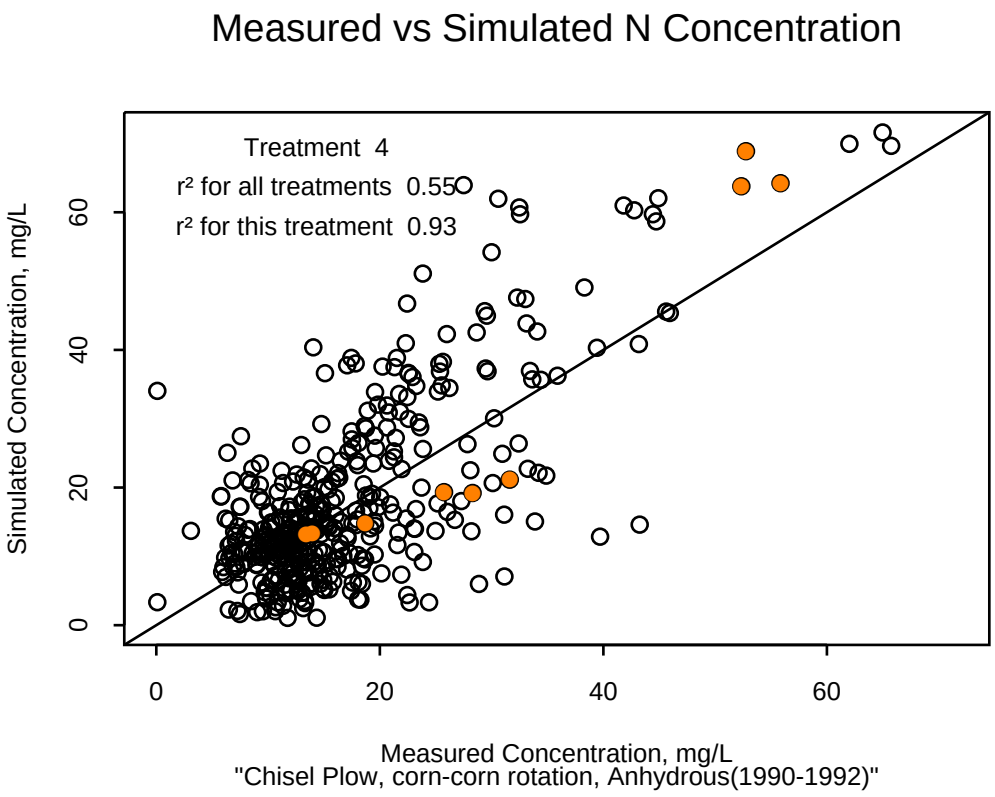

Measured vs Simulated Tileflow
Treatment 34
r² for all treatments 0.68
r² for this treatment 0.83
Simulated Tileflow, cm
Measured Tileflow, cm
"No-till, soybean-corn rotation, SM Spring Preplant(2001-2003)"

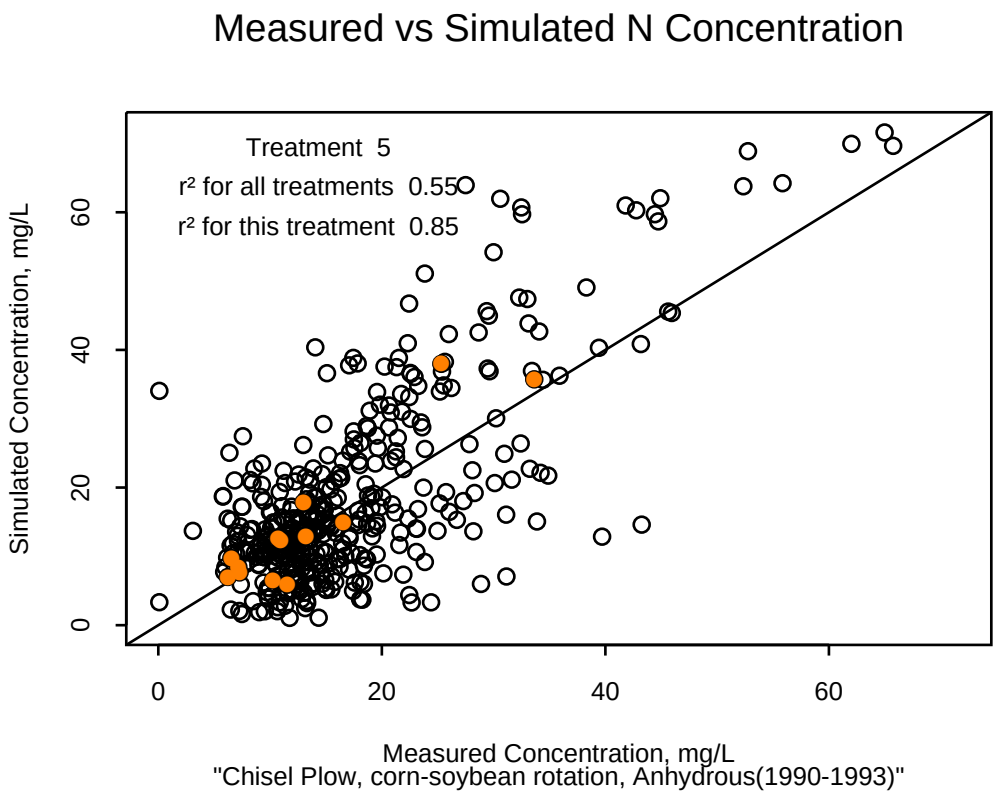

Measured vs Simulated Tileflow
Treatment 35
r² for all treatments 0.68
r² for this treatment 0.99
Simulated Tileflow, cm
Measured Tileflow, cm
"Chisel Plow, soybean-corn rotation, SM Spring Preplant(1999-2000)"

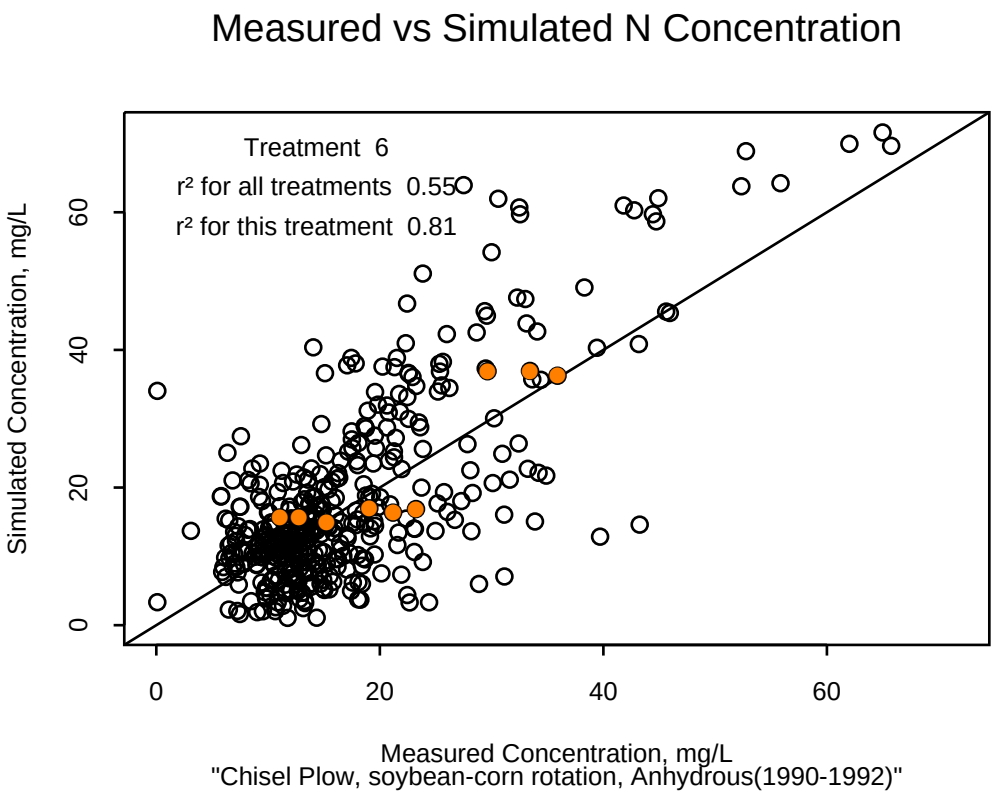

Measured vs Simulated N Concentration
Treatment 1
r² for all treatments 0.55
r² for this treatment 0.97
Simulated Concentration, mg/L
Measured Concentration, mg/L
"No-till, corn-corn rotation, Anhydrous(1990-1992)"
0
20
40
60

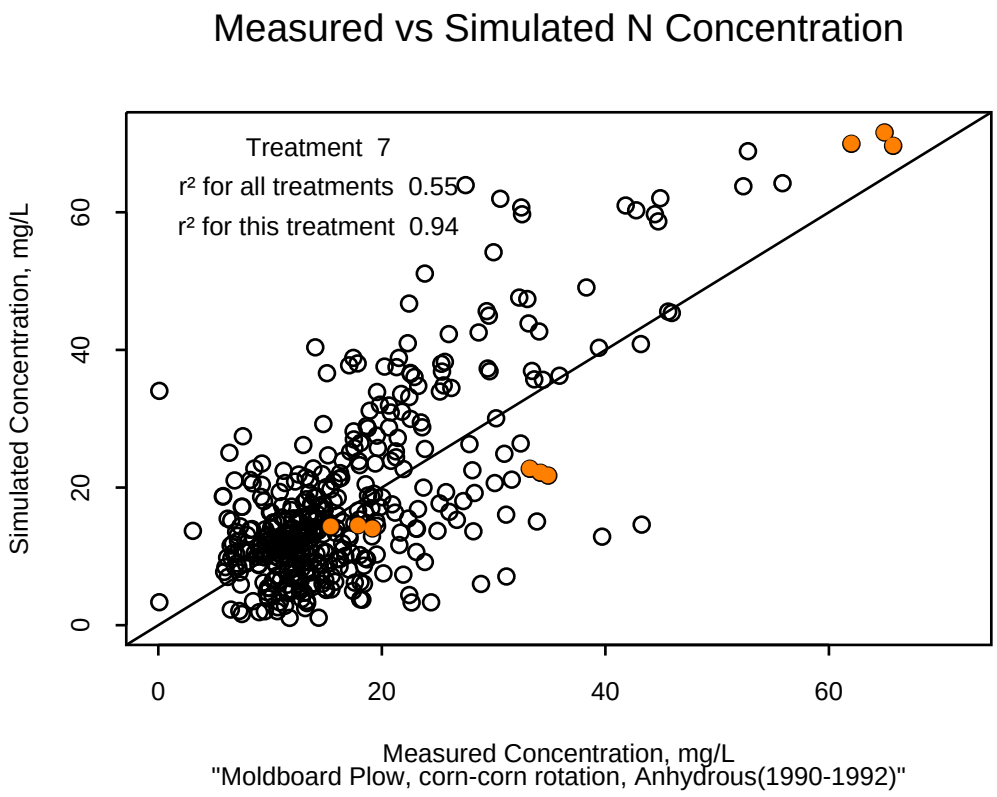

Measured vs Simulated N Concentration
Treatment 2
r² for all treatments 0.55
r² for this treatment 0.83
Simulated Concentration, mg/L
Measured Concentration, mg/L
"No-till, corn-soybean rotation, Anhydrous(1990-1993)"
0
20
40
60

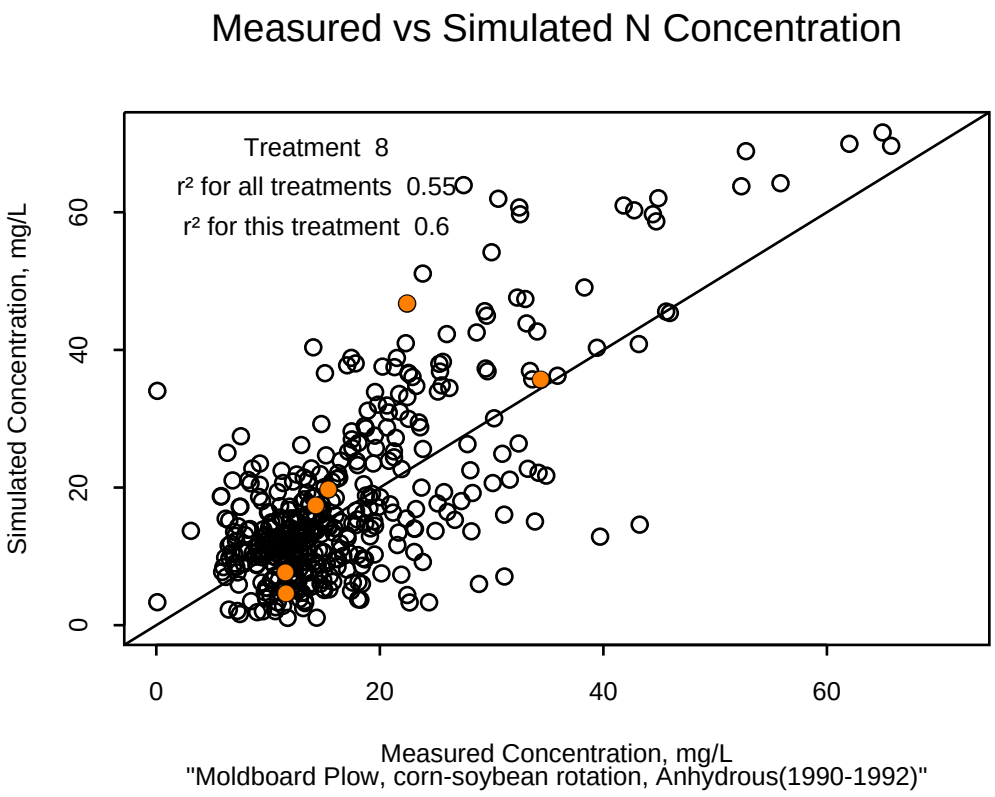

Measured vs Simulated N Concentration
Treatment 3
r² for all treatments 0.55
r² for this treatment 0.24
Simulated Concentration, mg/L
Measured Concentration, mg/L
"No-till, soybean-corn rotation, Anhydrous(1990-1992)"
0
20
40
60

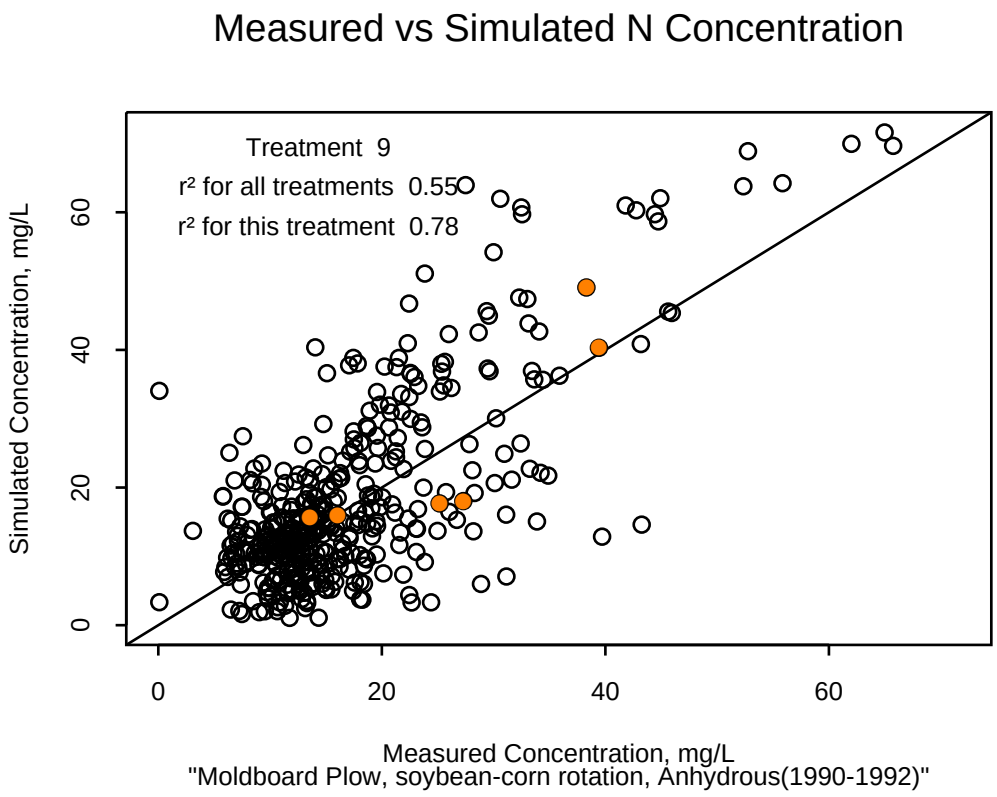

Measured vs Simulated N Concentration
Treatment 4
r² for all treatments 0.55
r² for this treatment 0.93
Simulated Concentration, mg/L
Measured Concentration, mg/L
"Chisel Plow, corn-corn rotation, Anhydrous(1990-1992)"
0
20
40
60

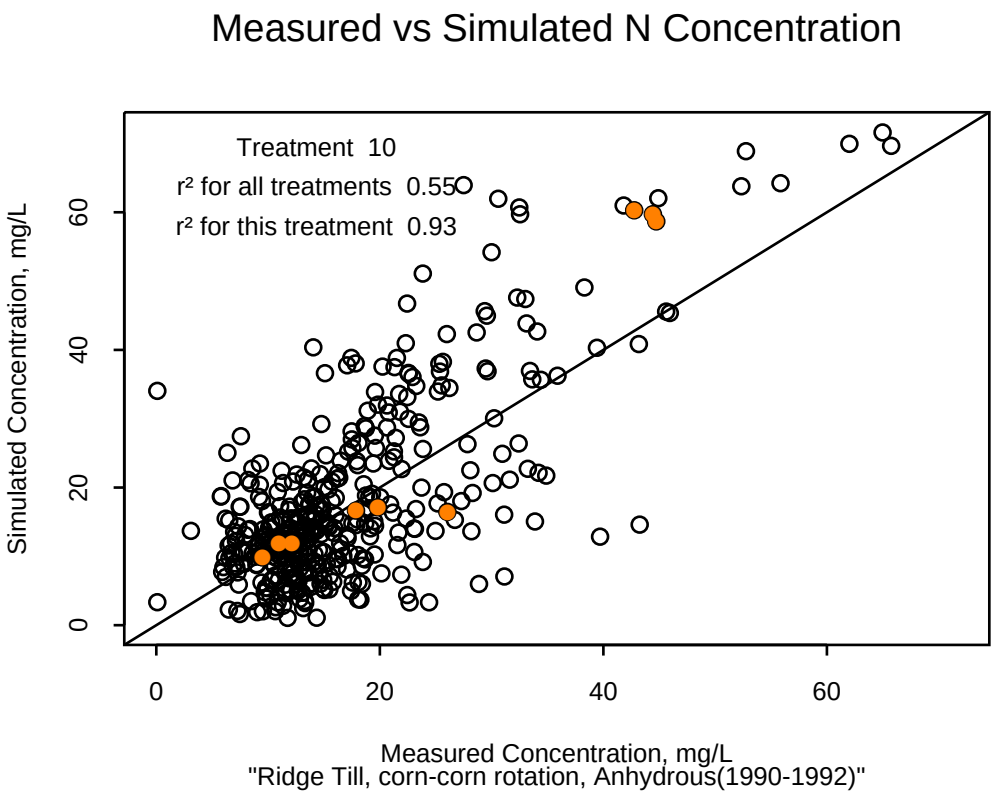

Measured vs Simulated N Concentration
Treatment 5
r² for all treatments 0.55
r² for this treatment 0.85
Simulated Concentration, mg/L
Measured Concentration, mg/L
"Chisel Plow, corn-soybean rotation, Anhydrous(1990-1993)"

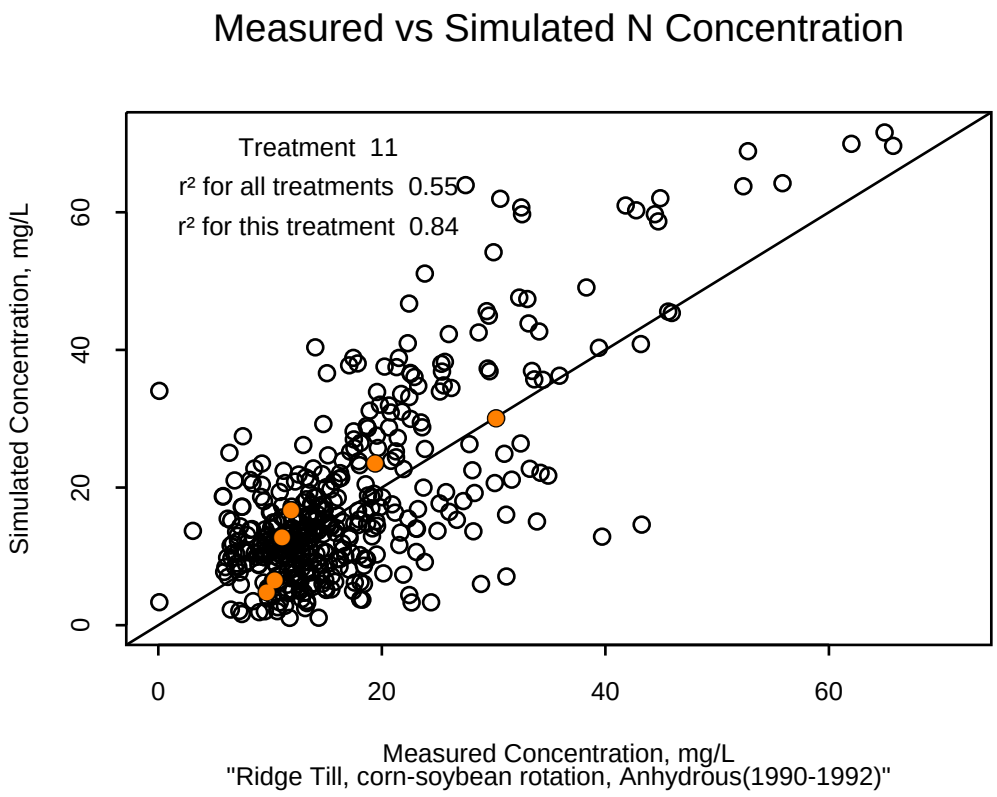

Measured vs Simulated N Concentration
Treatment 6
r² for all treatments 0.55
r² for this treatment 0.81
Simulated Concentration, mg/L
Measured Concentration, mg/L
"Chisel Plow, soybean-corn rotation, Anhydrous(1990-1992)"

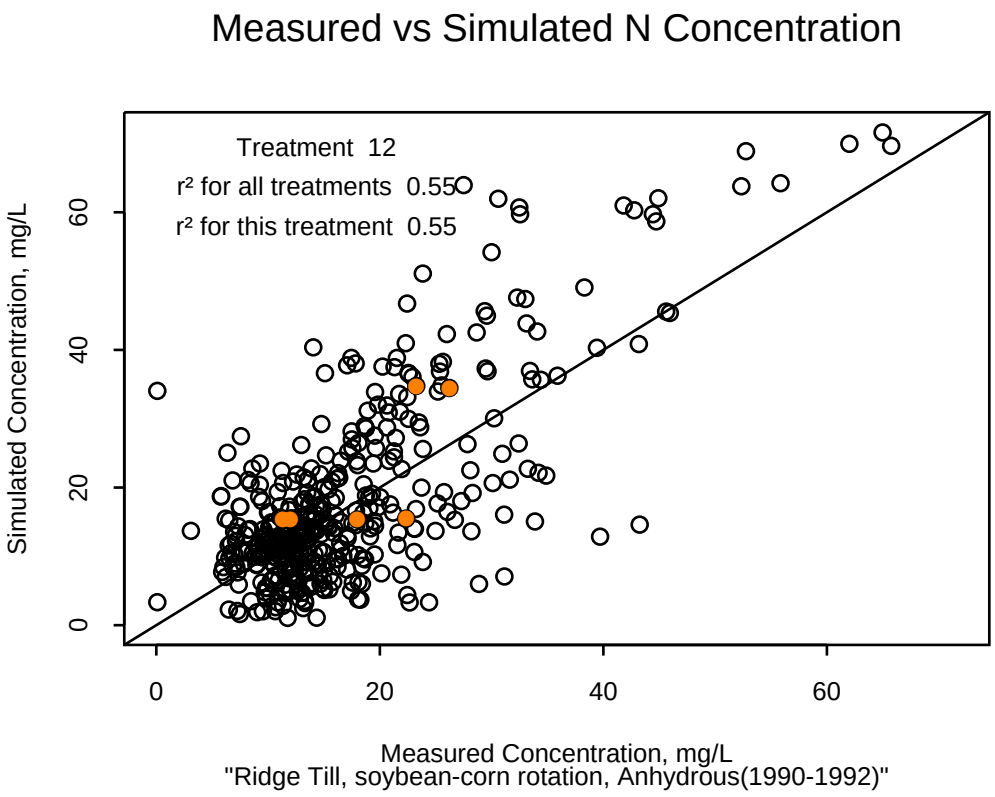

Measured vs Simulated N Concentration
Treatment 7
r² for all treatments 0.55
r² for this treatment 0.94
Simulated Concentration, mg/L
Measured Concentration, mg/L
"Moldboard Plow, corn-corn rotation, Anhydrous(1990-1992)"

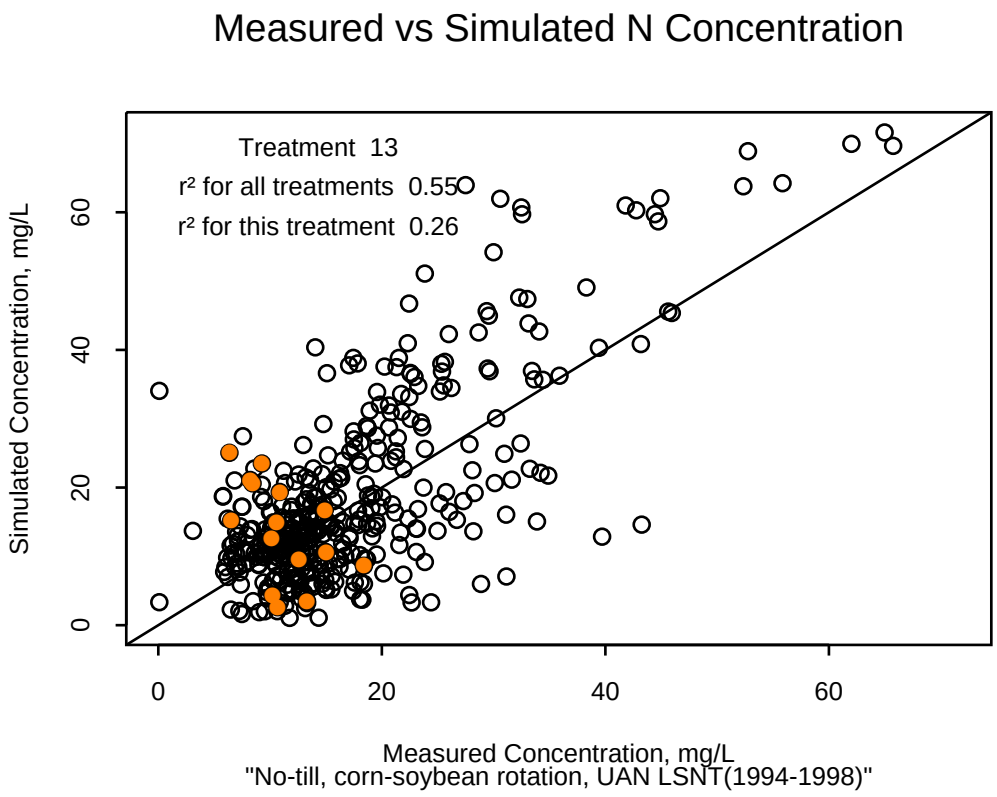

Measured vs Simulated N Concentration
Treatment 8
r² for all treatments 0.55
r² for this treatment 0.6
Simulated Concentration, mg/L
Measured Concentration, mg/L
"Moldboard Plow, corn-soybean rotation, Anhydrous(1990-1992)"

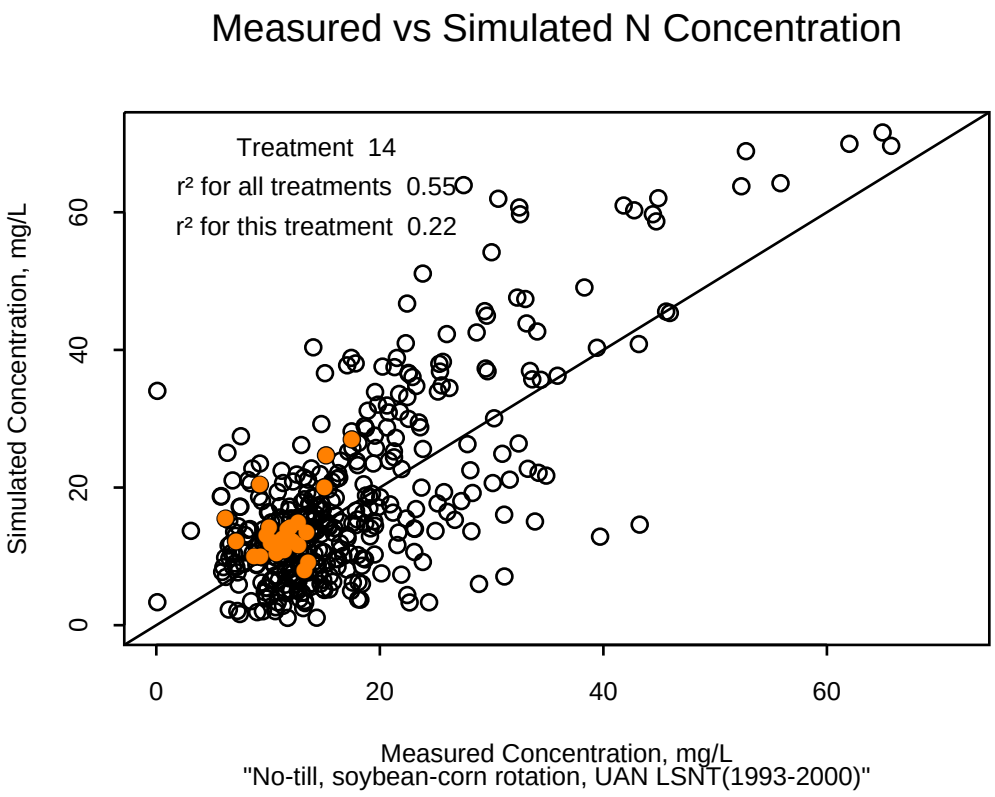

Measured vs Simulated N Concentration
Treatment 9
r² for all treatments 0.55
r² for this treatment 0.78
Simulated Concentration, mg/L
Measured Concentration, mg/L
"Moldboard Plow, soybean-corn rotation, Anhydrous(1990-1992)"

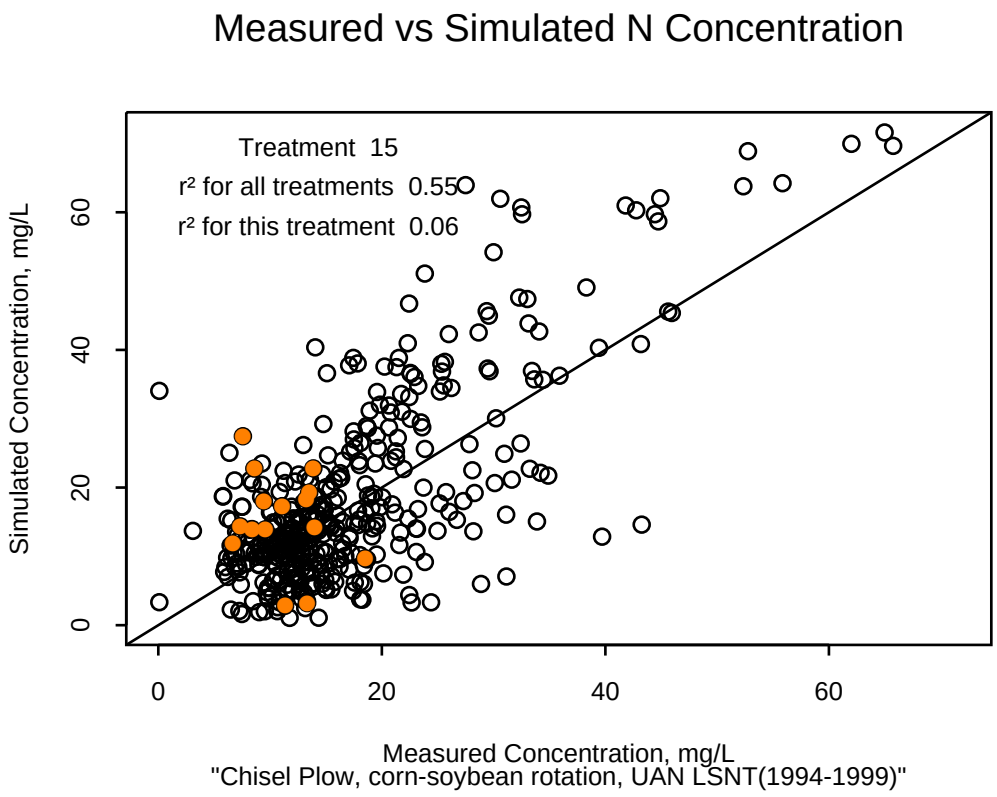

Measured vs Simulated N Concentration
Treatment 10
r² for all treatments 0.55
r² for this treatment 0.93
Simulated Concentration, mg/L
Measured Concentration, mg/L
"Ridge Till, corn-corn rotation, Anhydrous(1990-1992)"

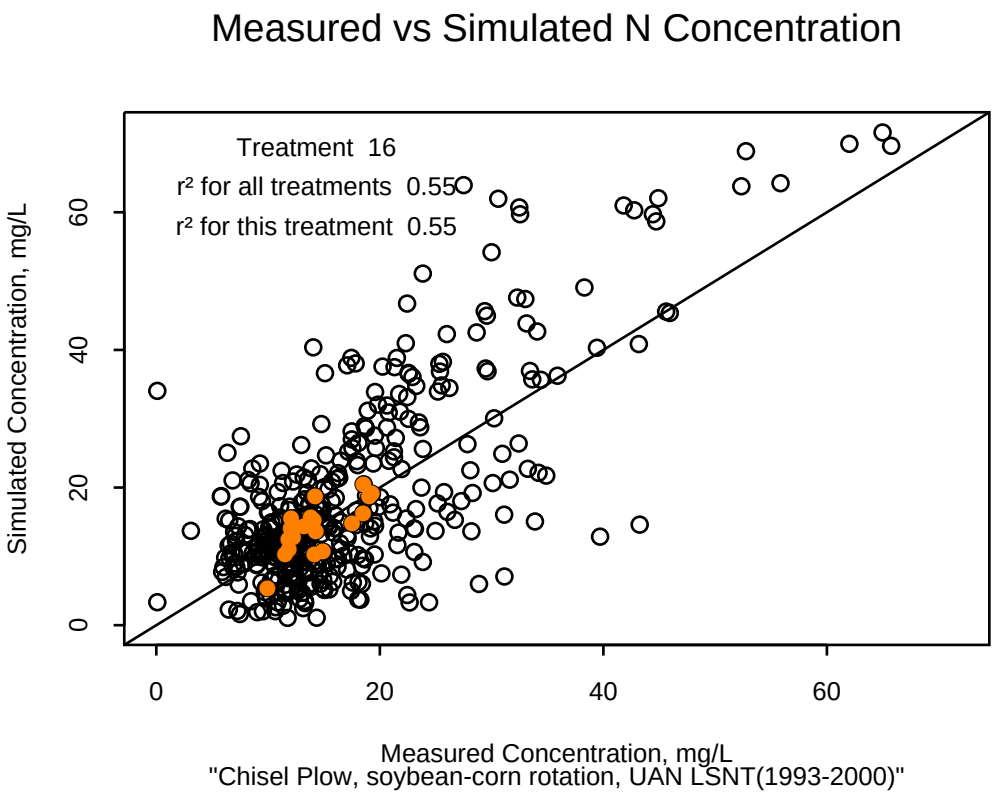

Measured vs Simulated N Concentration
Treatment 11
r² for all treatments 0.55
r² for this treatment 0.84
Simulated Concentration, mg/L
Measured Concentration, mg/L
"Ridge Till, corn-soybean rotation, Anhydrous(1990-1992)"

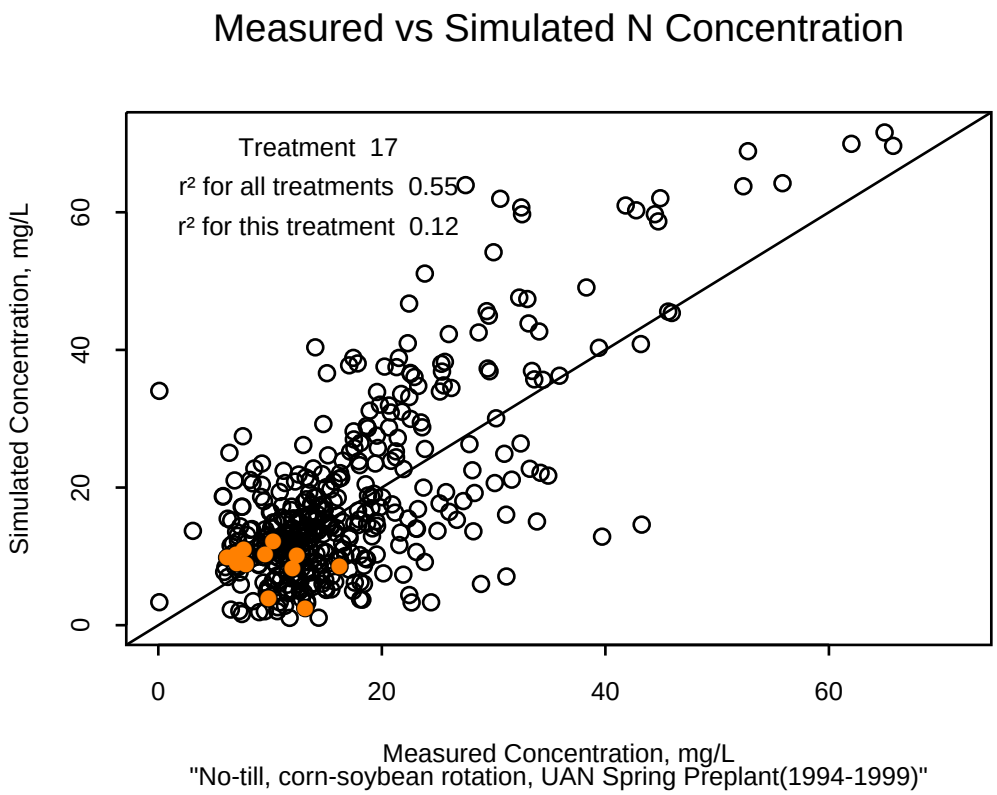

Measured vs Simulated N Concentration
Treatment 12
r² for all treatments 0.55
r² for this treatment 0.55
Simulated Concentration, mg/L
Measured Concentration, mg/L
"Ridge Till, soybean-corn rotation, Anhydrous(1990-1992)"

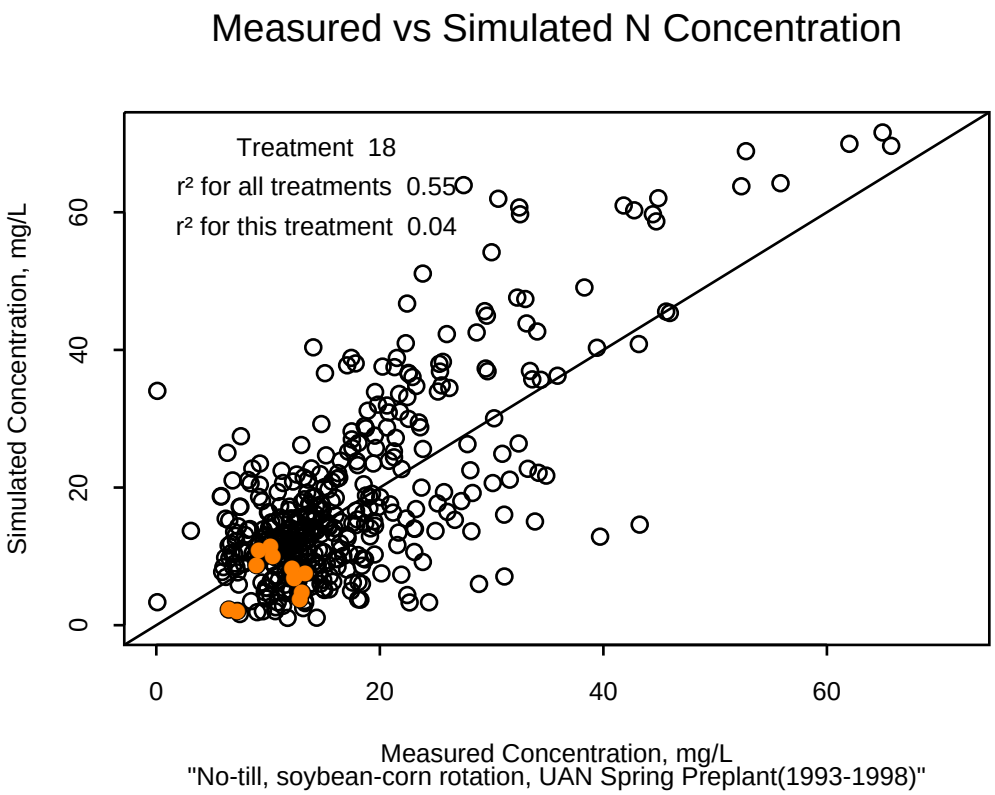

Measured vs Simulated N Concentration
Treatment 13
r² for all treatments 0.55
r² for this treatment 0.26
Simulated Concentration, mg/L
Measured Concentration, mg/L
"No-till, corn-soybean rotation, UAN LSNT(1994-1998)"

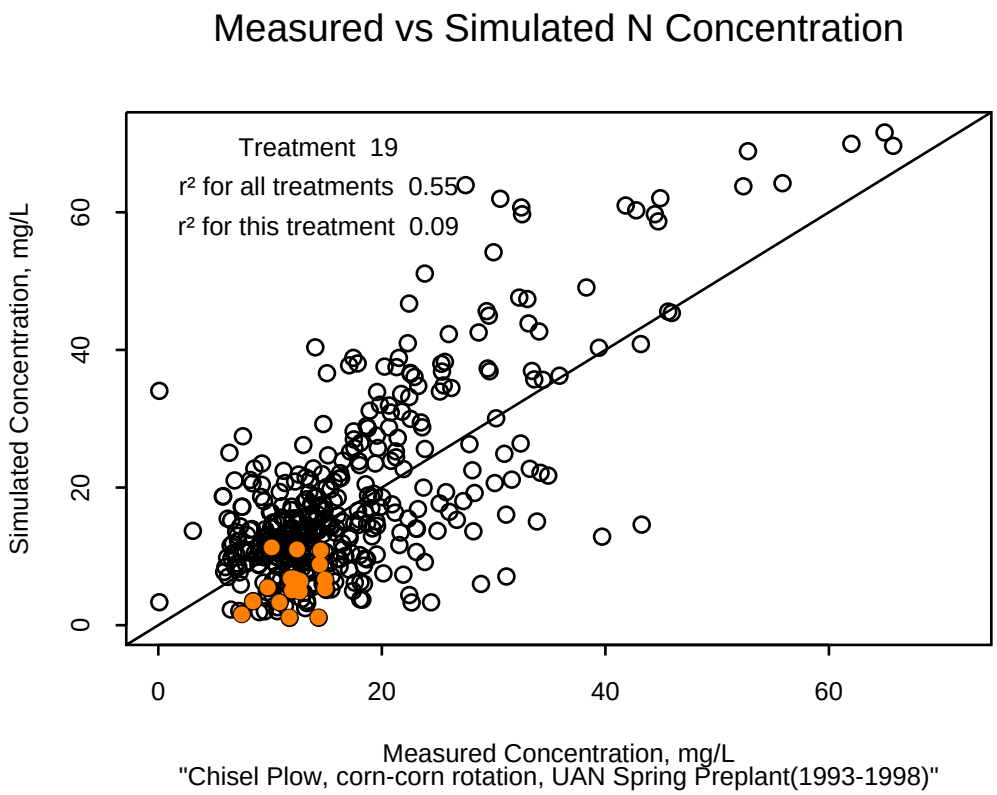

Measured vs Simulated N Concentration
Treatment 14
r² for all treatments 0.55
r² for this treatment 0.22
Simulated Concentration, mg/L
Measured Concentration, mg/L
"No-till, soybean-corn rotation, UAN LSNT(1993-2000)"

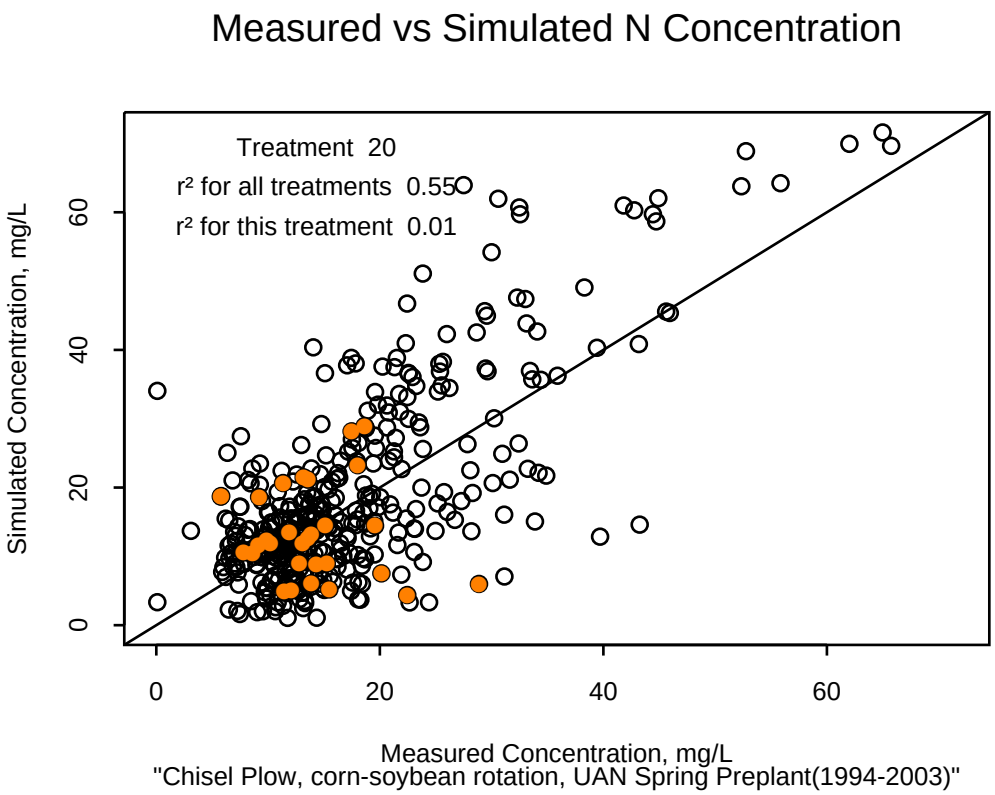

Measured vs Simulated N Concentration
Treatment 15
r² for all treatments 0.55
r² for this treatment 0.06
Simulated Concentration, mg/L
Measured Concentration, mg/L
"Chisel Plow, corn-soybean rotation, UAN LSNT(1994-1999)"

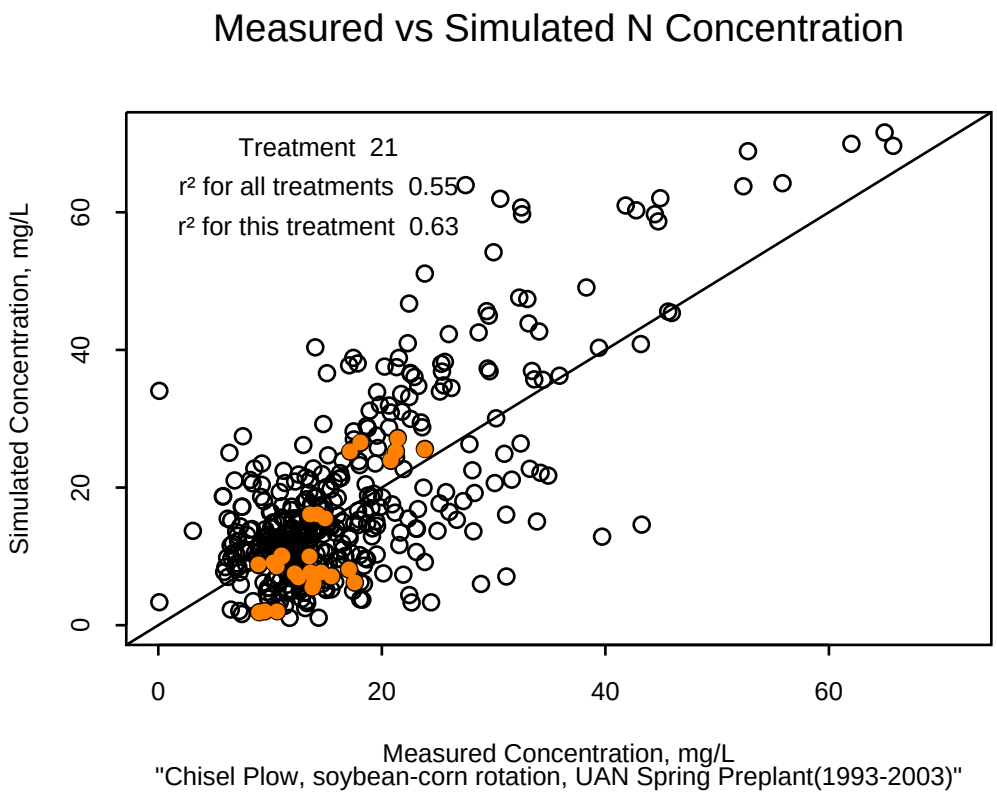

Measured vs Simulated N Concentration
Treatment 16
r² for all treatments 0.55
r² for this treatment 0.55
Simulated Concentration, mg/L
Measured Concentration, mg/L
"Chisel Plow, soybean-corn rotation, UAN LSNT(1993-2000)"

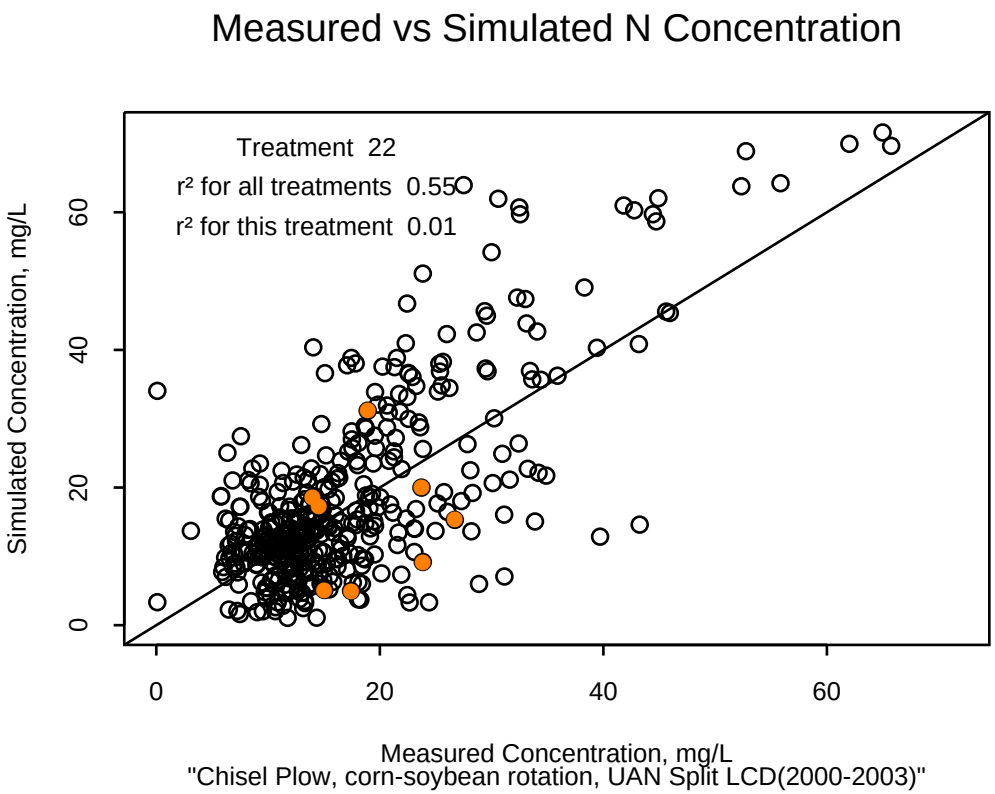

Measured vs Simulated N Concentration
Treatment 17
r² for all treatments 0.55
r² for this treatment 0.12
Simulated Concentration, mg/L
Measured Concentration, mg/L
"No-till, corn-soybean rotation, UAN Spring Preplant(1994-1999)"

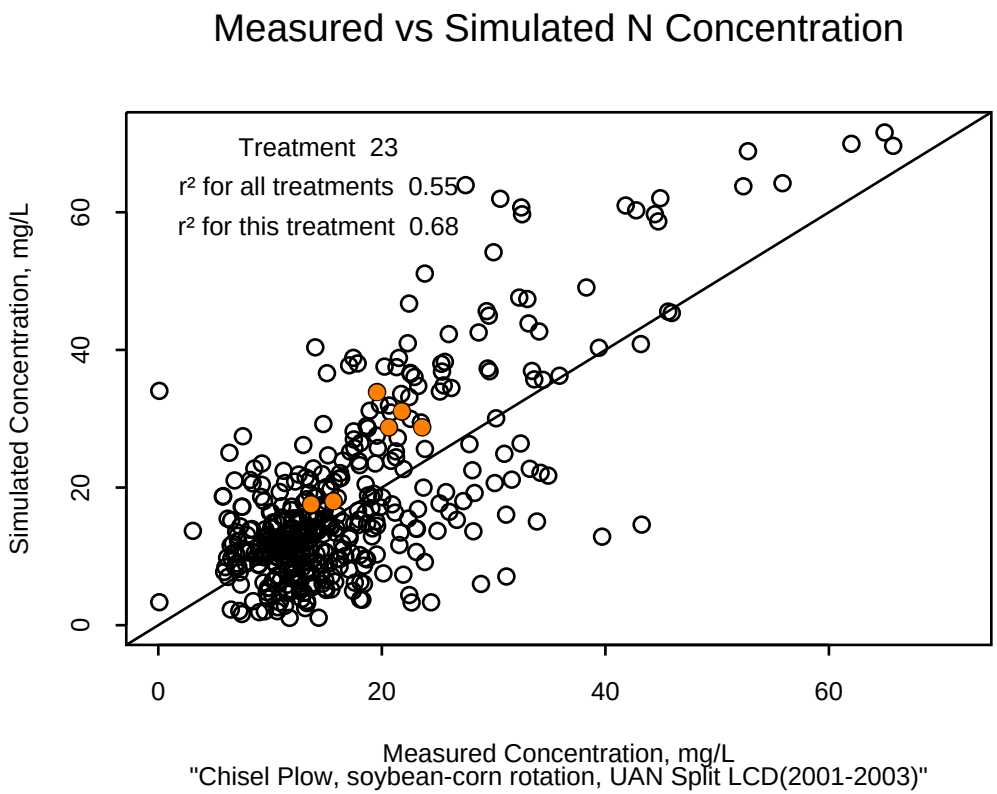

Measured vs Simulated N Concentration
Treatment 18
r² for all treatments 0.55
r² for this treatment 0.04
Simulated Concentration, mg/L
Measured Concentration, mg/L
"No-till, soybean-corn rotation, UAN Spring Preplant(1993-1998)"

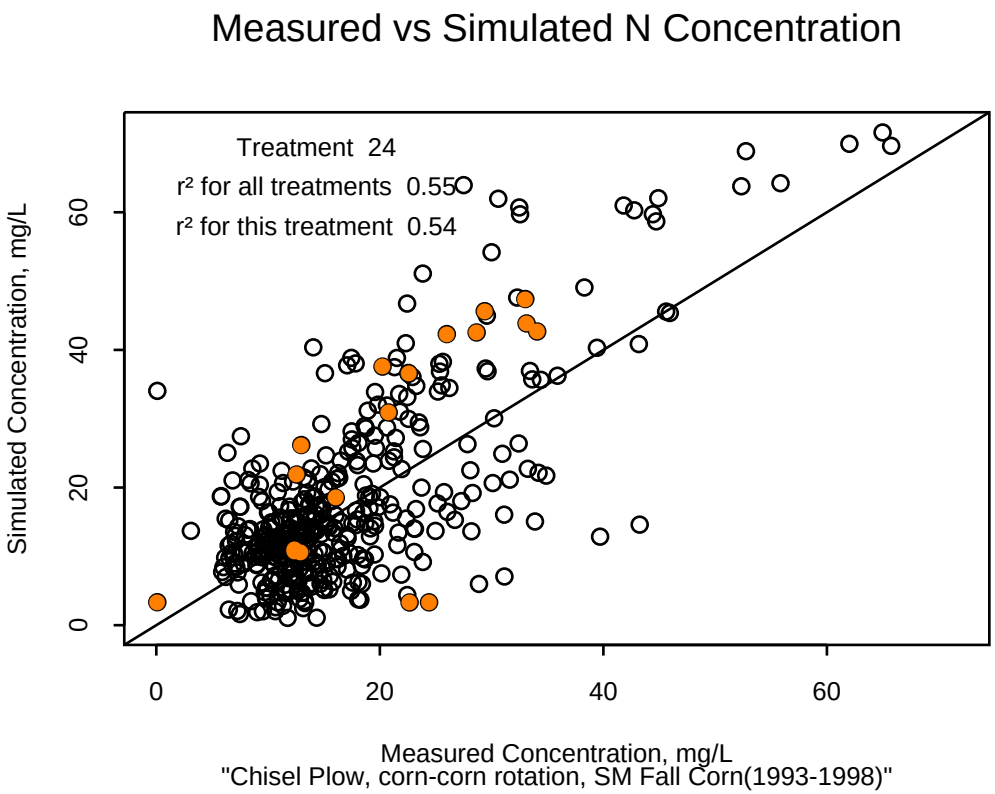

Measured vs Simulated N Concentration
Treatment 19
r² for all treatments 0.55
r² for this treatment 0.09
Simulated Concentration, mg/L
Measured Concentration, mg/L
"Chisel Plow, corn-corn rotation, UAN Spring Preplant(1993-1998)"

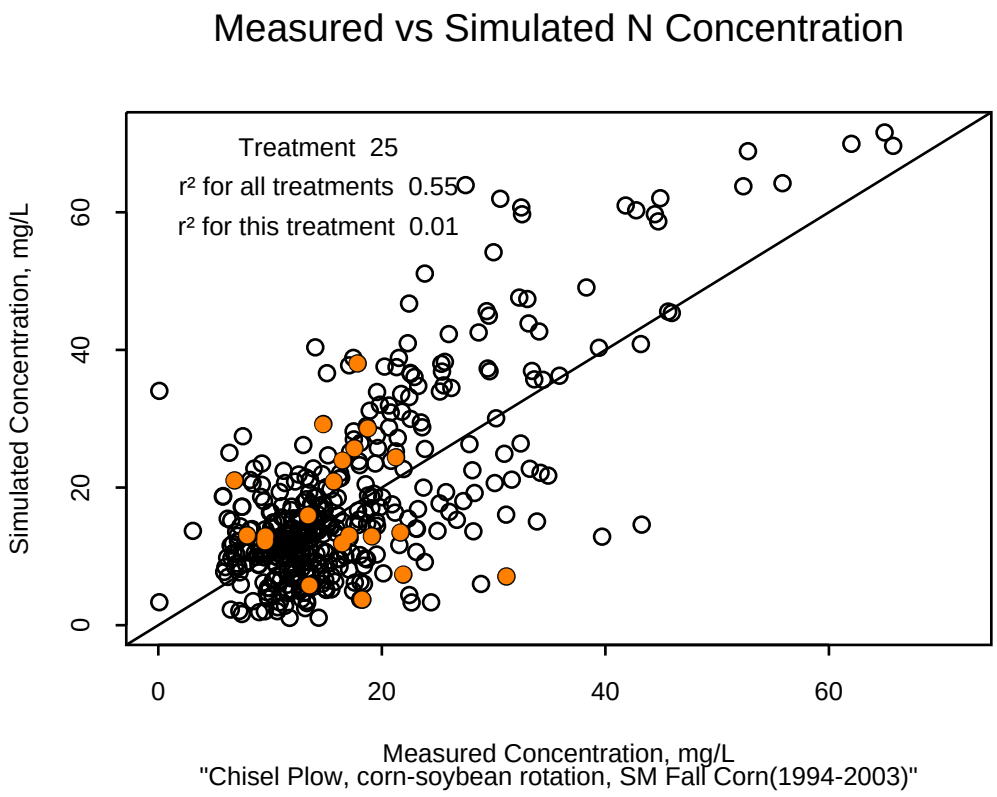

Measured vs Simulated N Concentration
Treatment 20
r² for all treatments 0.55
r² for this treatment 0.01
Simulated Concentration, mg/L
Measured Concentration, mg/L
"Chisel Plow, corn-soybean rotation, UAN Spring Preplant(1994-2003)"

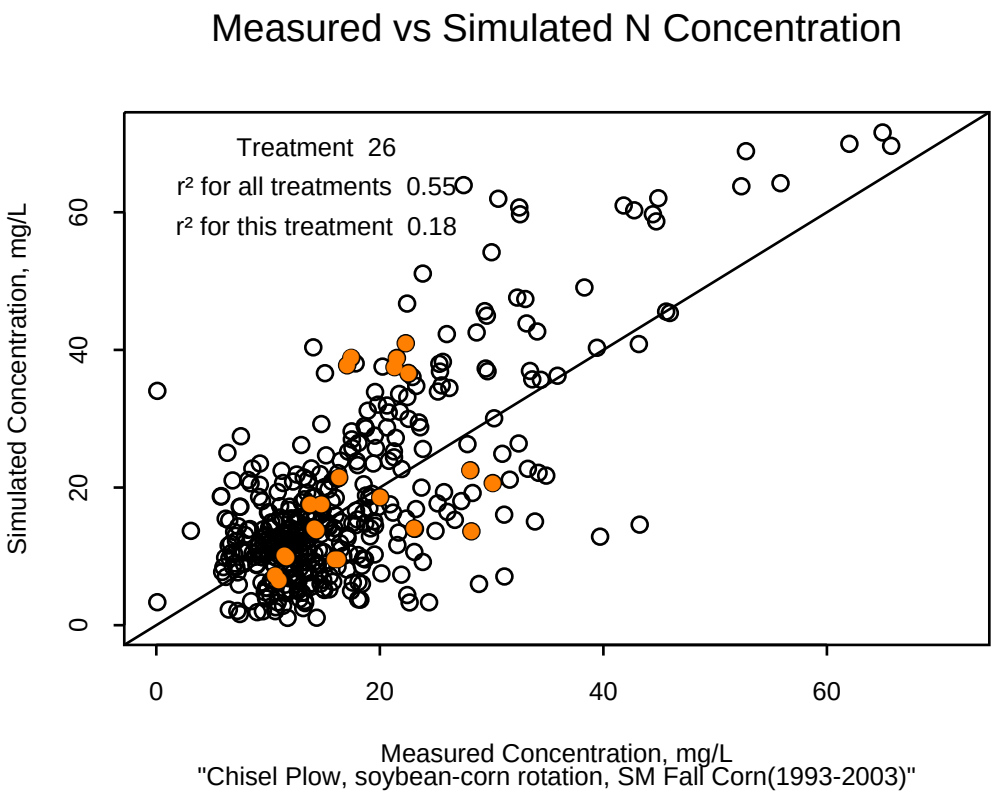

Measured vs Simulated N Concentration
Treatment 21
r² for all treatments 0.55
r² for this treatment 0.63
Simulated Concentration, mg/L
0
20
40
60
Measured Concentration, mg/L
"Chisel Plow, soybean-corn rotation, UAN Spring Preplant(1993-2003)"

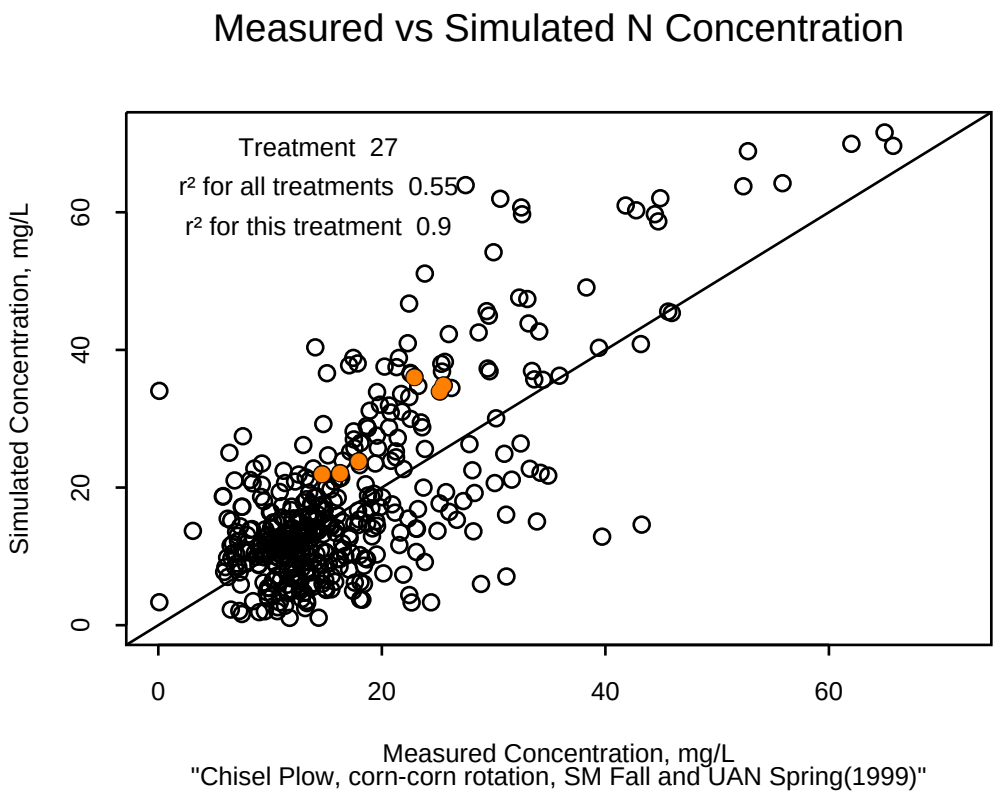

Measured vs Simulated N Concentration
Treatment 22
r² for all treatments 0.55
r² for this treatment 0.01
Simulated Concentration, mg/L
0
20
40
60
Measured Concentration, mg/L
"Chisel Plow, corn-soybean rotation, UAN Split LCD(2000-2003)"

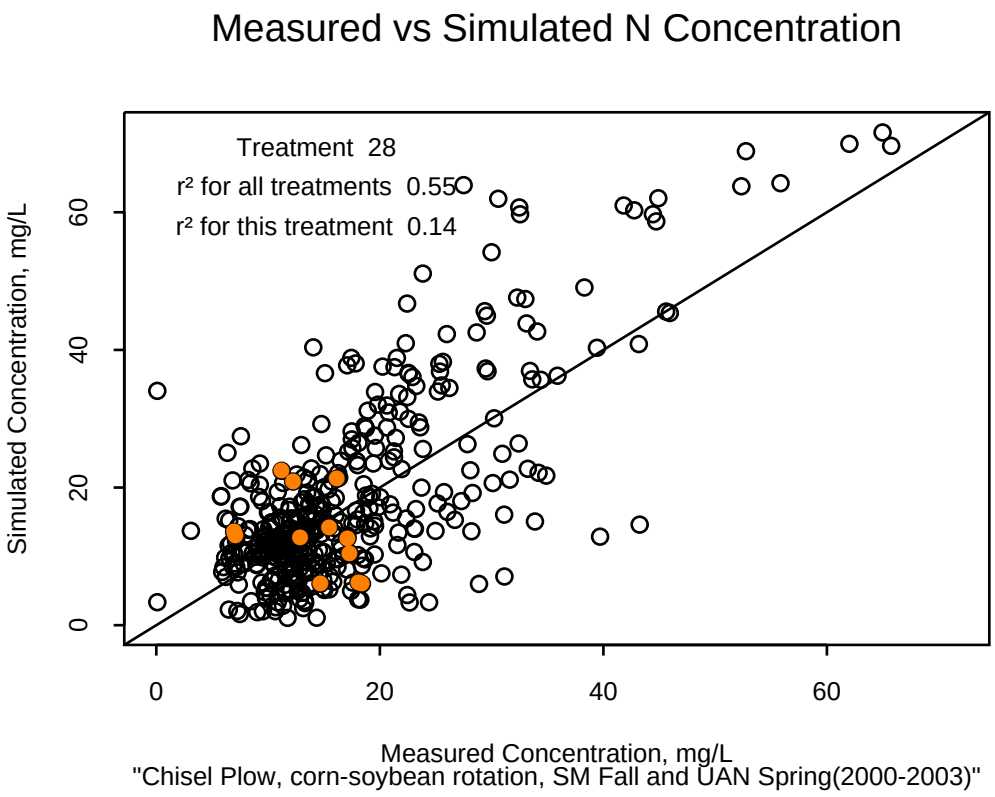

Measured vs Simulated N Concentration
Treatment 23
r² for all treatments 0.55
r² for this treatment 0.68
Simulated Concentration, mg/L
0
20
40
60
Measured Concentration, mg/L
"Chisel Plow, soybean-corn rotation, UAN Split LCD(2001-2003)"

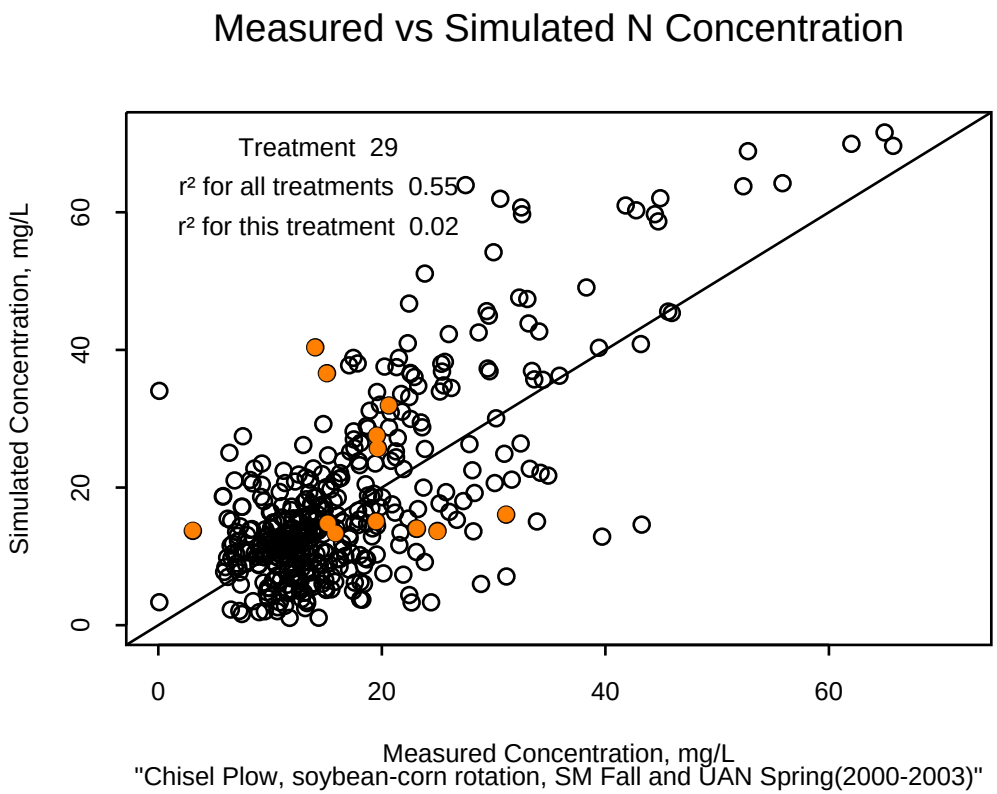

Measured vs Simulated N Concentration
Treatment 24
r² for all treatments 0.55
r² for this treatment 0.54
Simulated Concentration, mg/L
0
20
40
60
Measured Concentration, mg/L
"Chisel Plow, corn-corn rotation, SM Fall Corn(1993-1998)"

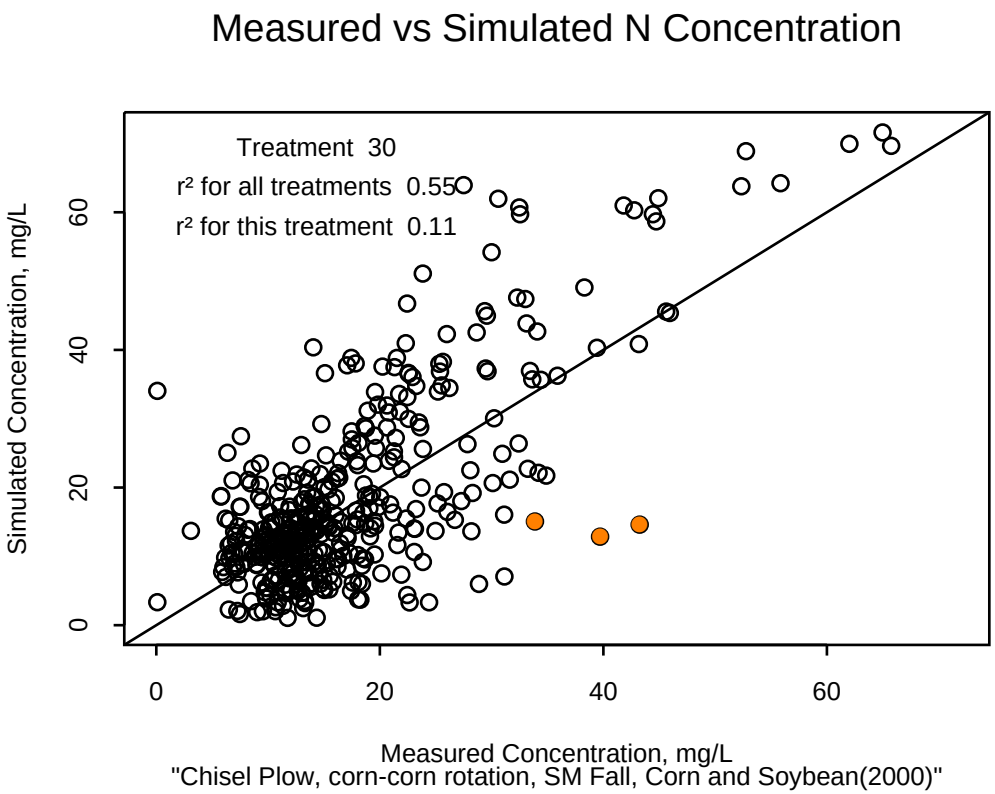

Measured vs Simulated N Concentration
Treatment 25
r² for all treatments 0.55
r² for this treatment 0.01
Simulated Concentration, mg/L
Measured Concentration, mg/L
"Chisel Plow, corn-soybean rotation, SM Fall Corn(1994-2003)"

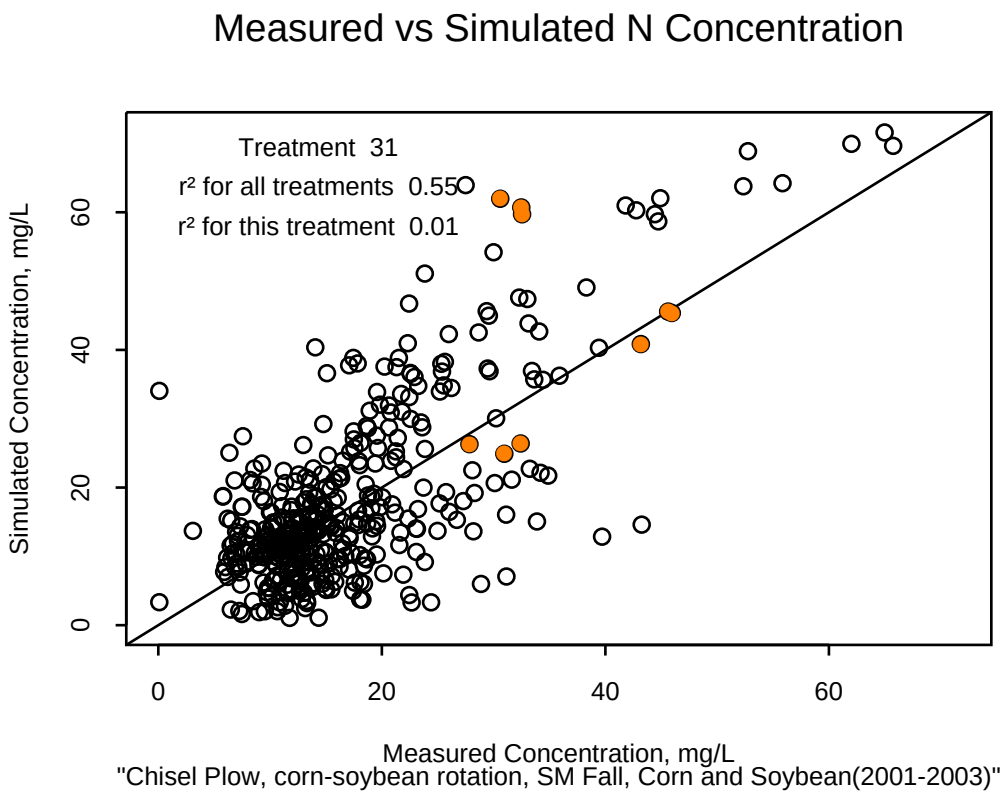

Measured vs Simulated N Concentration
Treatment 26
r² for all treatments 0.55
r² for this treatment 0.18
Simulated Concentration, mg/L
Measured Concentration, mg/L
"Chisel Plow, soybean-corn rotation, SM Fall Corn(1993-2003)"

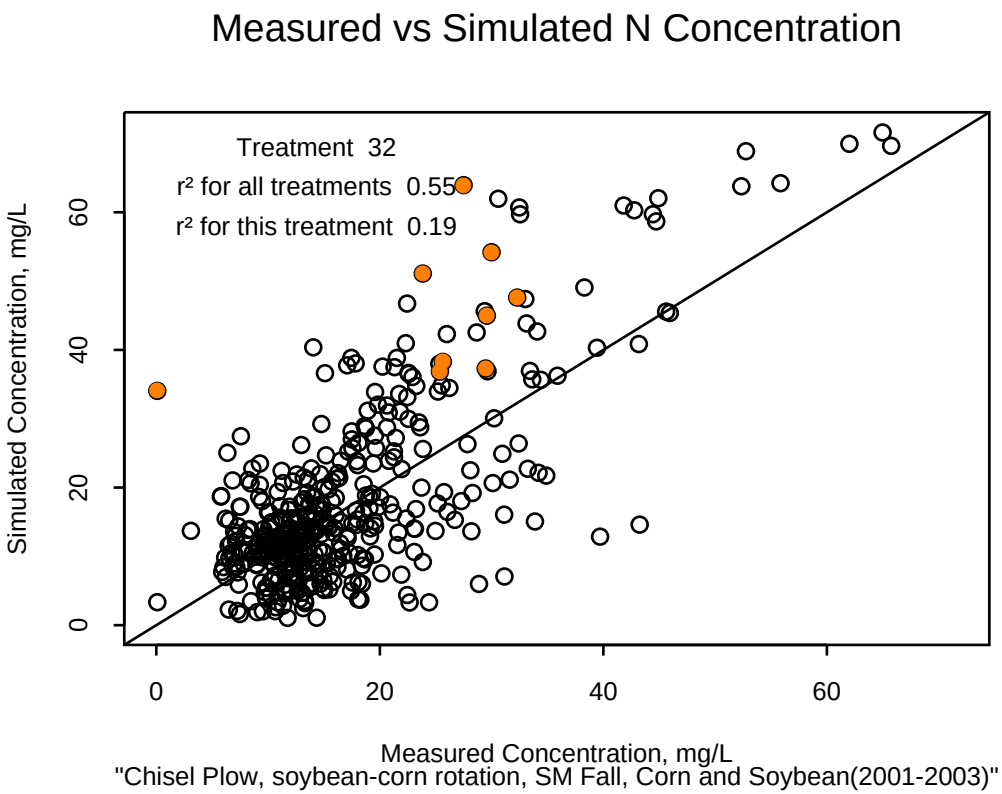

Measured vs Simulated N Concentration
Treatment 27
r² for all treatments 0.55
r² for this treatment 0.9
Simulated Concentration, mg/L
Measured Concentration, mg/L
"Chisel Plow, corn-corn rotation, SM Fall and UAN Spring(1999)"

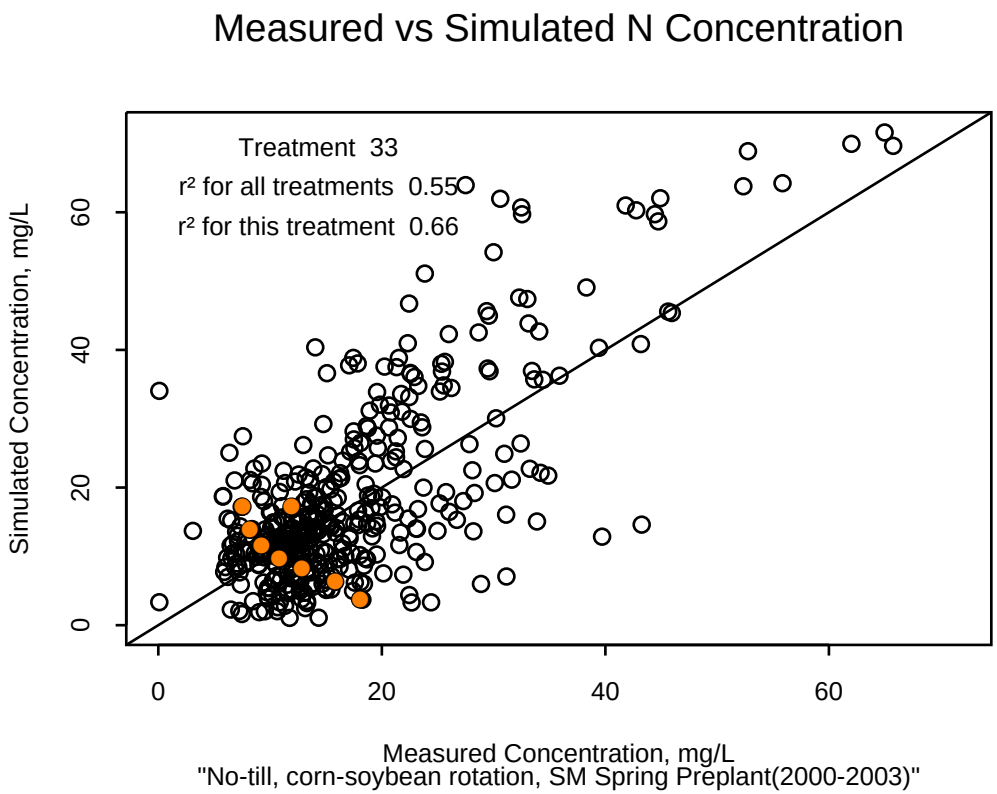

Measured vs Simulated N Concentration
Treatment 28
r² for all treatments 0.55
r² for this treatment 0.14
Simulated Concentration, mg/L
Measured Concentration, mg/L
"Chisel Plow, corn-soybean rotation, SM Fall and UAN Spring(2000-2003)"

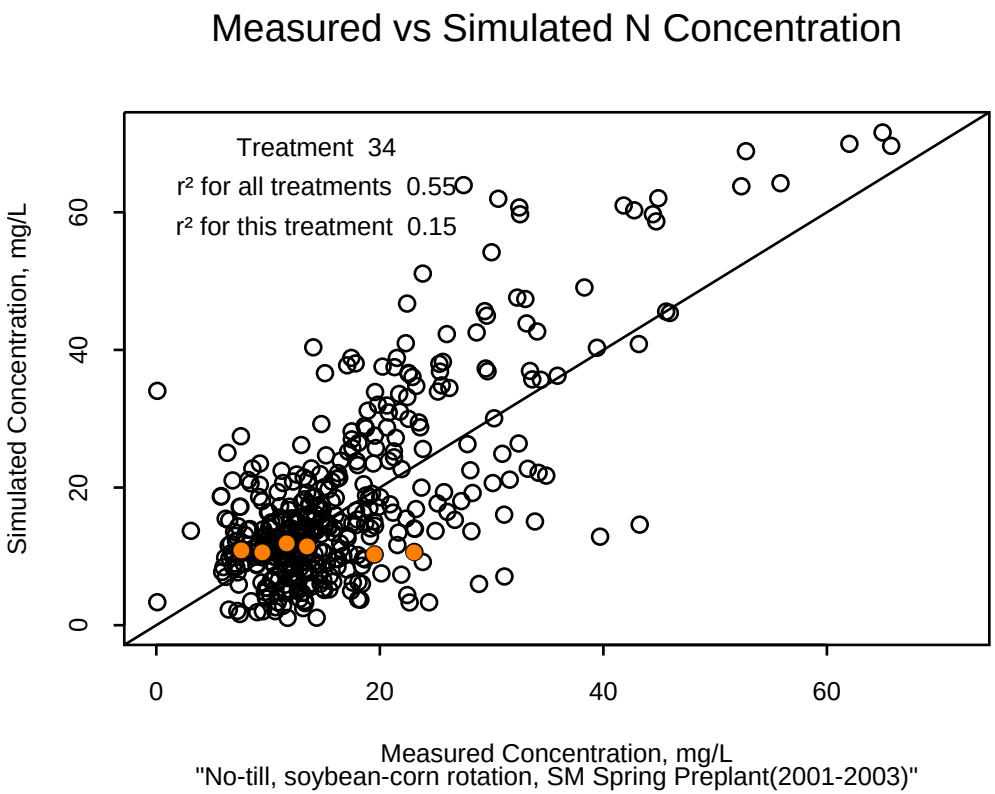

Measured vs Simulated N Concentration
Treatment 29
r² for all treatments 0.55
r² for this treatment 0.02
Simulated Concentration, mg/L
Measured Concentration, mg/L
"Chisel Plow, soybean-corn rotation, SM Fall and UAN Spring(2000-2003)"

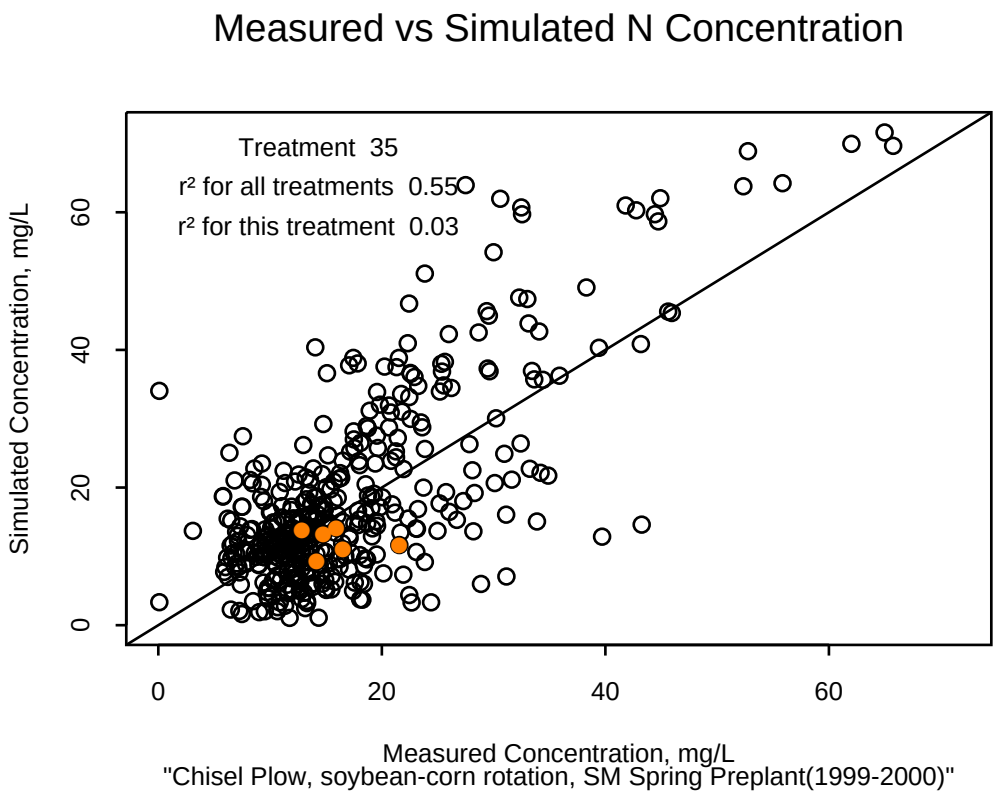

Measured vs Simulated N Concentration
Treatment 30
r² for all treatments 0.55
r² for this treatment 0.11
Simulated Concentration, mg/L
Measured Concentration, mg/L
"Chisel Plow, corn-corn rotation, SM Fall, Corn and Soybean(2000)"

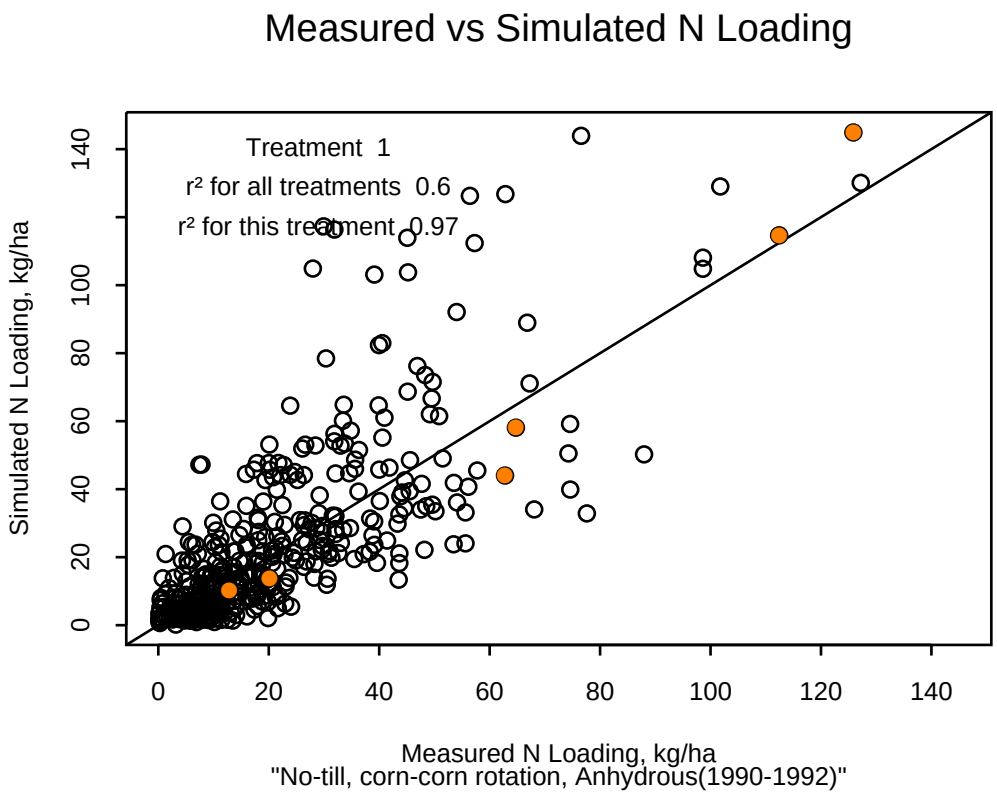

Measured vs Simulated N Concentration
Treatment 31
r² for all treatments 0.55
r² for this treatment 0.01
Simulated Concentration, mg/L
Measured Concentration, mg/L
"Chisel Plow, corn-soybean rotation, SM Fall, Corn and Soybean(2001-2003)"

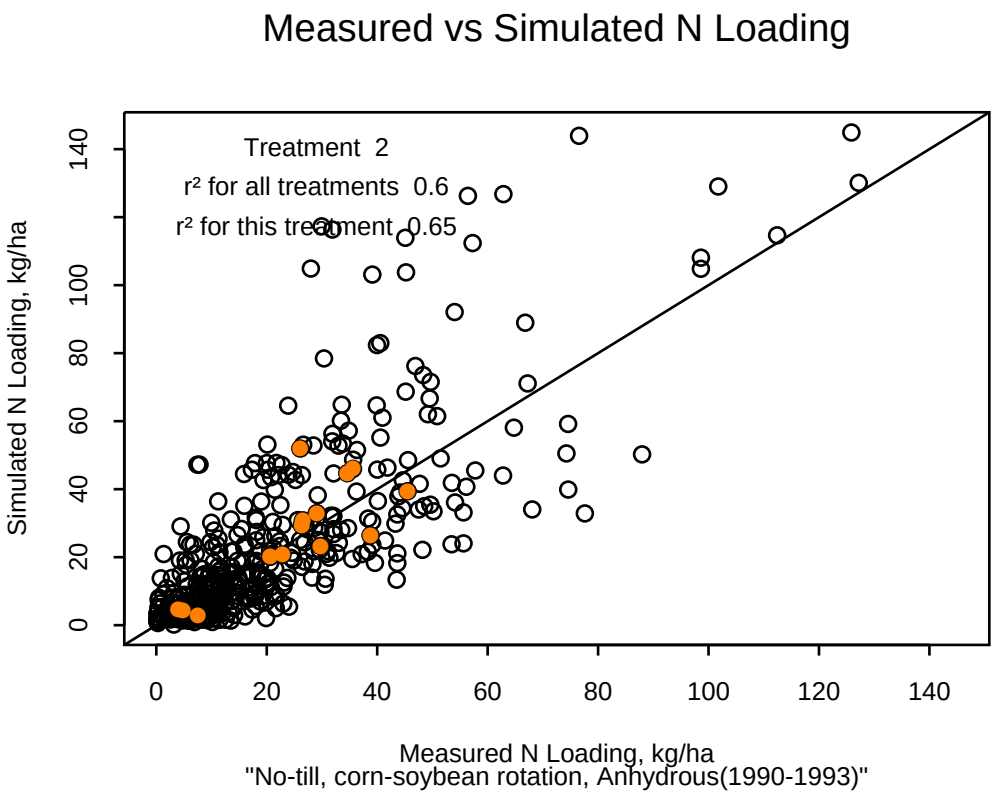

Measured vs Simulated N Concentration
Treatment 32
r² for all treatments 0.55
r² for this treatment 0.19
Simulated Concentration, mg/L
Measured Concentration, mg/L
"Chisel Plow, soybean-corn rotation, SM Fall, Corn and Soybean(2001-2003)"

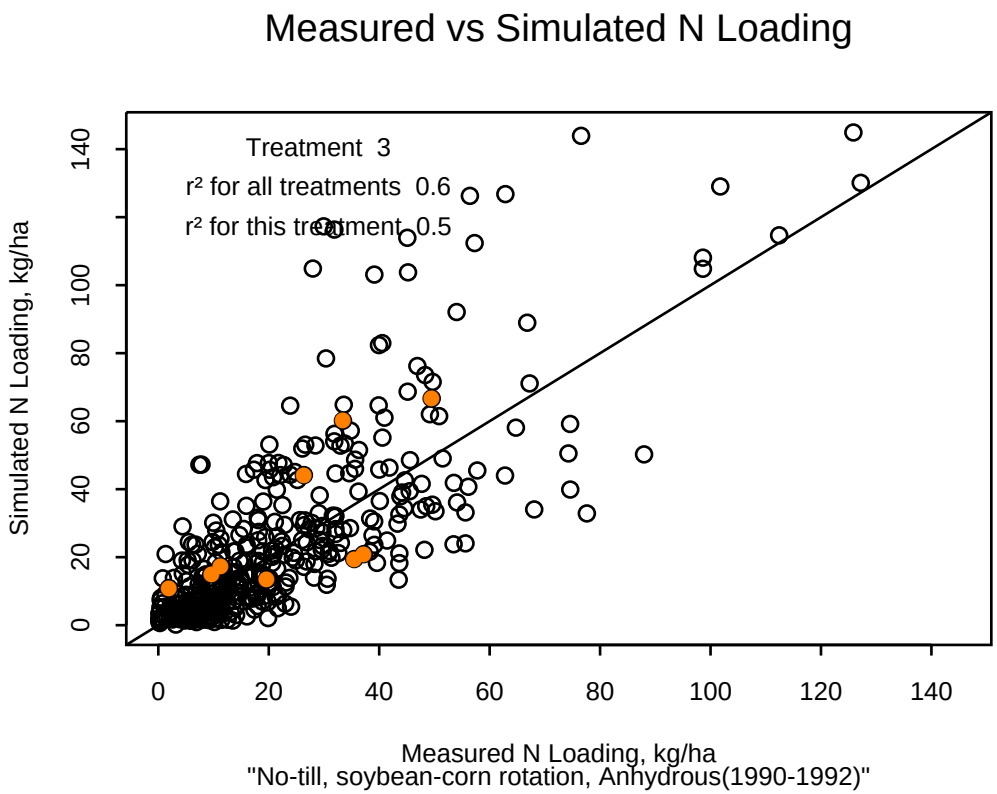

Measured vs Simulated N Concentration
Treatment 33
r² for all treatments 0.55
r² for this treatment 0.66
Simulated Concentration, mg/L
0
20
40
60
Measured Concentration, mg/L
"No-till, corn-soybean rotation, SM Spring Preplant(2000-2003)"

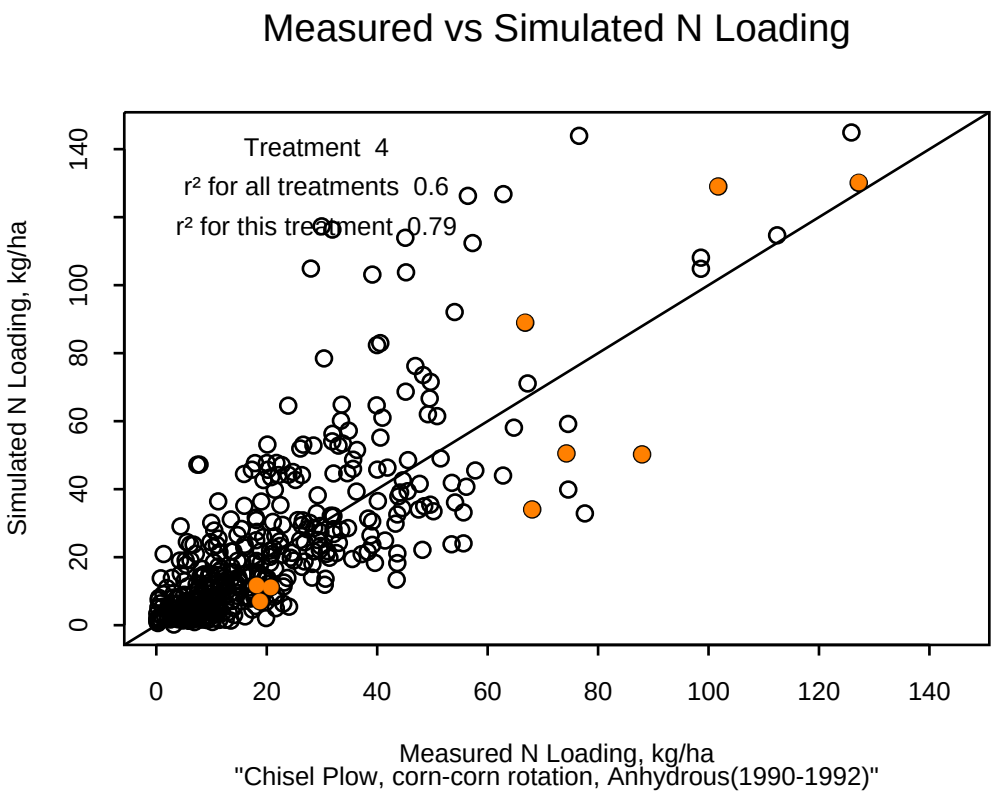

Measured vs Simulated N Concentration
Treatment 34
r² for all treatments 0.55
r² for this treatment 0.15
Simulated Concentration, mg/L
0
20
40
60
Measured Concentration, mg/L
"No-till, soybean-corn rotation, SM Spring Preplant(2001-2003)"

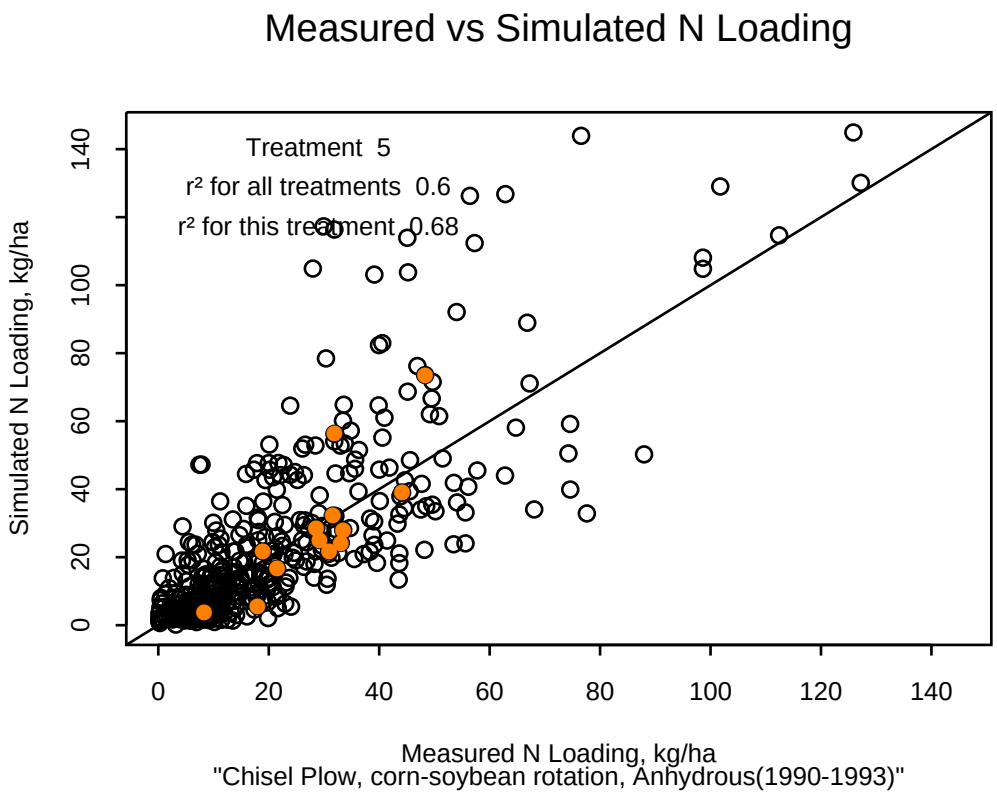

Measured vs Simulated N Concentration
Treatment 35
r² for all treatments 0.55
r² for this treatment 0.03
Simulated Concentration, mg/L
0
20
40
60
Measured Concentration, mg/L
"Chisel Plow, soybean-corn rotation, SM Spring Preplant(1999-2000)"

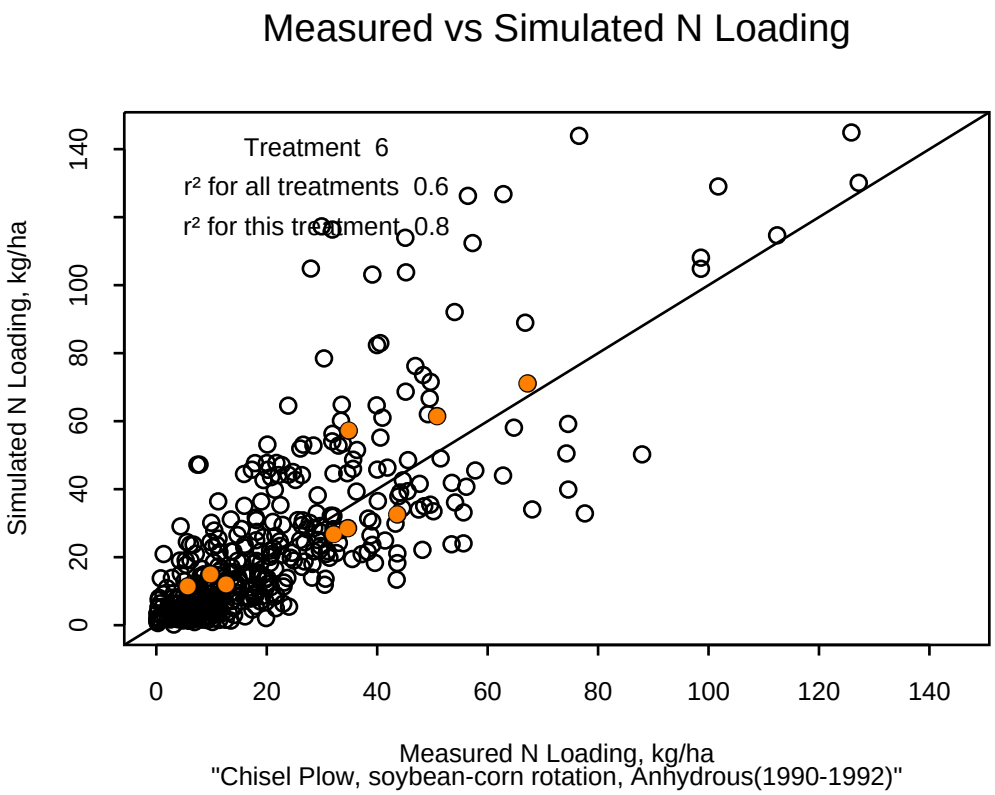

Measured vs Simulated N Loading
Treatment 1
r² for all treatments 0.6
r² for this treatment 0.97
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
"No-till, corn-corn rotation, Anhydrous(1990-1992)"

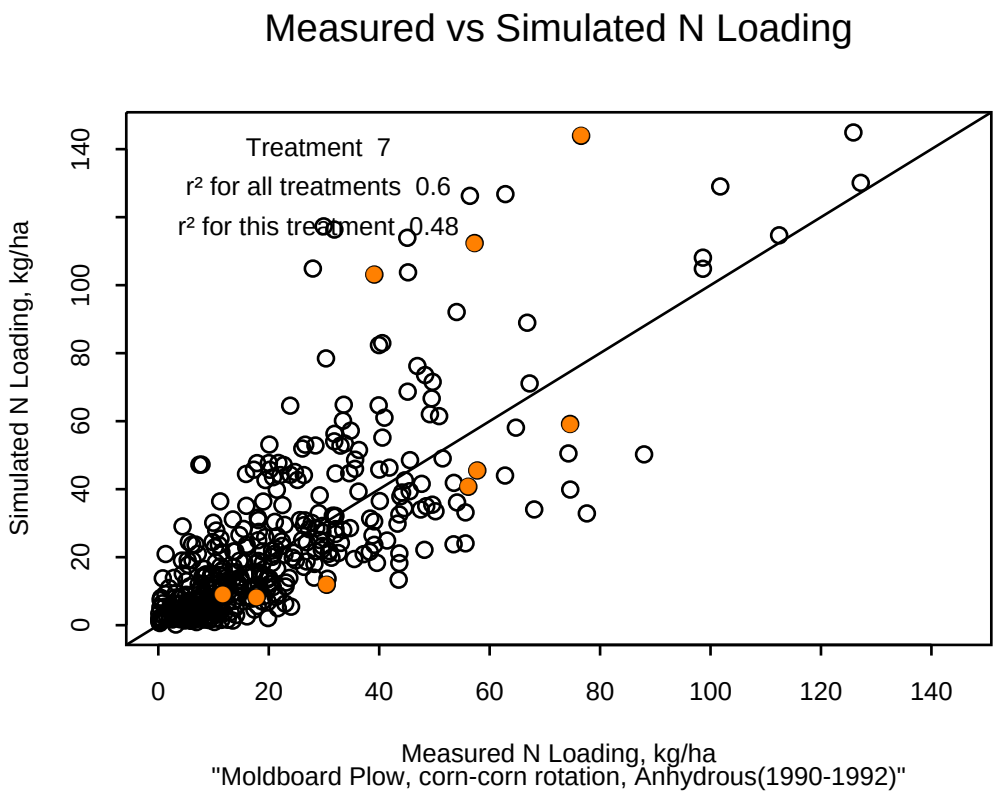

Measured vs Simulated N Loading
Treatment 2
r² for all treatments 0.6
r² for this treatment 0.65
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
"No-till, corn-soybean rotation, Anhydrous(1990-1993)"

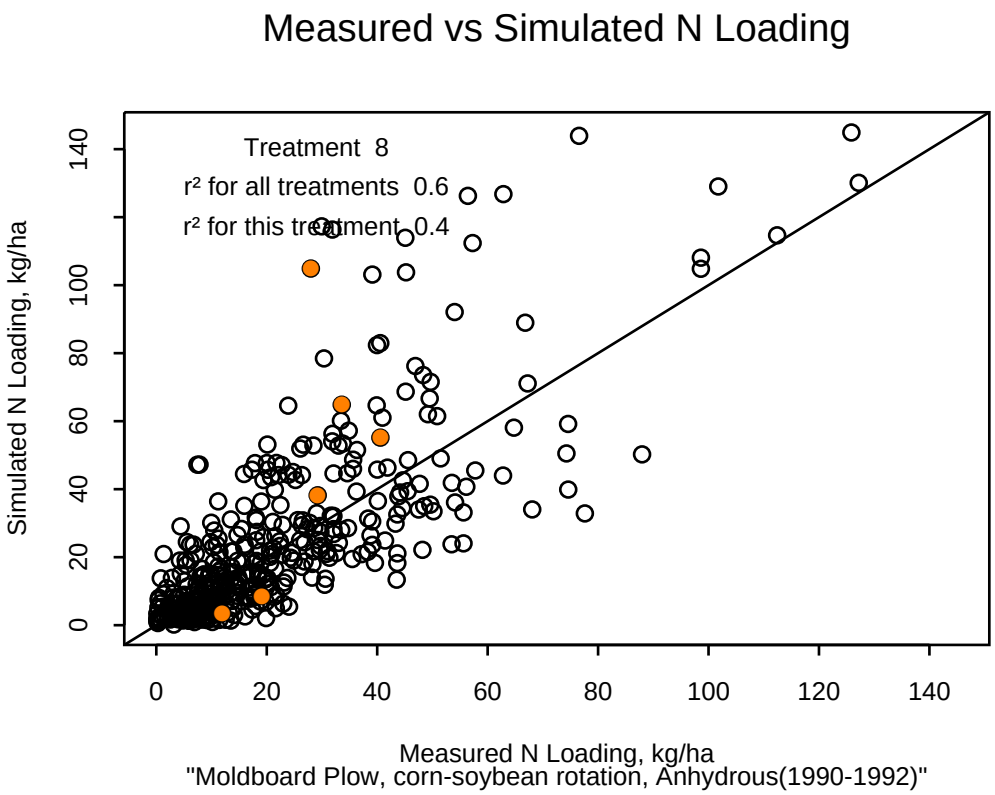

Measured vs Simulated N Loading
Treatment 3
r² for all treatments 0.6
r² for this treatment 0.5
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
"No-till, soybean-corn rotation, Anhydrous(1990-1992)"

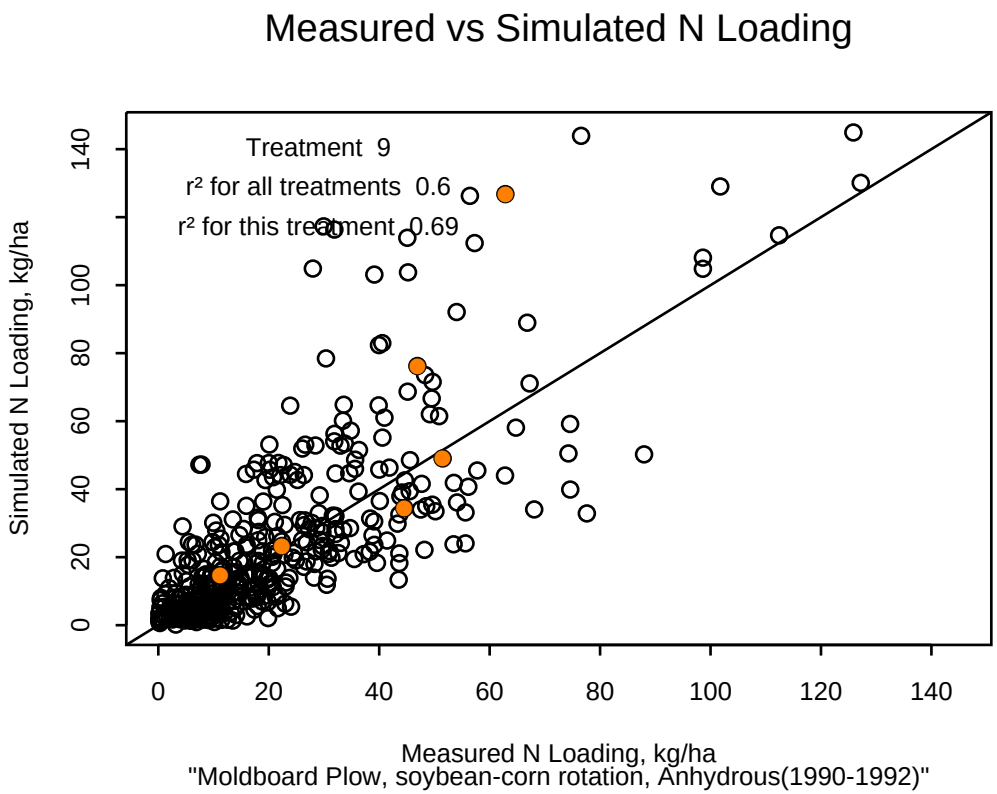

Measured vs Simulated N Loading
Treatment 4
r² for all treatments 0.6
r² for this treatment 0.79
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
"Chisel Plow, corn-corn rotation, Anhydrous(1990-1992)"

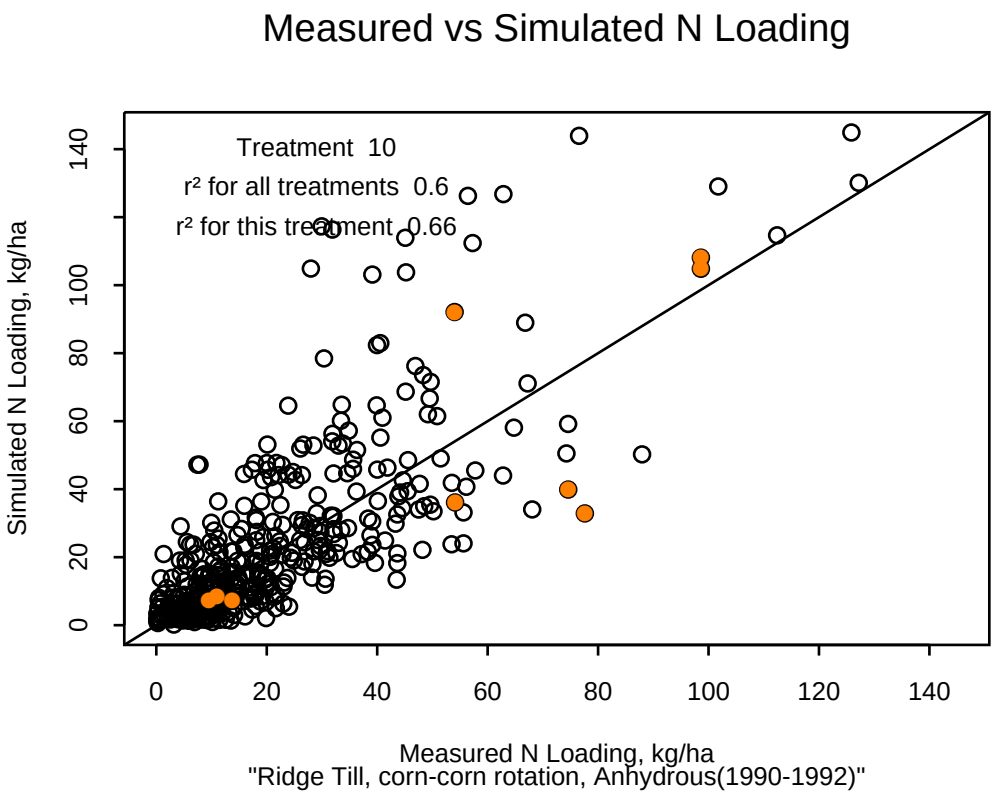

Measured vs Simulated N Loading
Treatment 5
r² for all treatments 0.6
r² for this treatment 0.68
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
"Chisel Plow, corn-soybean rotation, Anhydrous(1990-1993)"

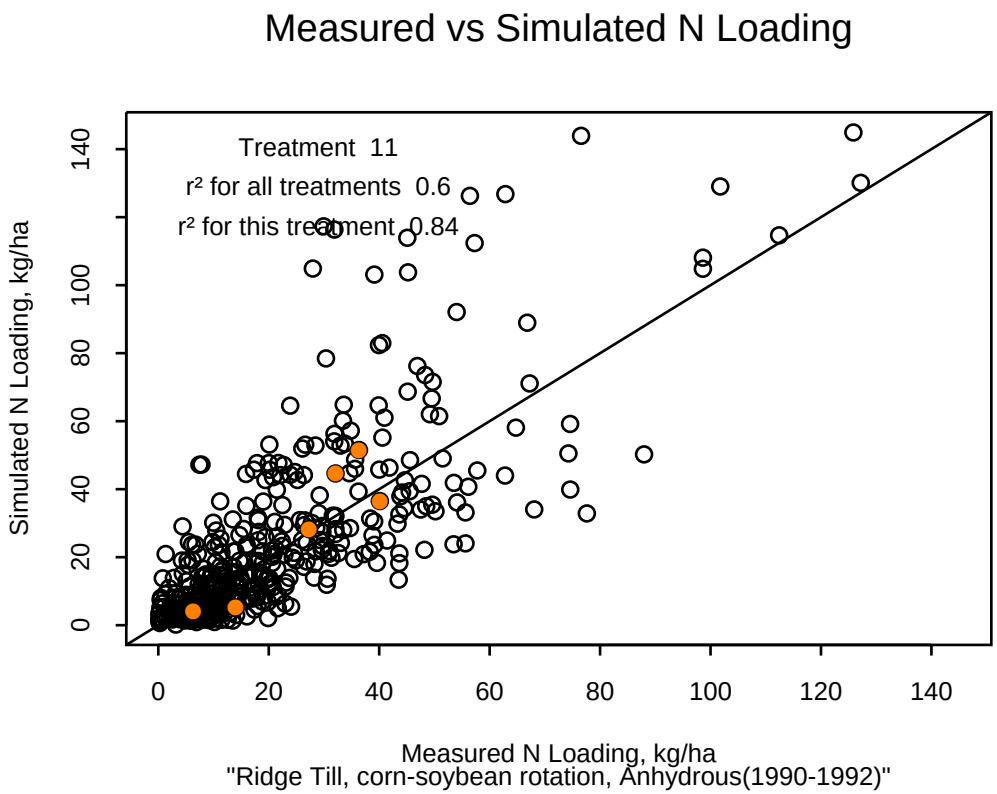

Measured vs Simulated N Loading
Treatment 6
r² for all treatments 0.6
r² for this treatment 0.8
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
"Chisel Plow, soybean-corn rotation, Anhydrous(1990-1992)"

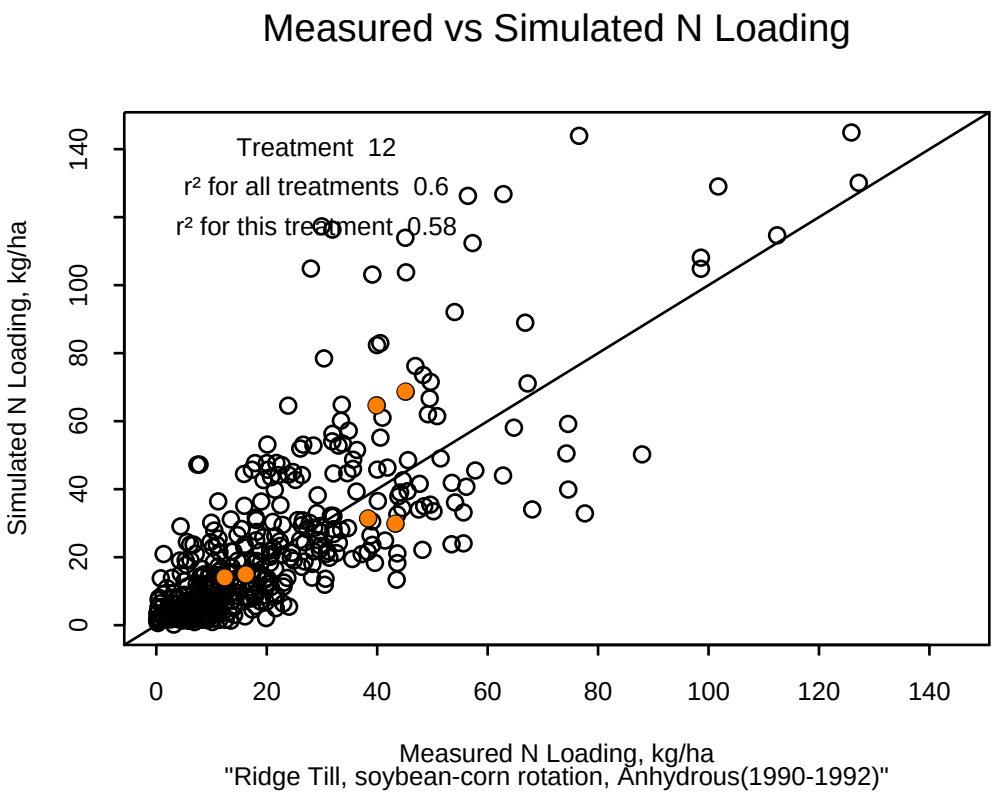

Measured vs Simulated N Loading
Treatment 7
r² for all treatments 0.6
r² for this treatment 0.48
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
"Moldboard Plow, corn-corn rotation, Anhydrous(1990-1992)"

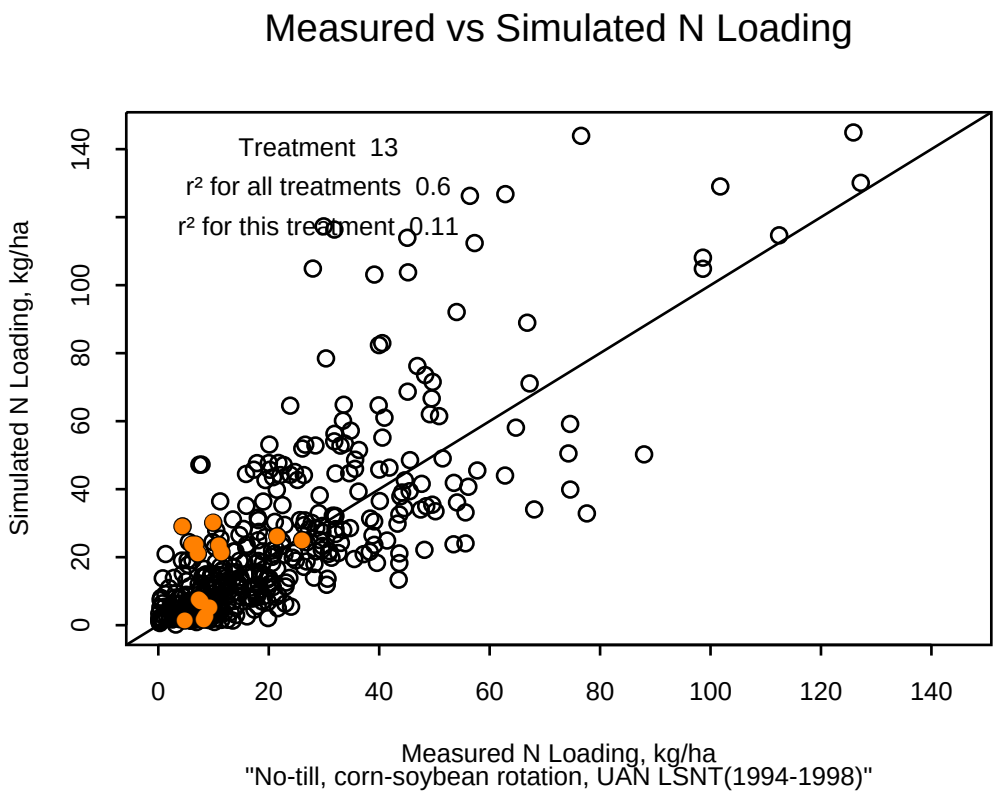

Measured vs Simulated N Loading
Treatment 8
r² for all treatments 0.6
r² for this treatment 0.4
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
"Moldboard Plow, corn-soybean rotation, Anhydrous(1990-1992)"

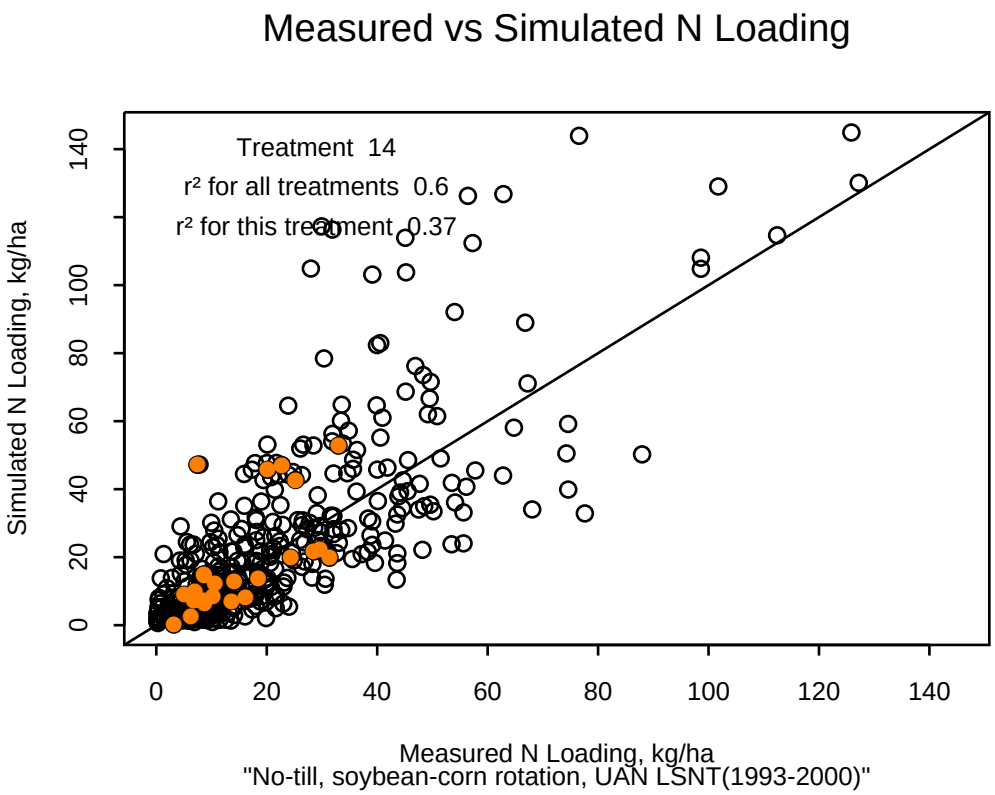

Measured vs Simulated N Loading
Treatment 9
r² for all treatments 0.6
r² for this treatment 0.69
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
"Moldboard Plow, soybean-corn rotation, Anhydrous(1990-1992)"

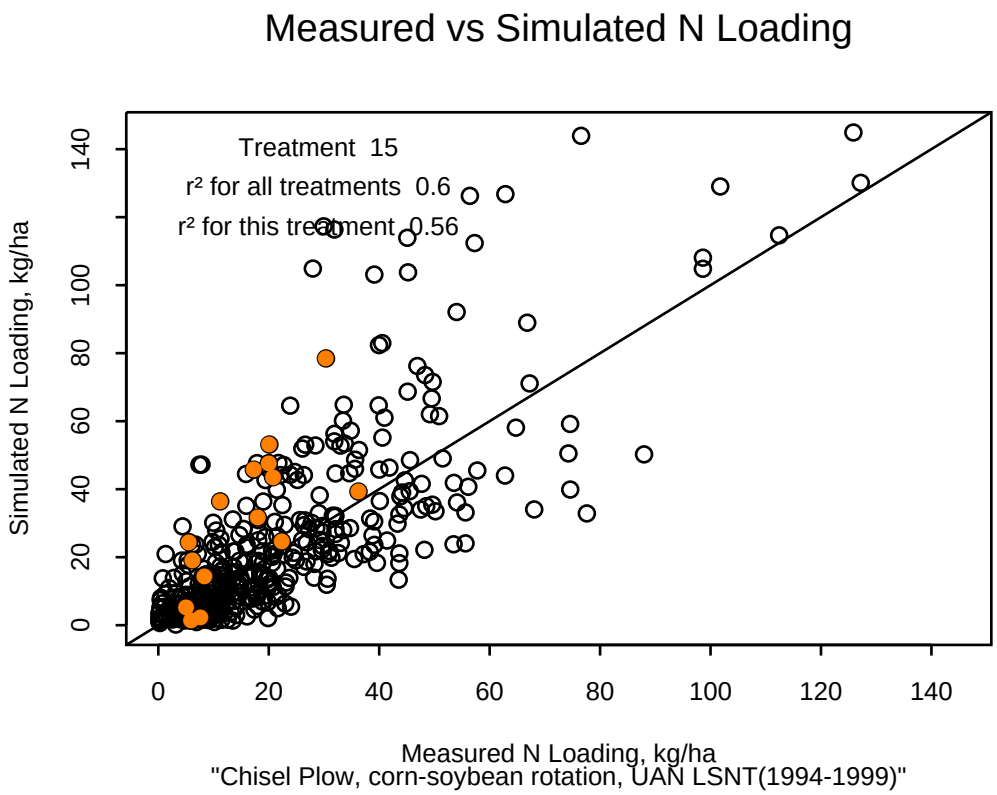

Measured vs Simulated N Loading
Treatment 10
r² for all treatments 0.6
r² for this treatment 0.66
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
"Ridge Till, corn-corn rotation, Anhydrous(1990-1992)"

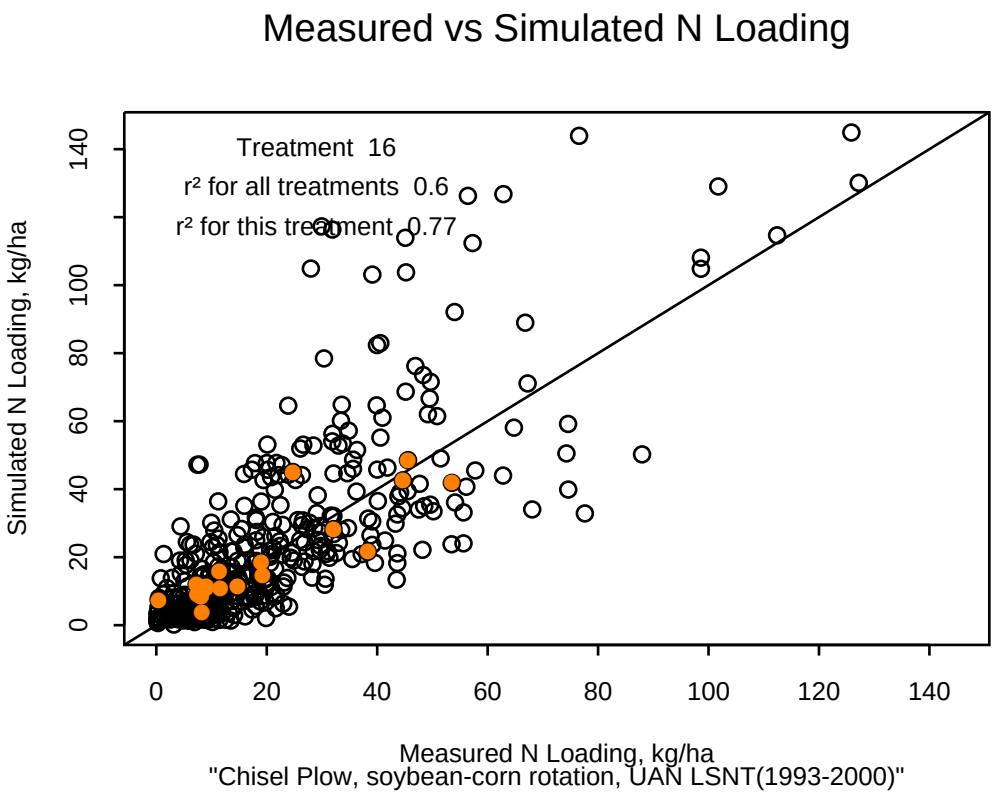

Measured vs Simulated N Loading
Treatment 11
r² for all treatments 0.6
r² for this treatment 0.84
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
"Ridge Till, corn-soybean rotation, Anhydrous(1990-1992)"

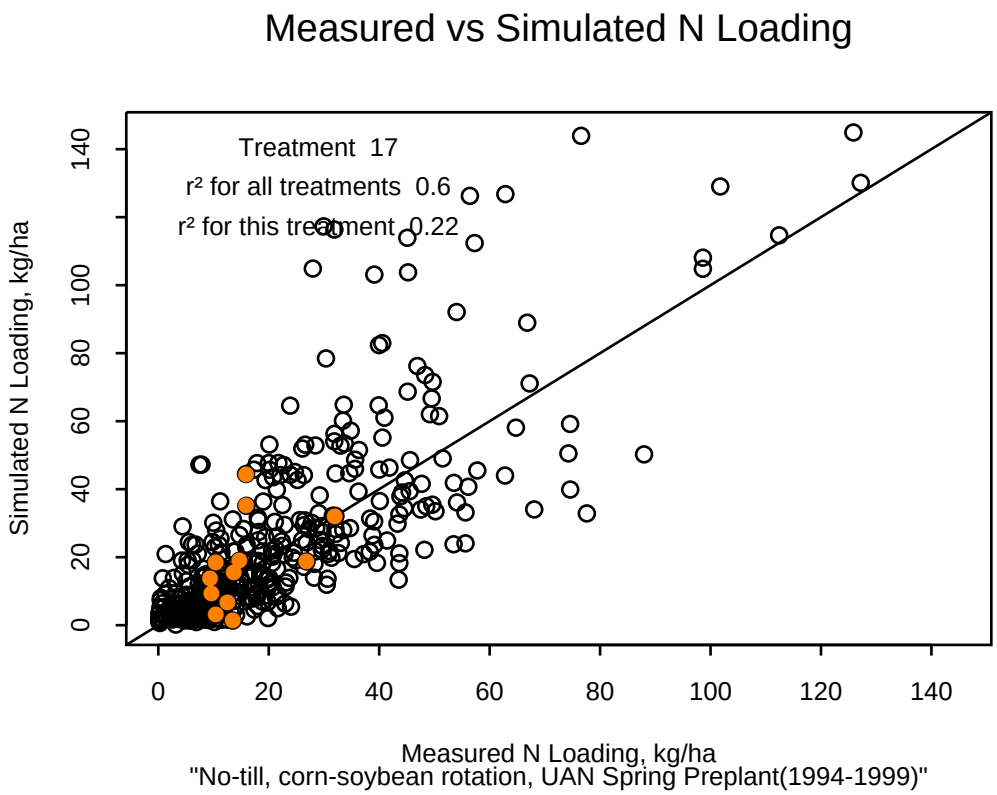

Measured vs Simulated N Loading
Treatment 12
r² for all treatments 0.6
r² for this treatment 0.58
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
"Ridge Till, soybean-corn rotation, Anhydrous(1990-1992)"

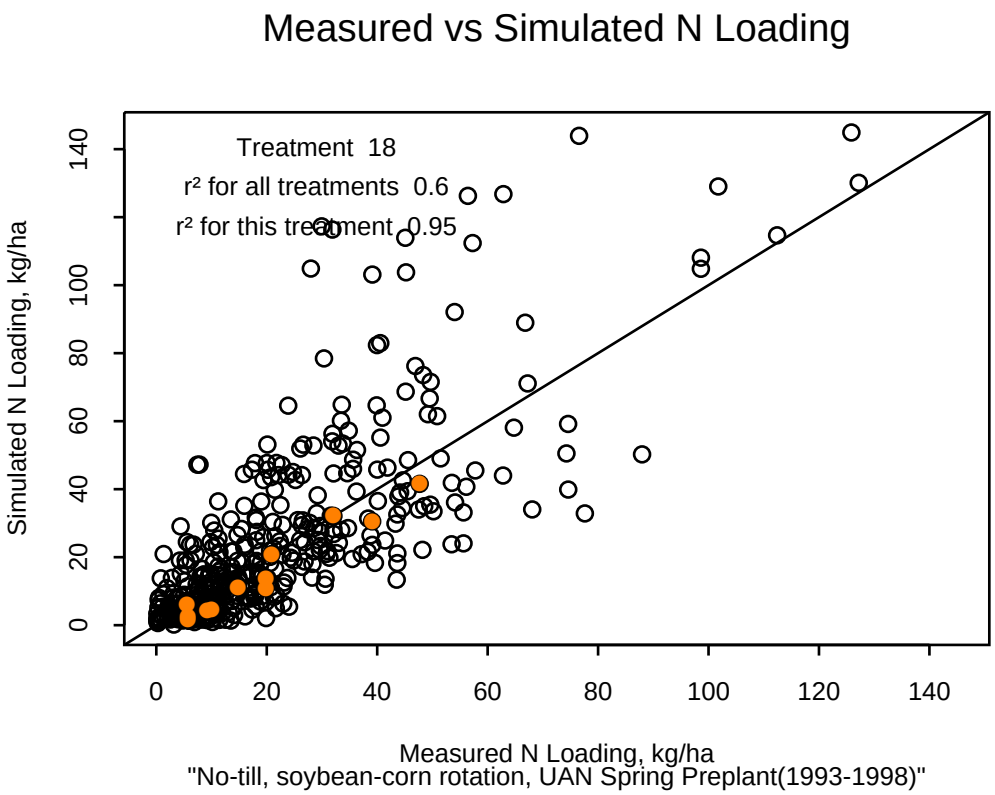

Measured vs Simulated N Loading
Treatment 13
r² for all treatments 0.6
r² for this treatment 0.11
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
"No-till, corn-soybean rotation, UAN LSNT(1994-1998)"

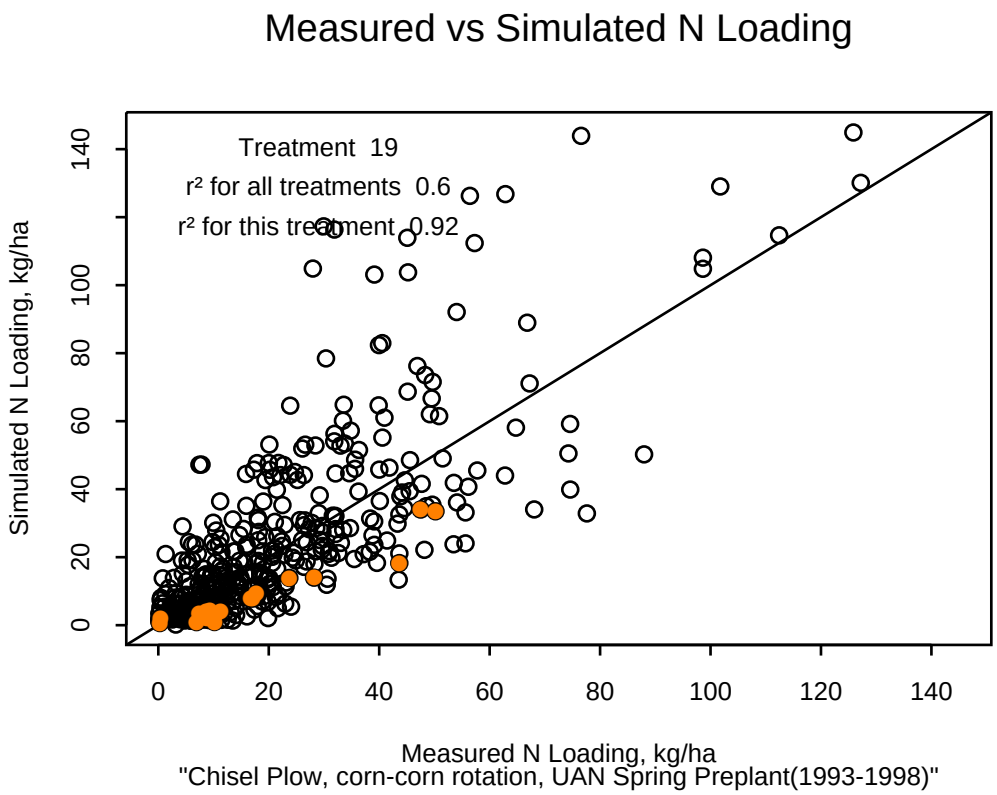

Measured vs Simulated N Loading
Treatment 14
r² for all treatments 0.6
r² for this treatment 0.37
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
"No-till, soybean-corn rotation, UAN LSNT(1993-2000)"

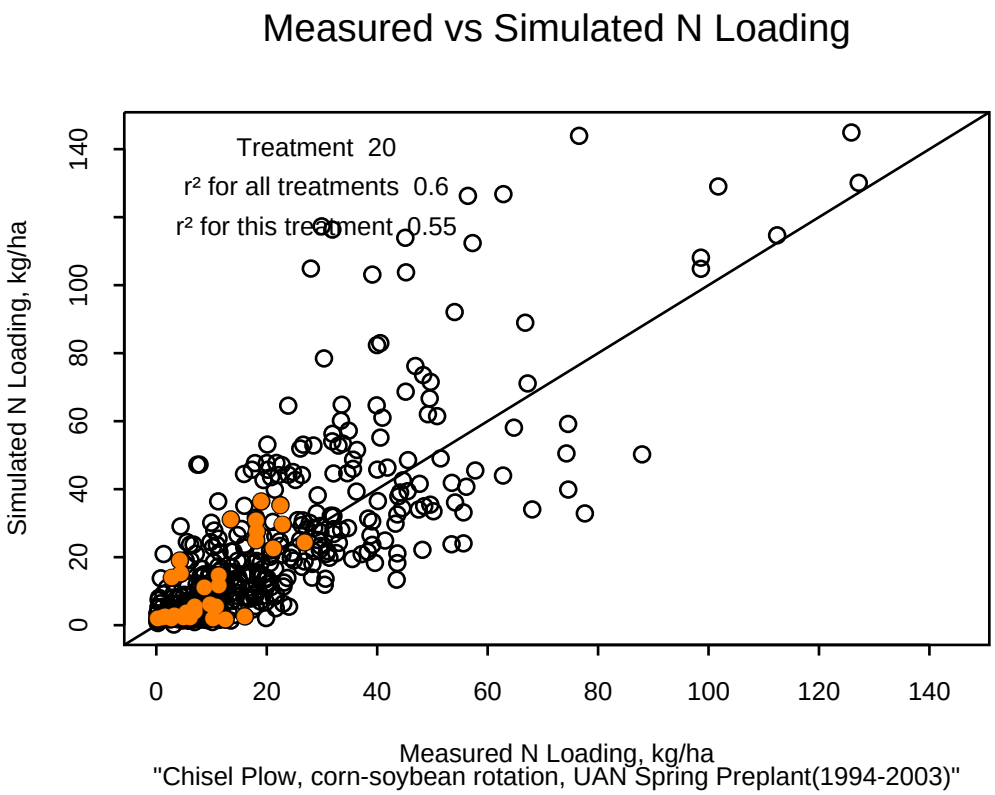

Measured vs Simulated N Loading
Treatment 15
r² for all treatments 0.6
r² for this treatment 0.56
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
"Chisel Plow, corn-soybean rotation, UAN LSNT(1994-1999)"

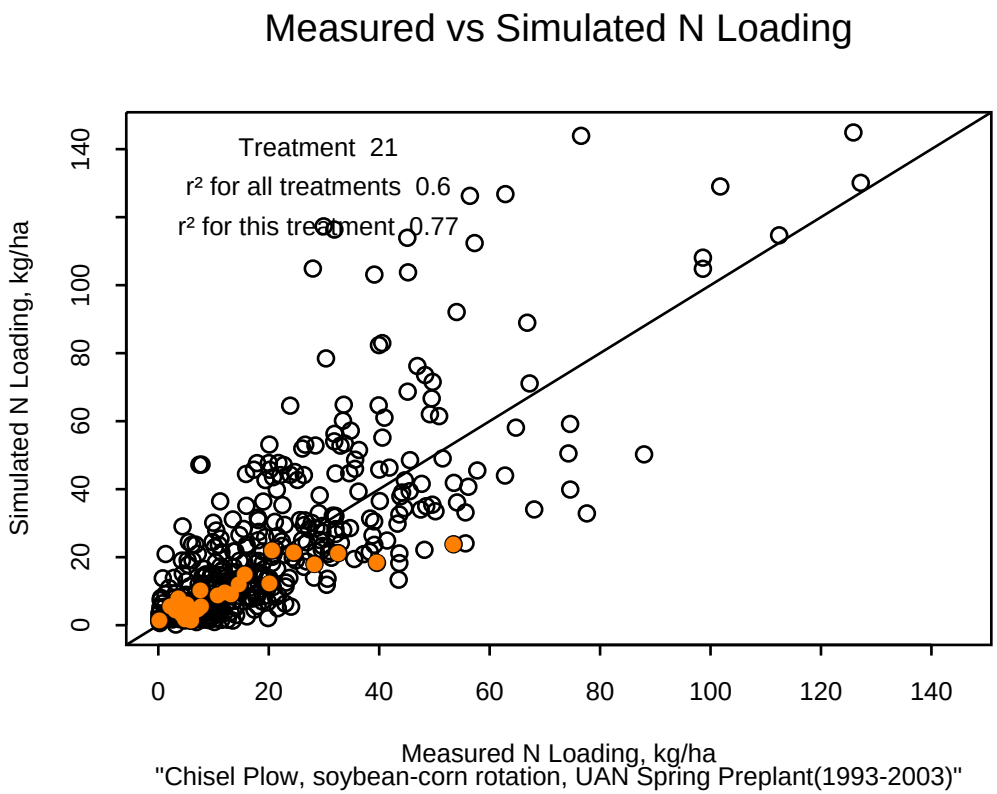

Measured vs Simulated N Loading
Treatment 16
r² for all treatments 0.6
r² for this treatment 0.77
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
"Chisel Plow, soybean-corn rotation, UAN LSNT(1993-2000)"

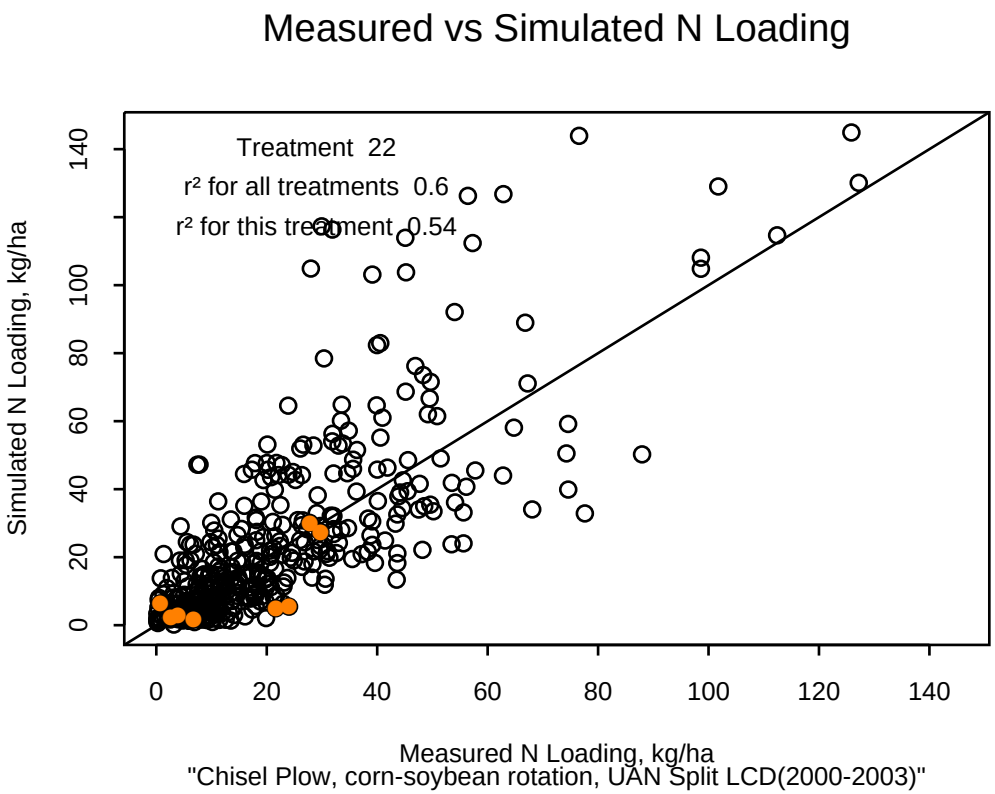

Measured vs Simulated N Loading
Treatment 17
r² for all treatments 0.6
r² for this treatment 0.22
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
"No-till, corn-soybean rotation, UAN Spring Preplant(1994-1999)"

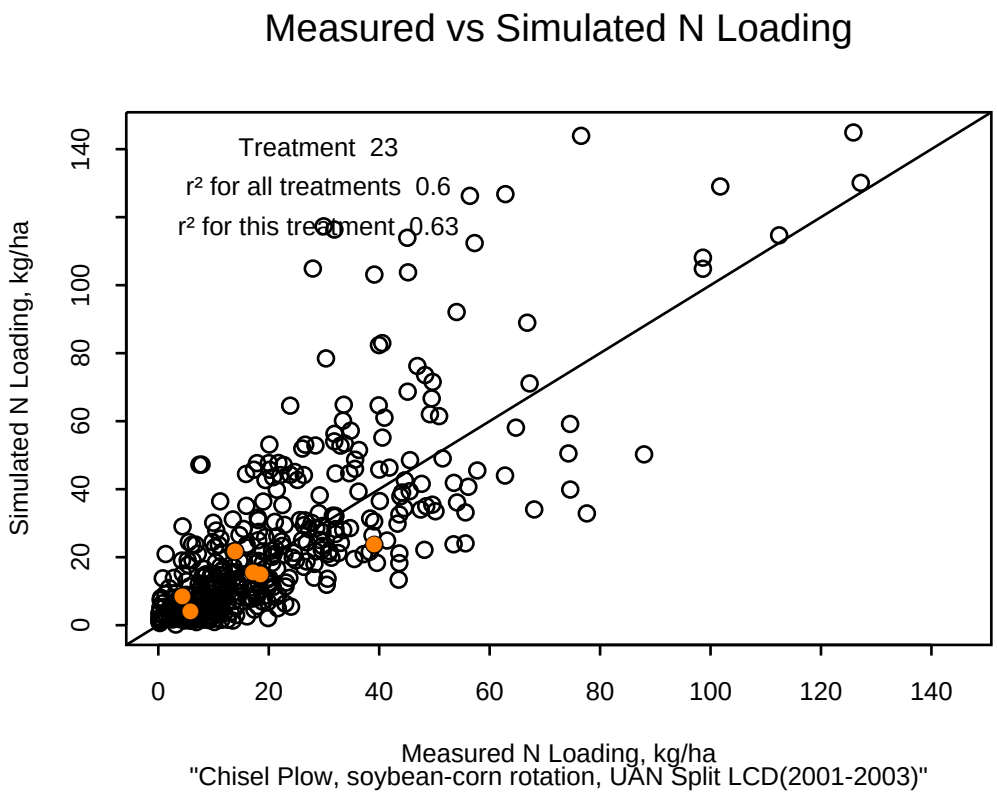

Measured vs Simulated N Loading
Treatment 18
r² for all treatments 0.6
r² for this treatment 0.95
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
"No-till, soybean-corn rotation, UAN Spring Preplant(1993-1998)"

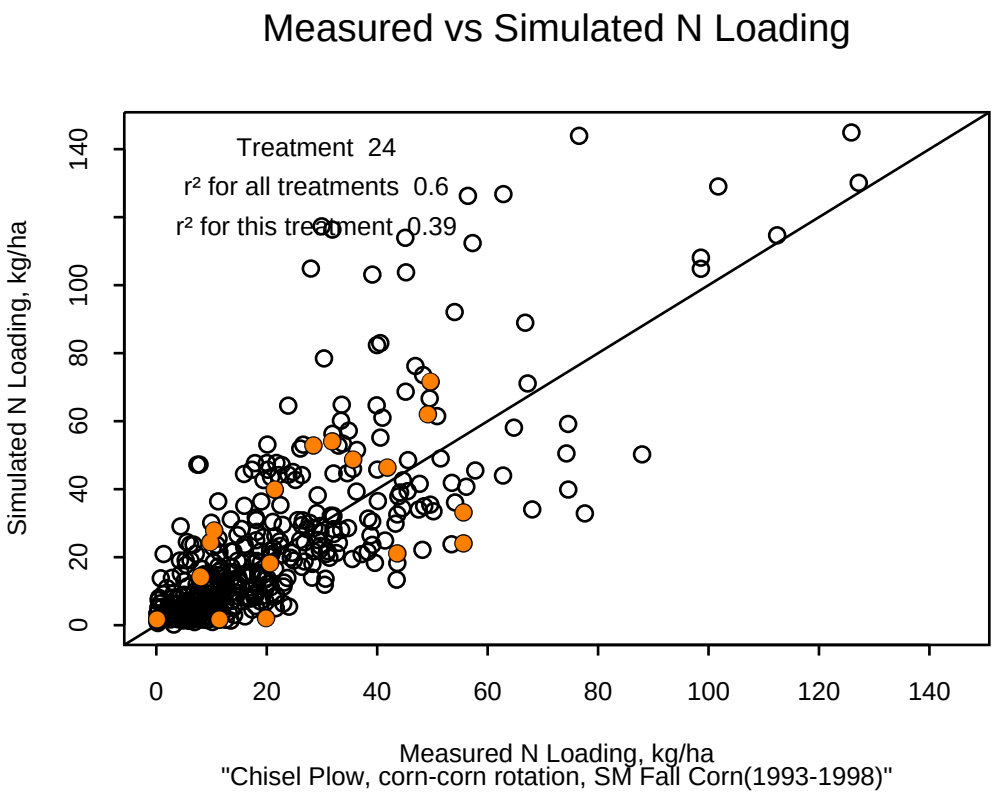

Measured vs Simulated N Loading
Treatment 19
r² for all treatments 0.6
r² for this treatment 0.92
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
"Chisel Plow, corn-corn rotation, UAN Spring Preplant(1993-1998)"

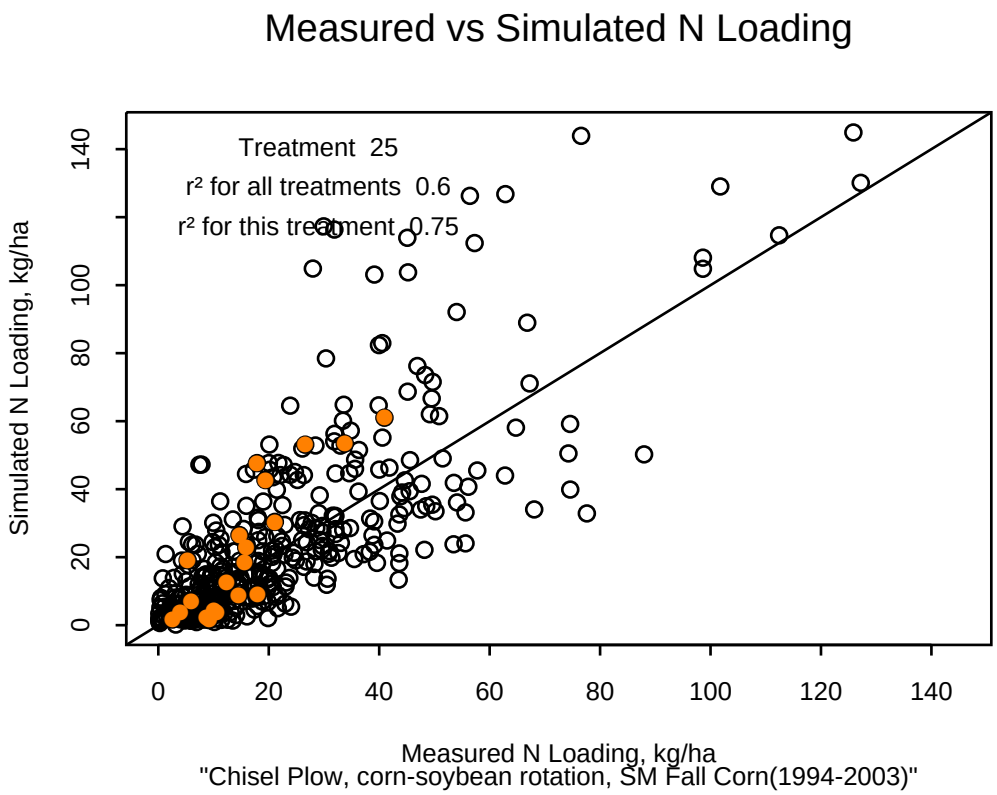

Measured vs Simulated N Loading
Treatment 20
r² for all treatments 0.6
r² for this treatment 0.55
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
"Chisel Plow, corn-soybean rotation, UAN Spring Preplant(1994-2003)"

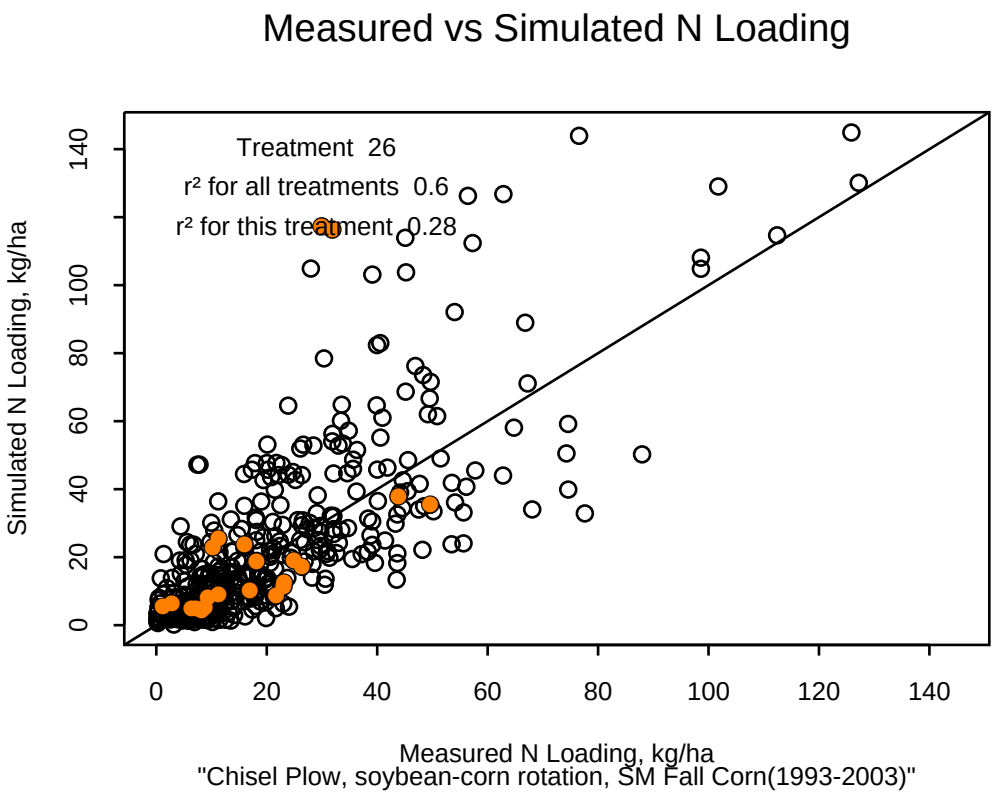

Measured vs Simulated N Loading
Treatment 21
r² for all treatments 0.6
r² for this treatment 0.77
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
"Chisel Plow, soybean-corn rotation, UAN Spring Preplant(1993-2003)"

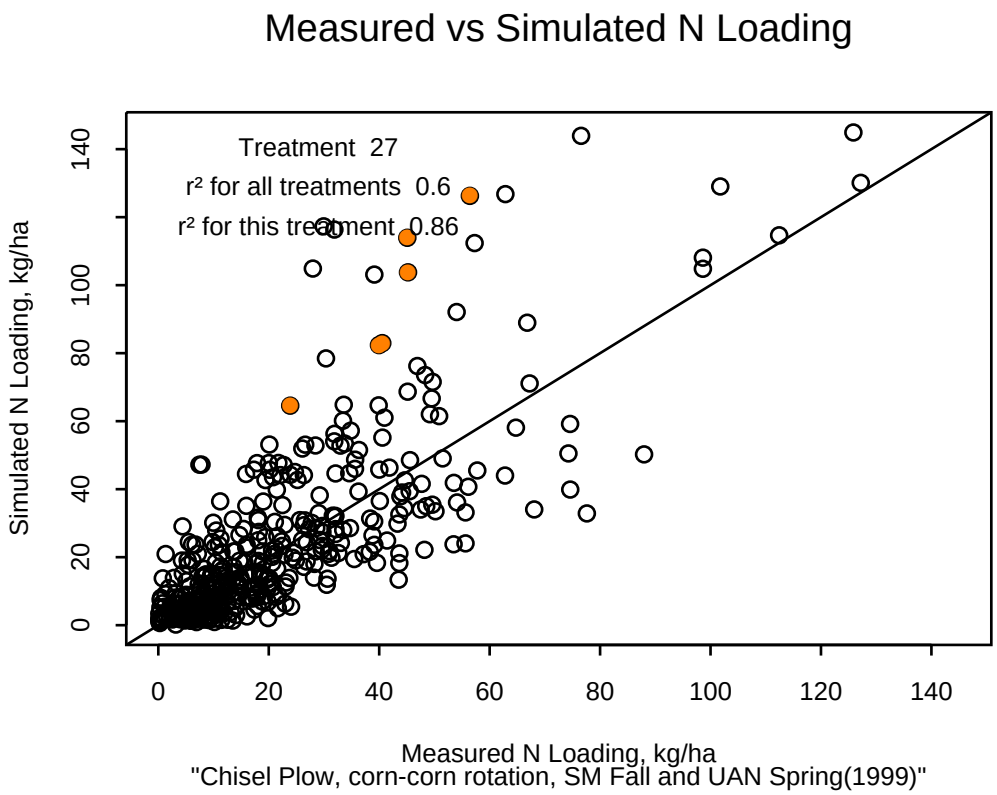

Measured vs Simulated N Loading
Treatment 22
r² for all treatments 0.6
r² for this treatment 0.54
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
"Chisel Plow, corn-soybean rotation, UAN Split LCD(2000-2003)"

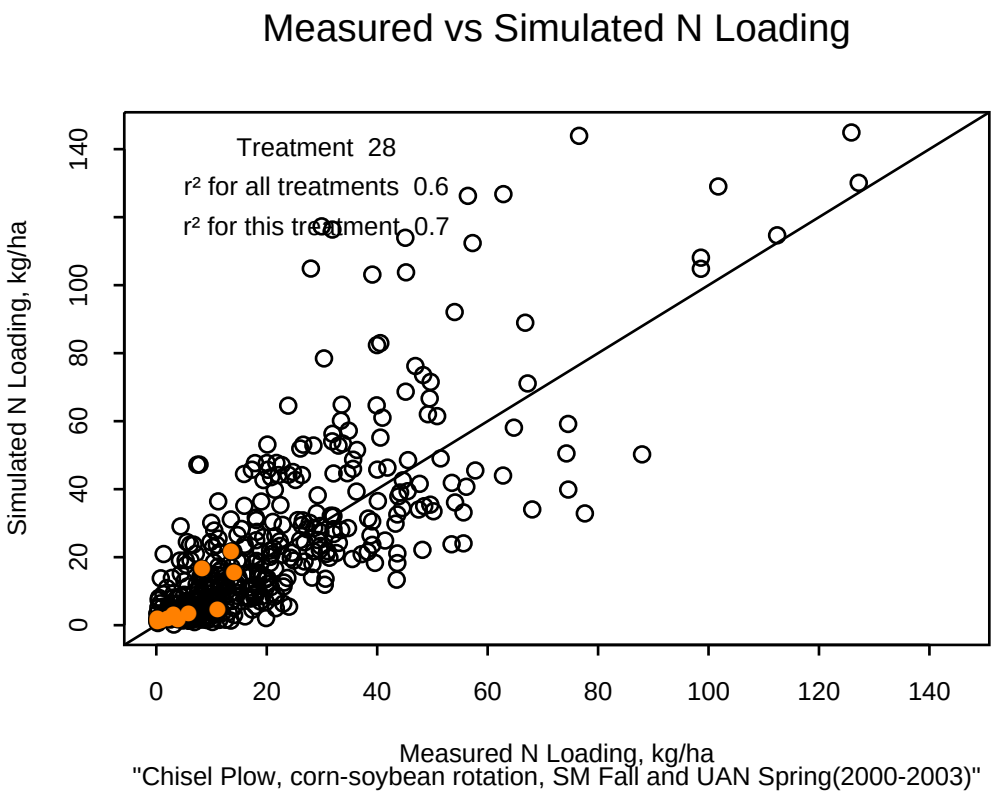

Measured vs Simulated N Loading
Treatment 23
r² for all treatments 0.6
r² for this treatment 0.63
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
"Chisel Plow, soybean-corn rotation, UAN Split LCD(2001-2003)"

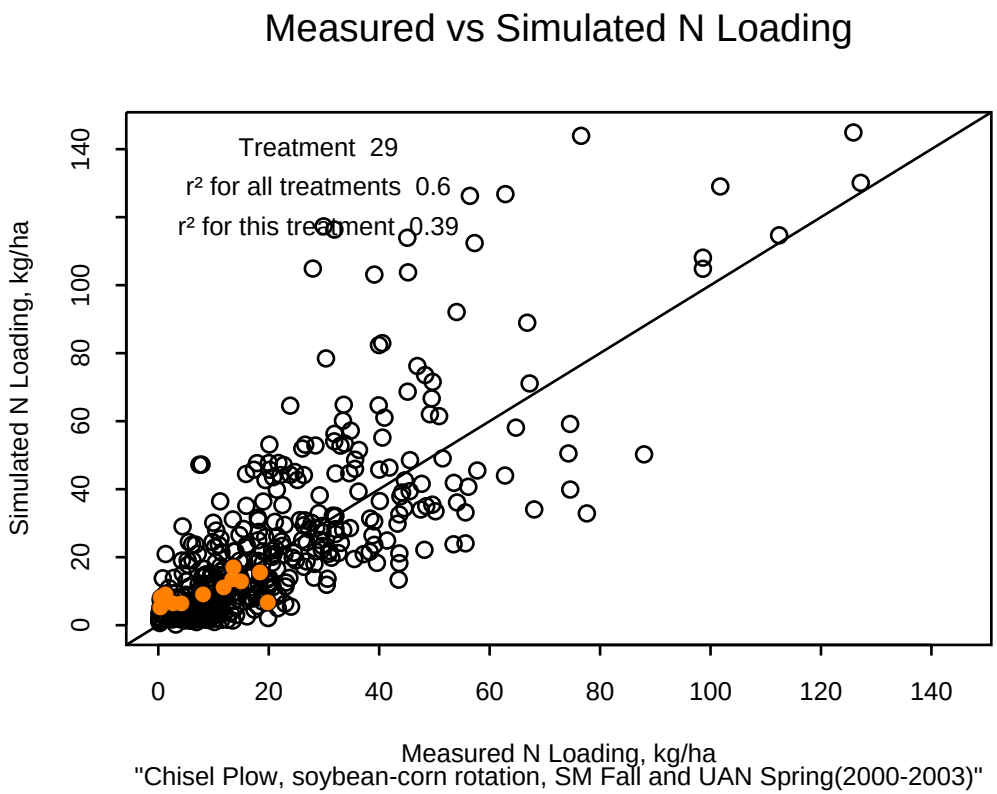

Measured vs Simulated N Loading
Treatment 24
r² for all treatments 0.6
r² for this treatment 0.39
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
"Chisel Plow, corn-corn rotation, SM Fall Corn(1993-1998)"

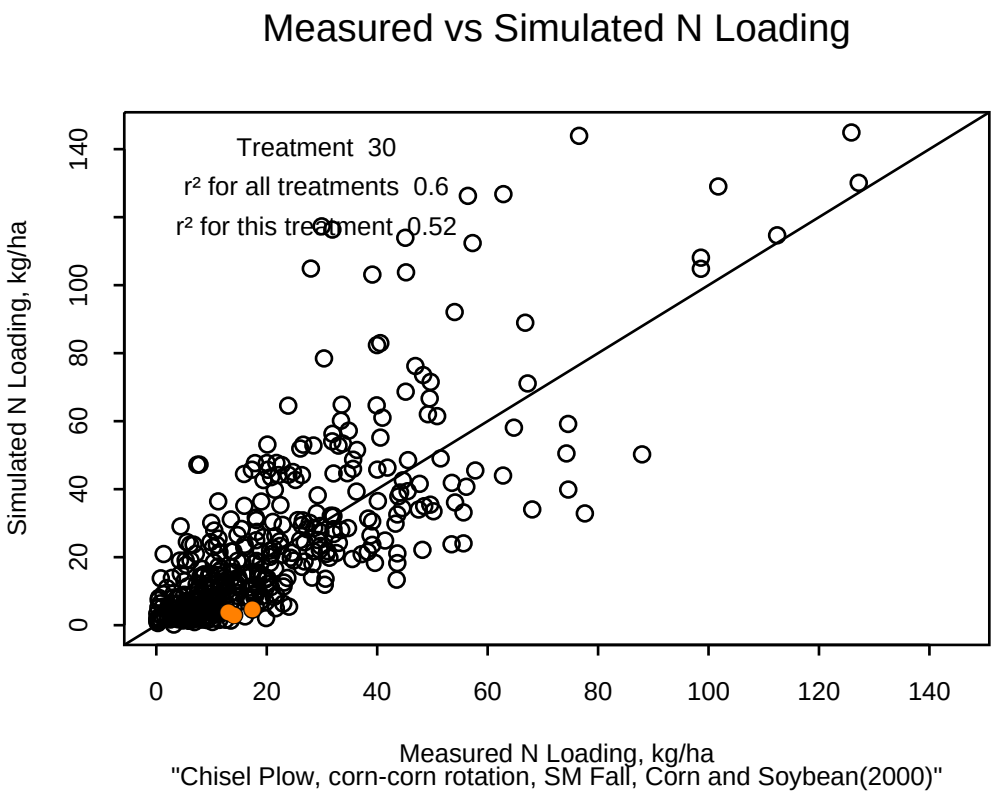

Measured vs Simulated N Loading
Treatment 25
r² for all treatments 0.6
r² for this treatment 0.75
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
"Chisel Plow, corn-soybean rotation, SM Fall Corn(1994-2003)"

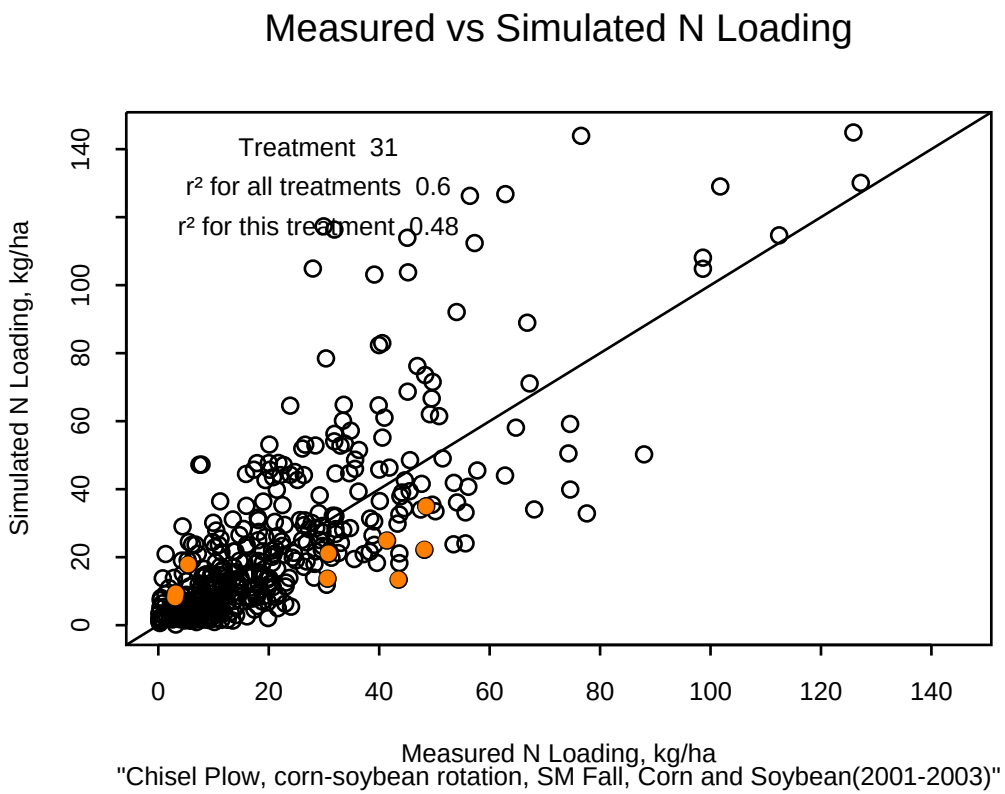

Measured vs Simulated N Loading
Treatment 26
r² for all treatments 0.6
r² for this treatment 0.28
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
"Chisel Plow, soybean-corn rotation, SM Fall Corn(1993-2003)"

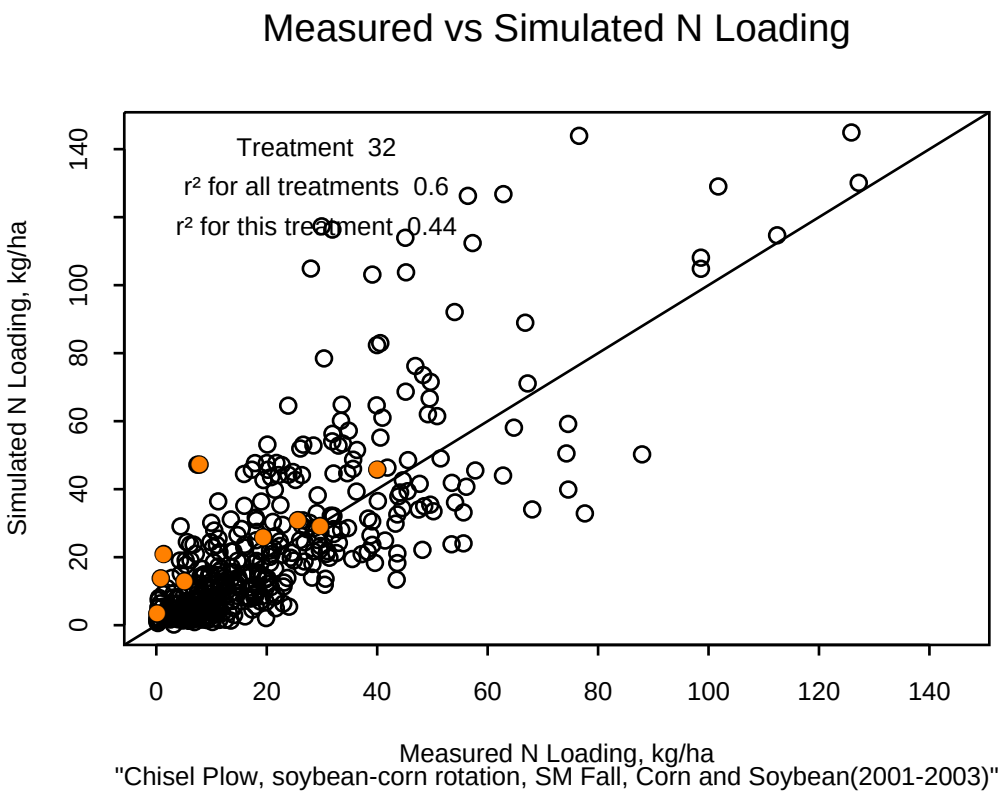

Measured vs Simulated N Loading
Treatment 27
r² for all treatments 0.6
r² for this treatment 0.86
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
"Chisel Plow, corn-corn rotation, SM Fall and UAN Spring(1999)"

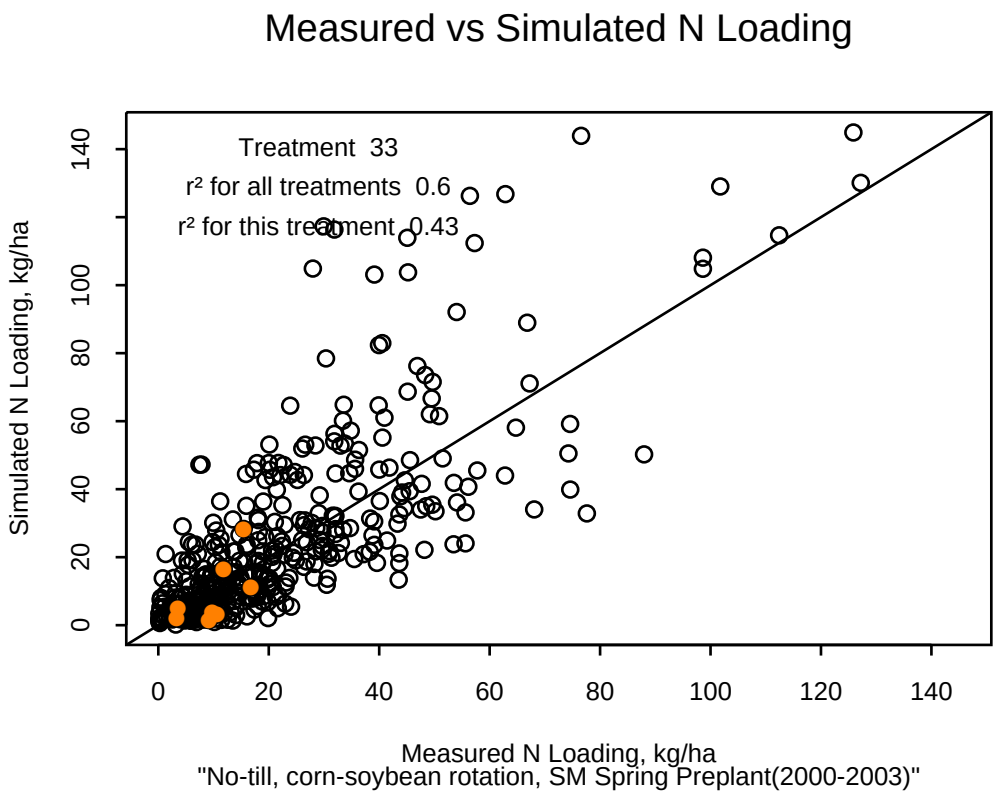

Measured vs Simulated N Loading
Treatment 28
r² for all treatments 0.6
r² for this treatment 0.7
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
"Chisel Plow, corn-soybean rotation, SM Fall and UAN Spring(2000-2003)"

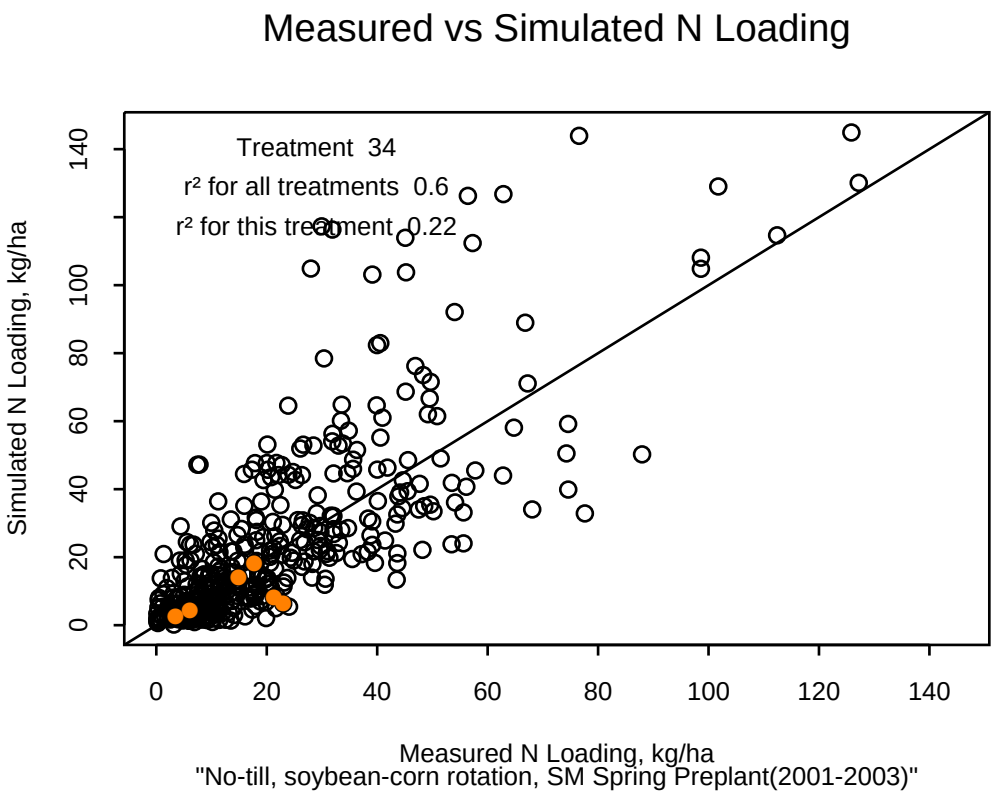

Measured vs Simulated N Loading
Treatment 29
r² for all treatments 0.6
r² for this treatment 0.39
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
"Chisel Plow, soybean-corn rotation, SM Fall and UAN Spring(2000-2003)"

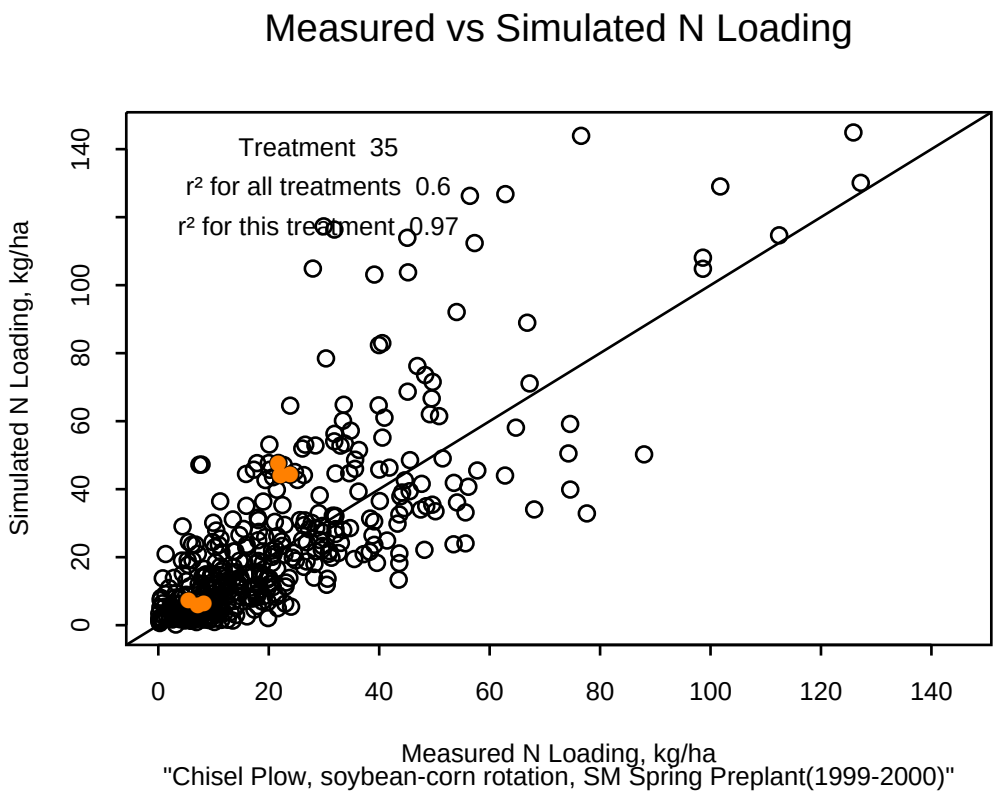

Measured vs Simulated N Loading
Treatment 30
r² for all treatments 0.6
r² for this treatment 0.52
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
"Chisel Plow, corn-corn rotation, SM Fall, Corn and Soybean(2000)"

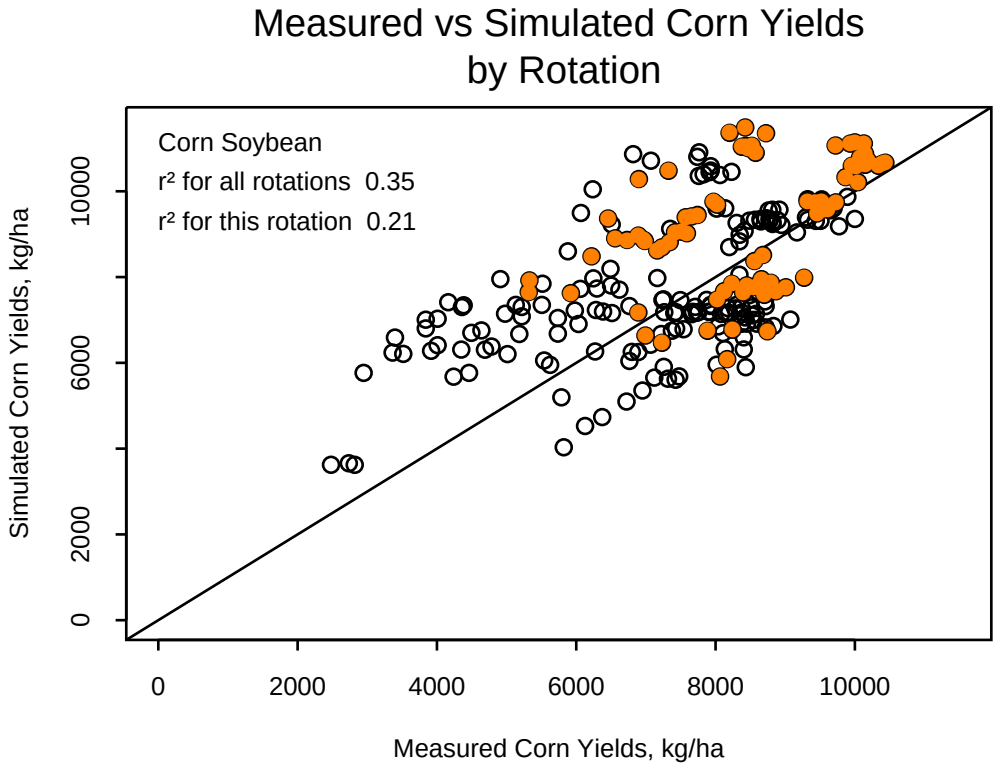

Measured vs Simulated N Loading
Treatment 31
r² for all treatments 0.6
r² for this treatment 0.48
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
"Chisel Plow, corn-soybean rotation, SM Fall, Corn and Soybean(2001-2003)"

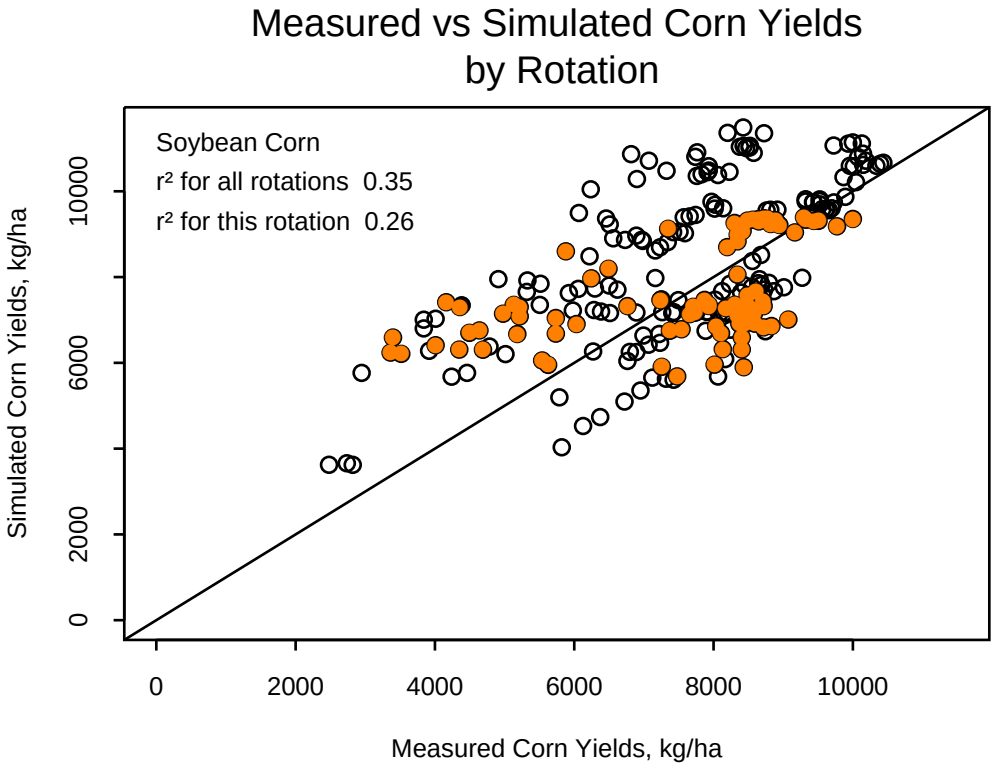

Measured vs Simulated N Loading
Treatment 32
r² for all treatments 0.6
r² for this treatment 0.44
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
"Chisel Plow, soybean-corn rotation, SM Fall, Corn and Soybean(2001-2003)"

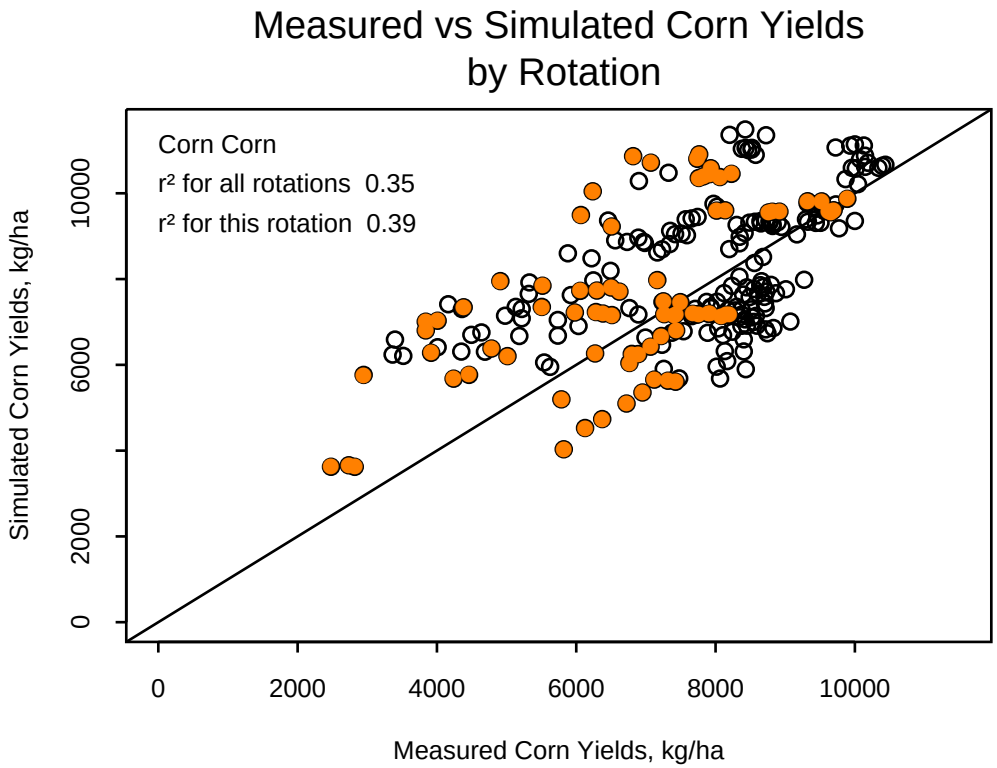

Measured vs Simulated N Loading
Treatment 33
r² for all treatments 0.6
r² for this treatment 0.43
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
"No-till, corn-soybean rotation, SM Spring Preplant(2000-2003)"

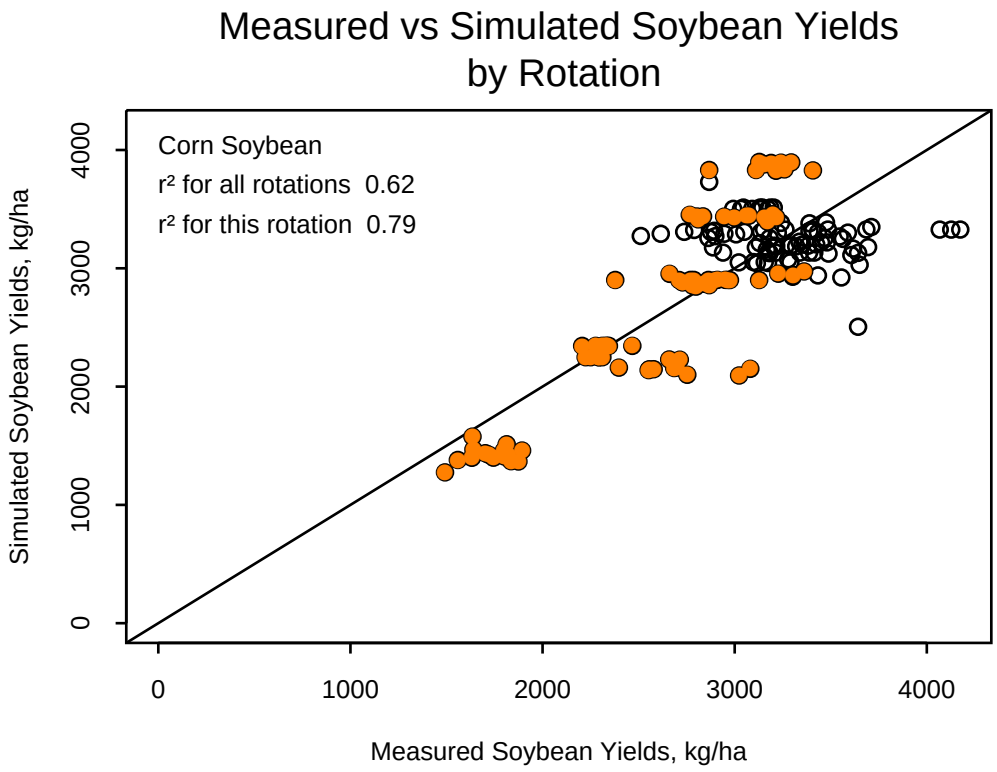

Measured vs Simulated N Loading
Treatment 34
r² for all treatments 0.6
r² for this treatment 0.22
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
"No-till, soybean-corn rotation, SM Spring Preplant(2001-2003)"

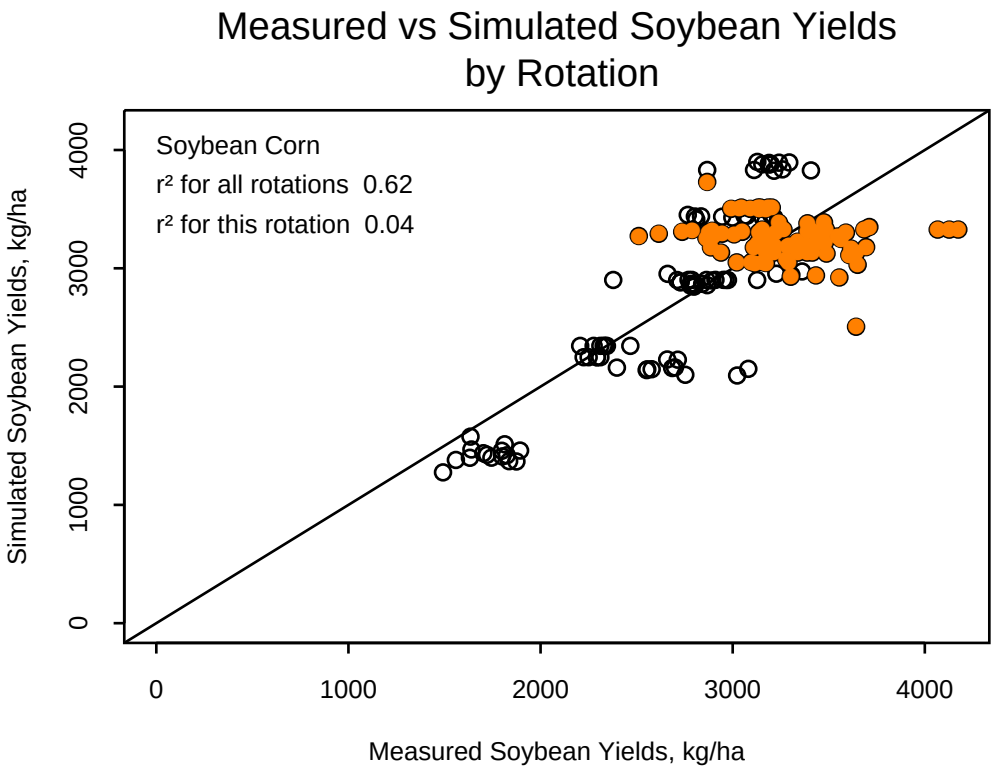

Measured vs Simulated N Loading
Treatment 35
r² for all treatments 0.6
r² for this treatment 0.97
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
"Chisel Plow, soybean-corn rotation, SM Spring Preplant(1999-2000)"

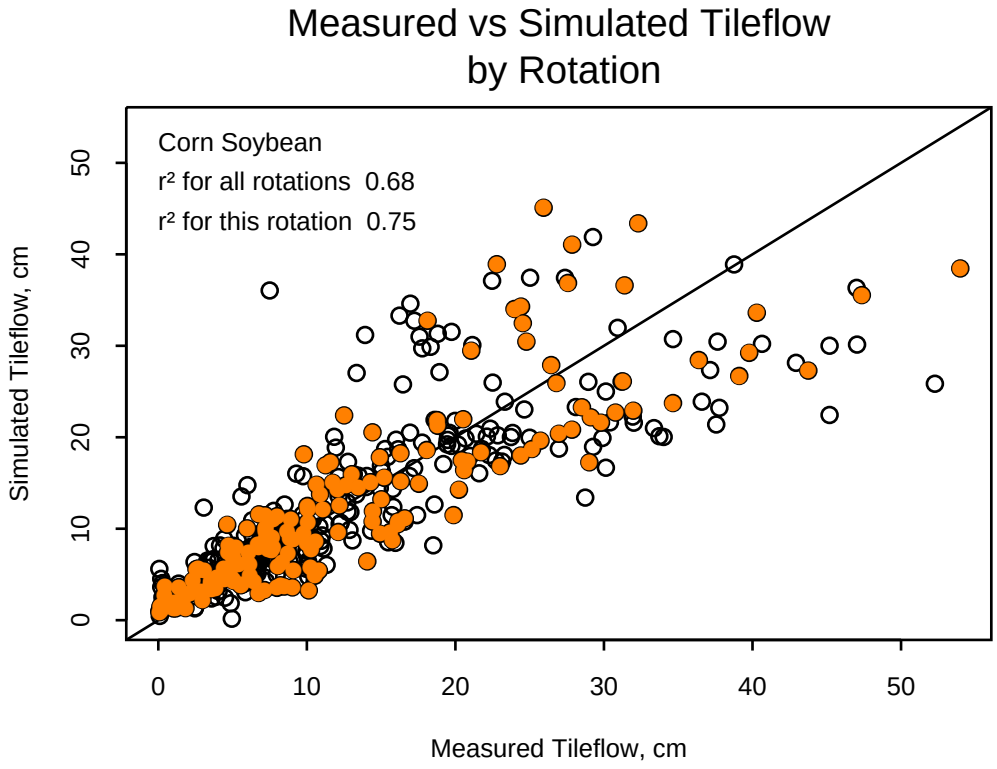

Measured vs Simulated Corn Yields
by Rotation
Corn Soybean
r² for all rotations 0.35
r² for this rotation 0.21
Simulated Corn Yields, kg/ha
Measured Corn Yields, kg/ha
0
2000
4000
6000
8000
10000

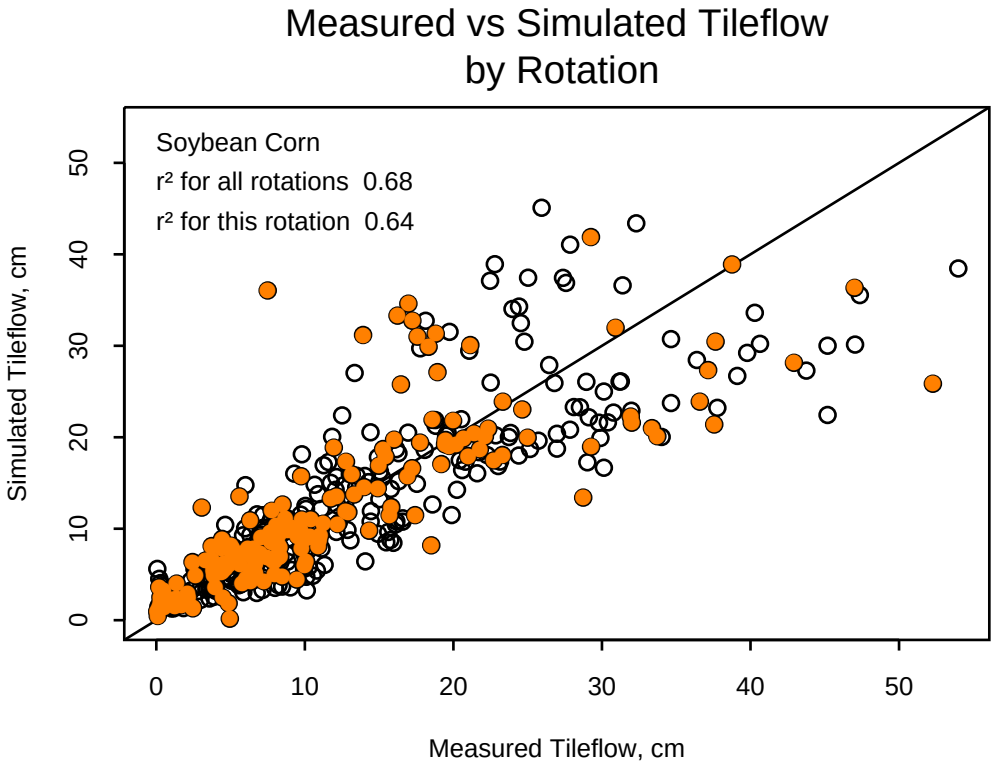

Measured vs Simulated Corn Yields
by Rotation
Soybean Corn
r² for all rotations 0.35
r² for this rotation 0.26
Simulated Corn Yields, kg/ha
Measured Corn Yields, kg/ha
0
2000
4000
6000
8000
10000

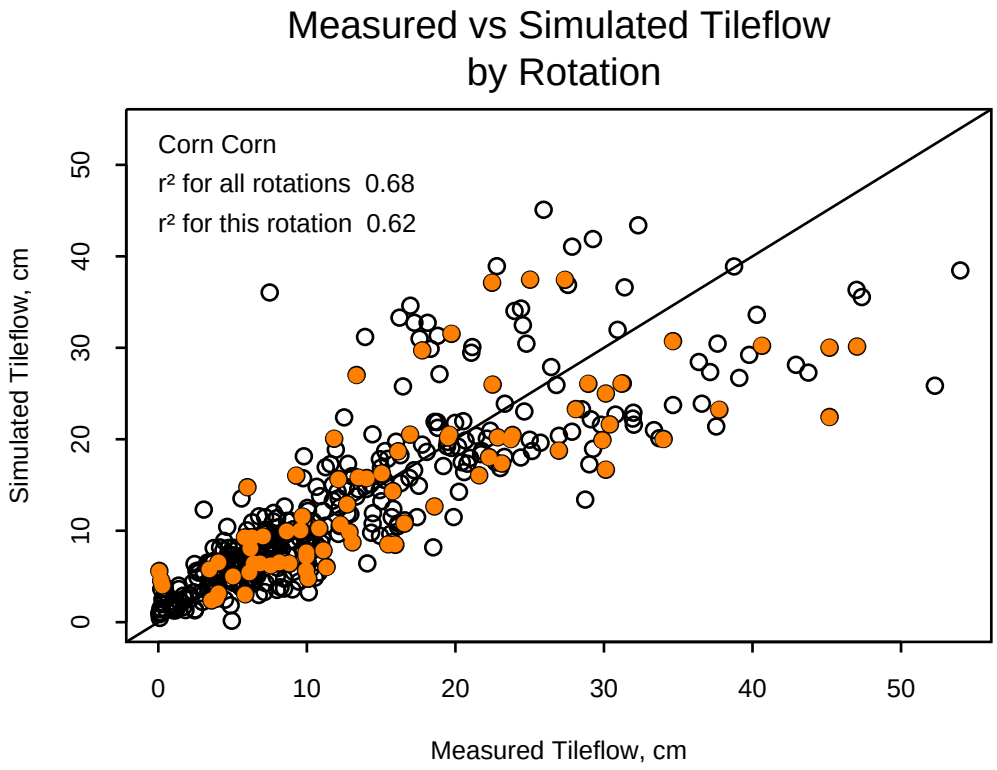

Measured vs Simulated Corn Yields
by Rotation
Corn Corn
r² for all rotations 0.35
r² for this rotation 0.39
Simulated Corn Yields, kg/ha
Measured Corn Yields, kg/ha
0
2000
4000
6000
8000
10000

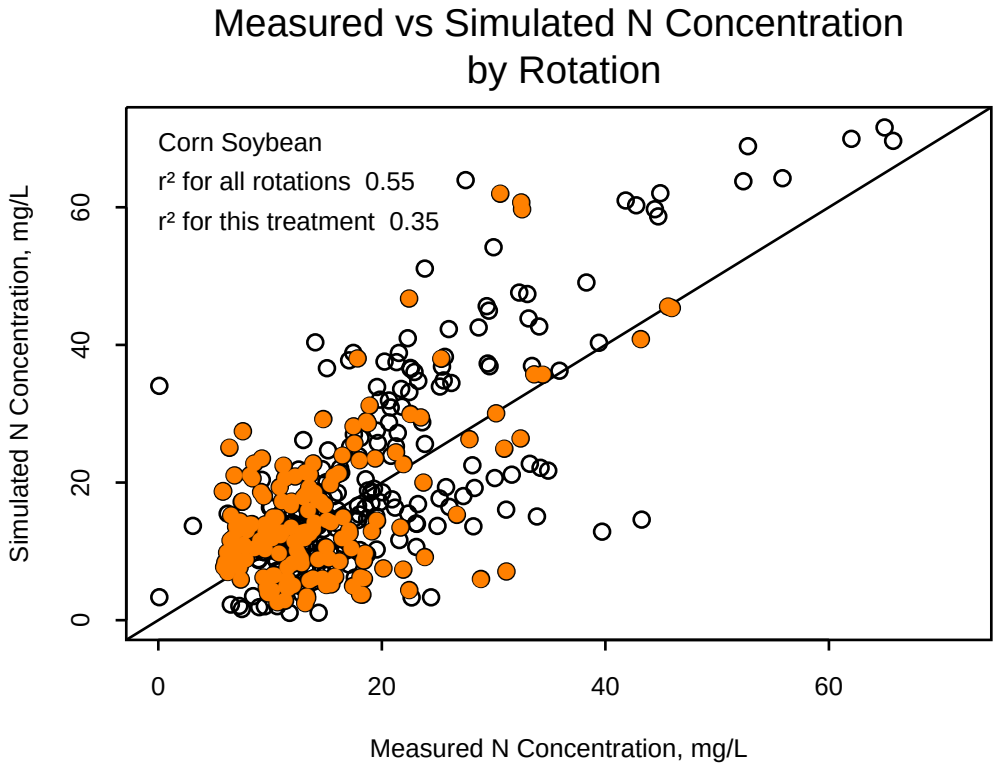

Measured vs Simulated Soybean Yields
by Rotation
Corn Soybean
r² for all rotations 0.62
r² for this rotation 0.79
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
0
1000
2000
3000
4000

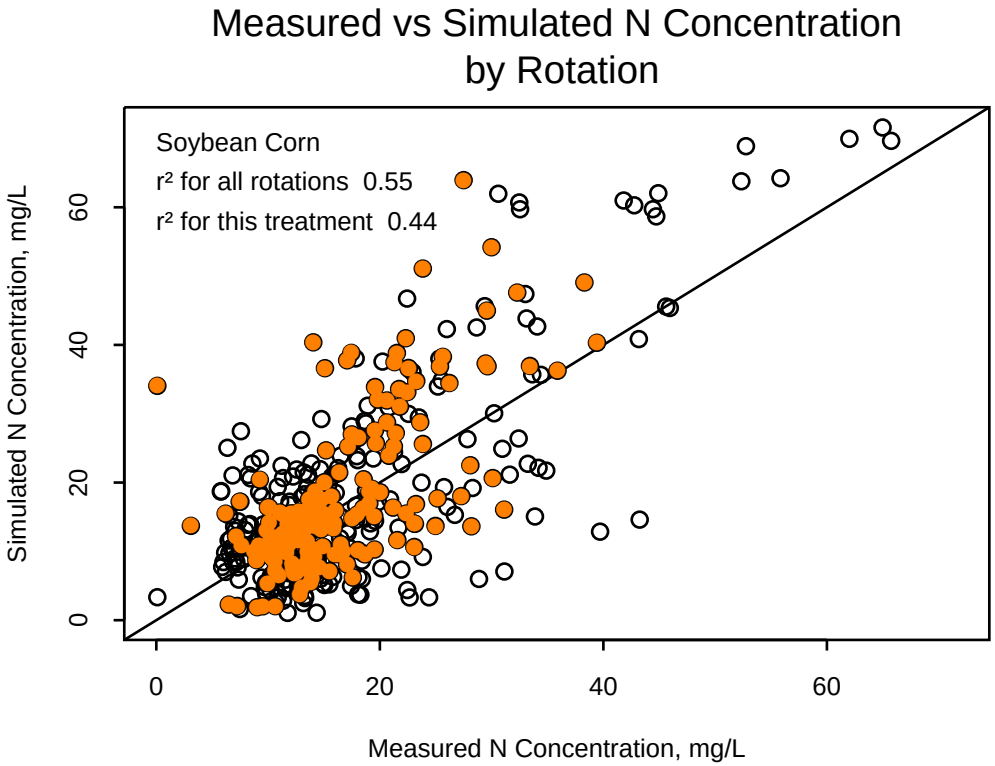

Measured vs Simulated Soybean Yields
by Rotation
Soybean Corn
r² for all rotations 0.62
r² for this rotation 0.04
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
0
1000
2000
3000
4000

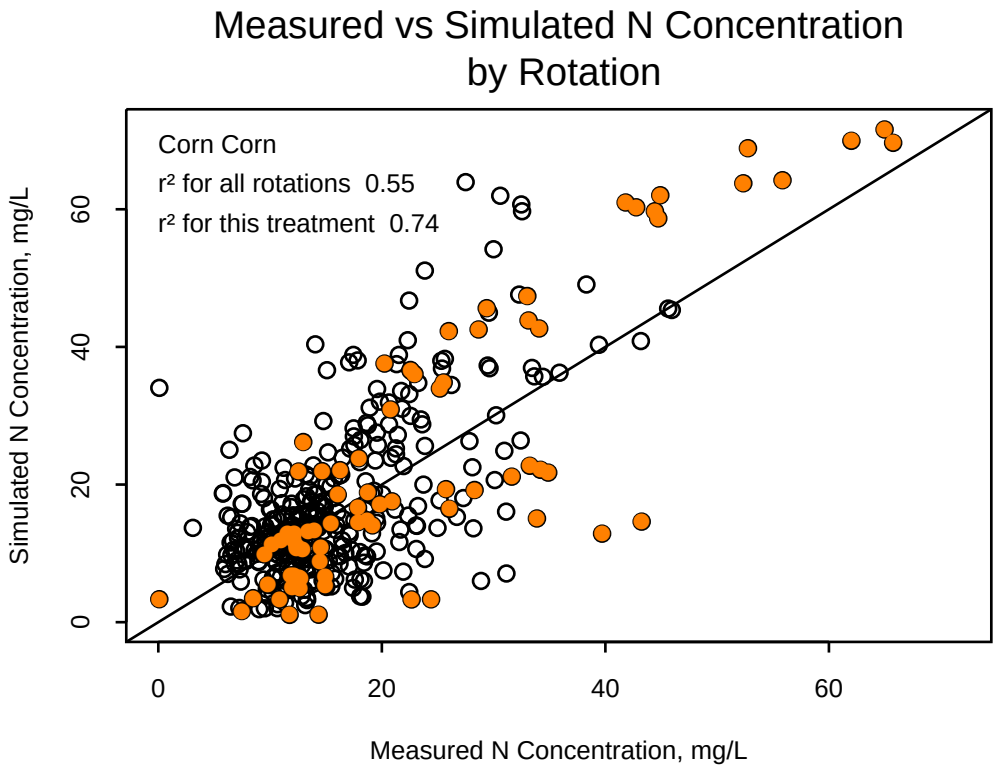

Measured vs Simulated Tileflow
by Rotation
Corn Soybean
r² for all rotations 0.68
r² for this rotation 0.75
Simulated Tileflow, cm
Measured Tileflow, cm
0
10
20
30
40
50

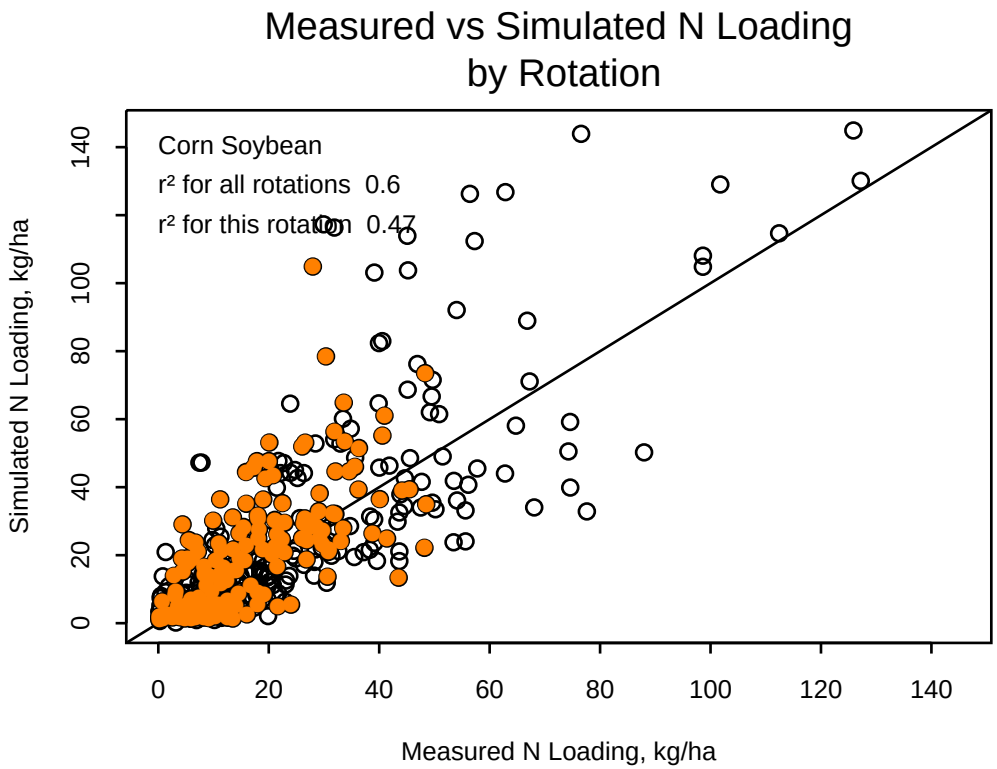

Measured vs Simulated Tileflow
by Rotation
Soybean Corn
r² for all rotations 0.68
r² for this rotation 0.64
Simulated Tileflow, cm
Measured Tileflow, cm
0
10
20
30
40
50

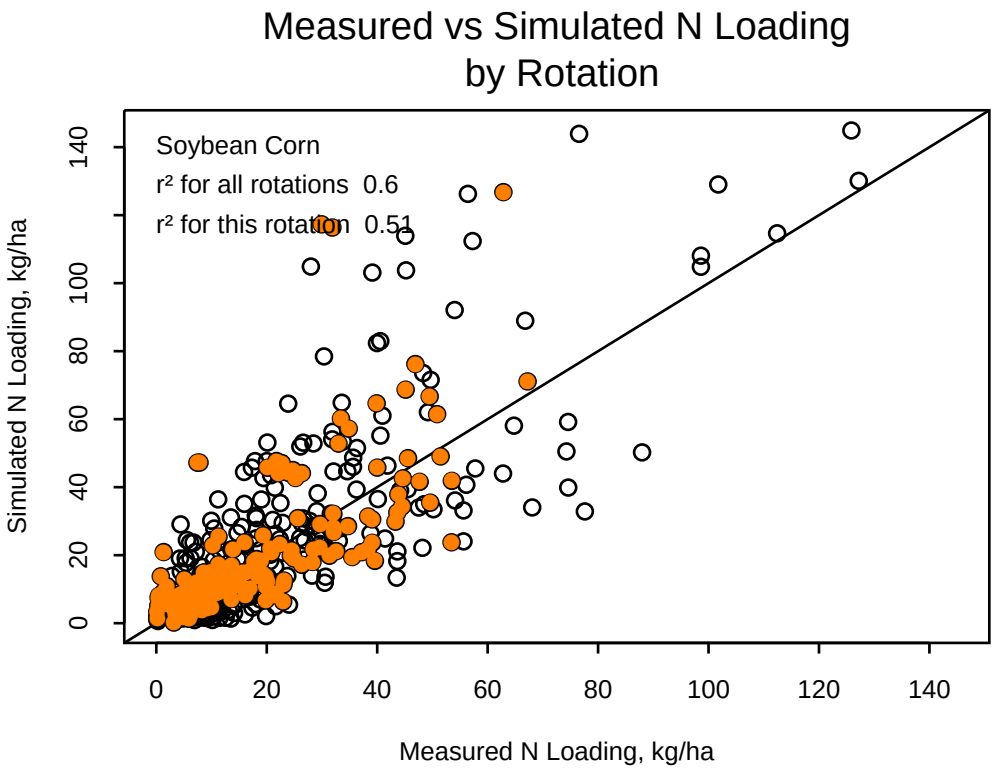

Measured vs Simulated Tileflow
by Rotation
Corn Corn
r² for all rotations 0.68
r² for this rotation 0.62
Simulated Tileflow, cm
Measured Tileflow, cm
0
10
20
30
40
50

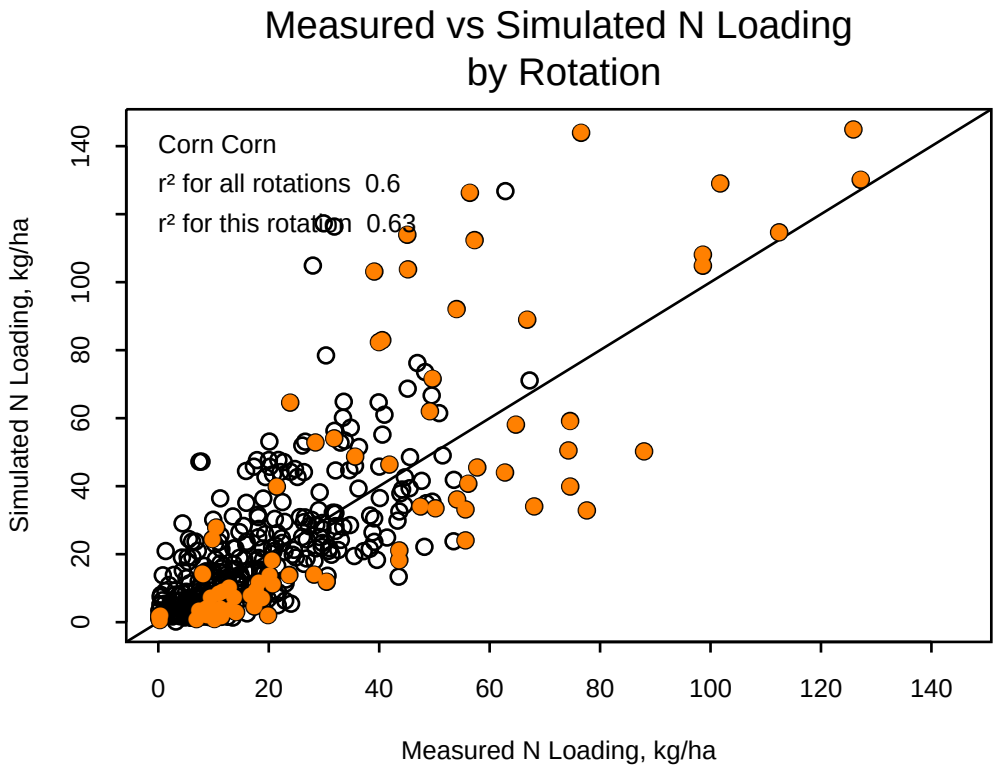

Measured vs Simulated N Concentration
by Rotation
Corn Soybean
r² for all rotations 0.55
r² for this treatment 0.35
Simulated N Concentration, mg/L
Measured N Concentration, mg/L
0
20
40
60

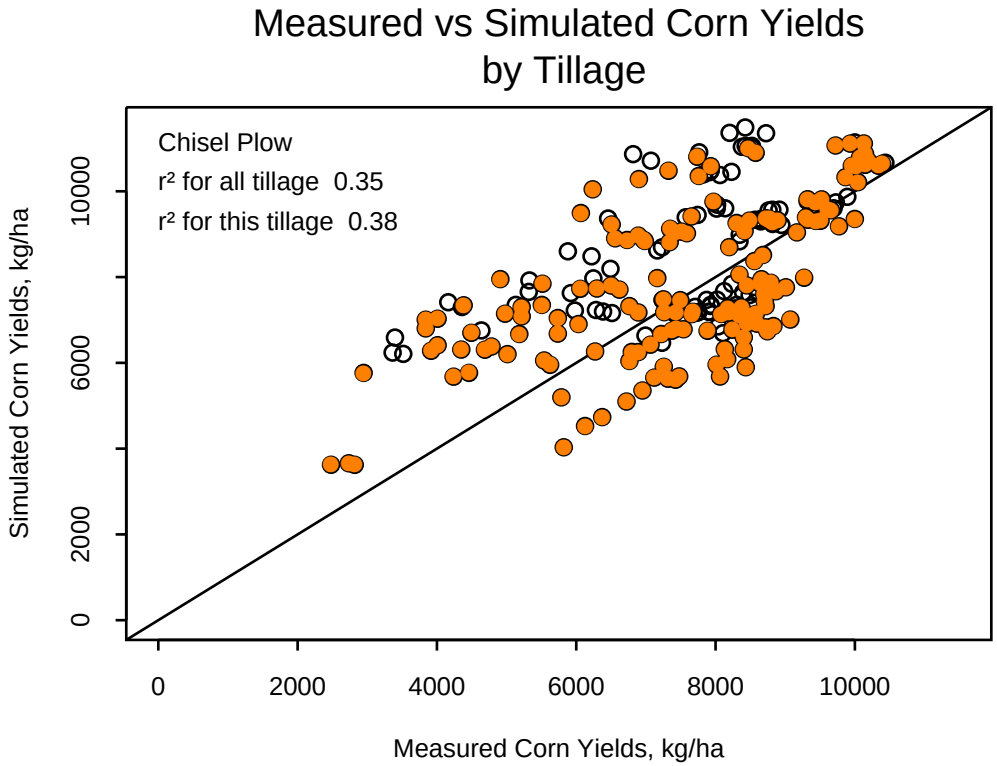

Measured vs Simulated N Concentration
by Rotation
Soybean Corn
r² for all rotations 0.55
r² for this treatment 0.44
Simulated N Concentration, mg/L
Measured N Concentration, mg/L
0
20
40
60

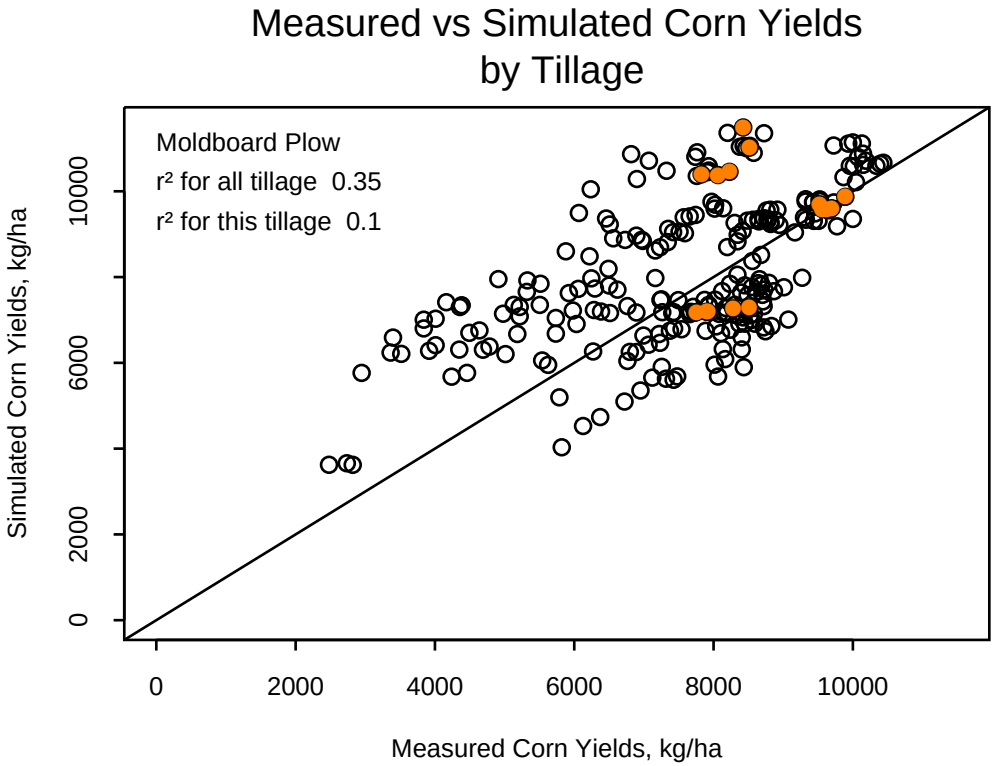

Measured vs Simulated N Concentration
by Rotation
Corn Corn
r² for all rotations 0.55
r² for this treatment 0.74
Simulated N Concentration, mg/L
Measured N Concentration, mg/L
0
20
40
60

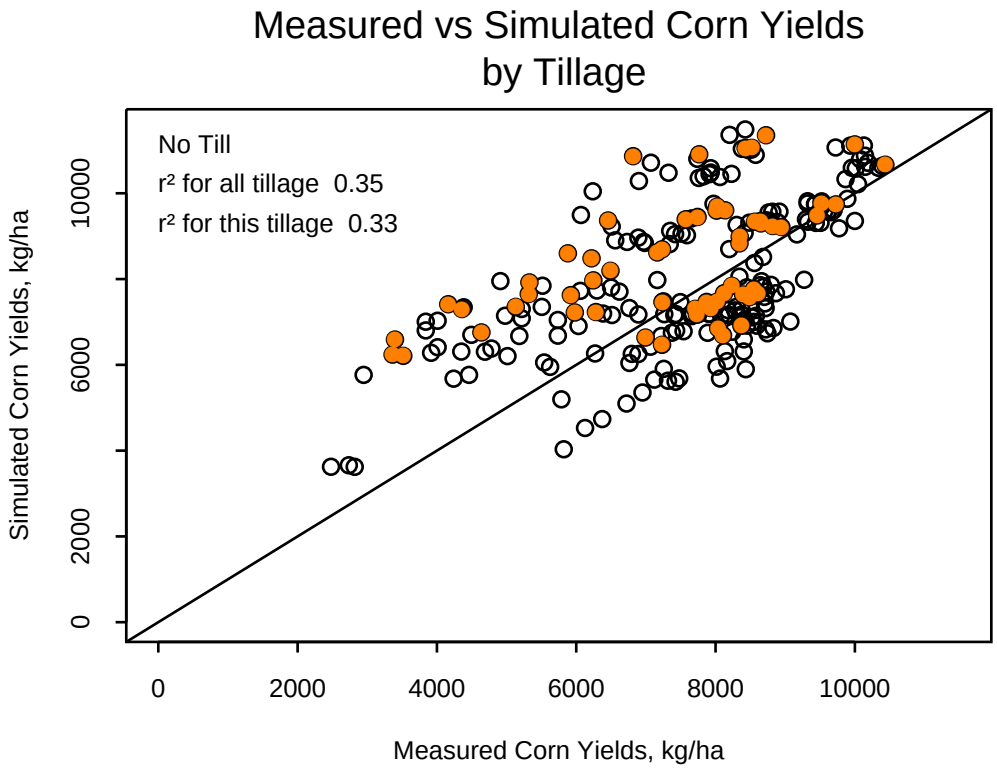

Measured vs Simulated N Loading
by Rotation
Corn Soybean
r² for all rotations 0.6
r² for this rotation 0.47
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
0
20
40
60
80
100
120
140

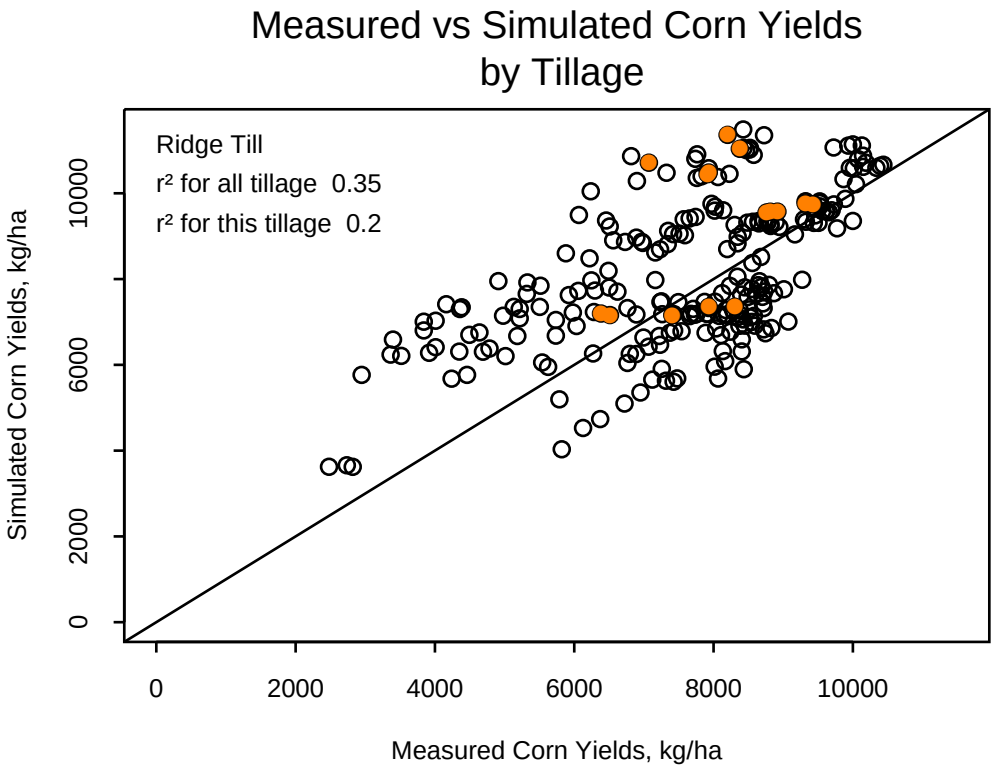

Measured vs Simulated N Loading
by Rotation
Soybean Corn
r² for all rotations 0.6
r² for this rotation 0.51
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
0
20
40
60
80
100
120
140

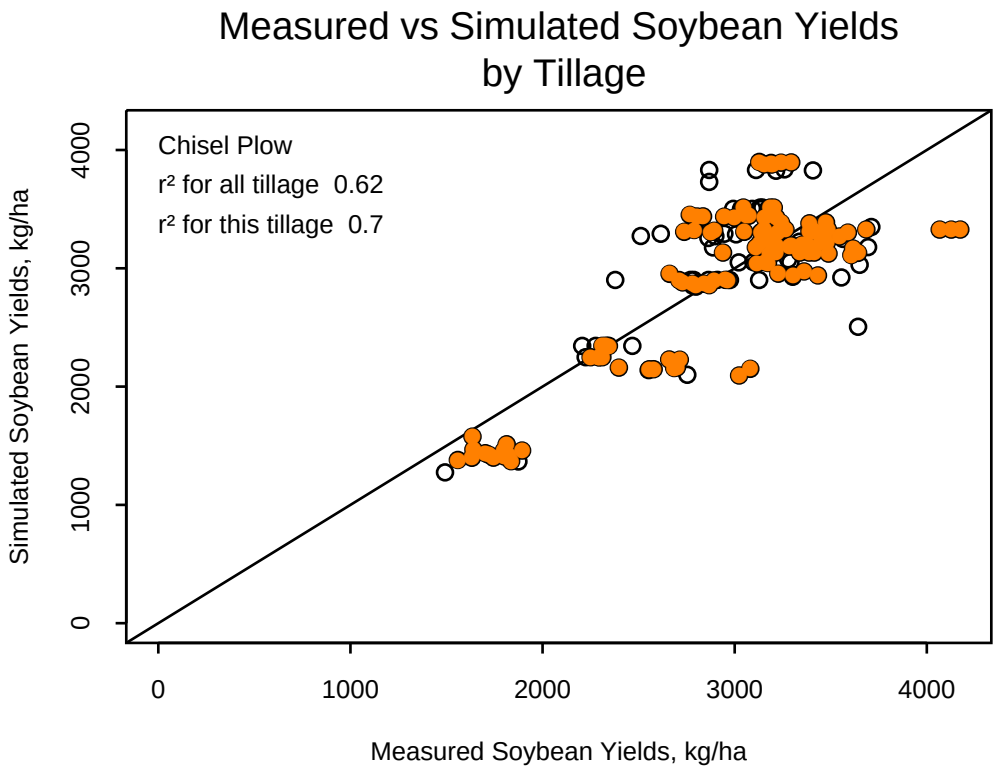

Measured vs Simulated N Loading
by Rotation
Corn Corn
r² for all rotations 0.6
r² for this rotation 0.63
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
0
20
40
60
80
100
120
140

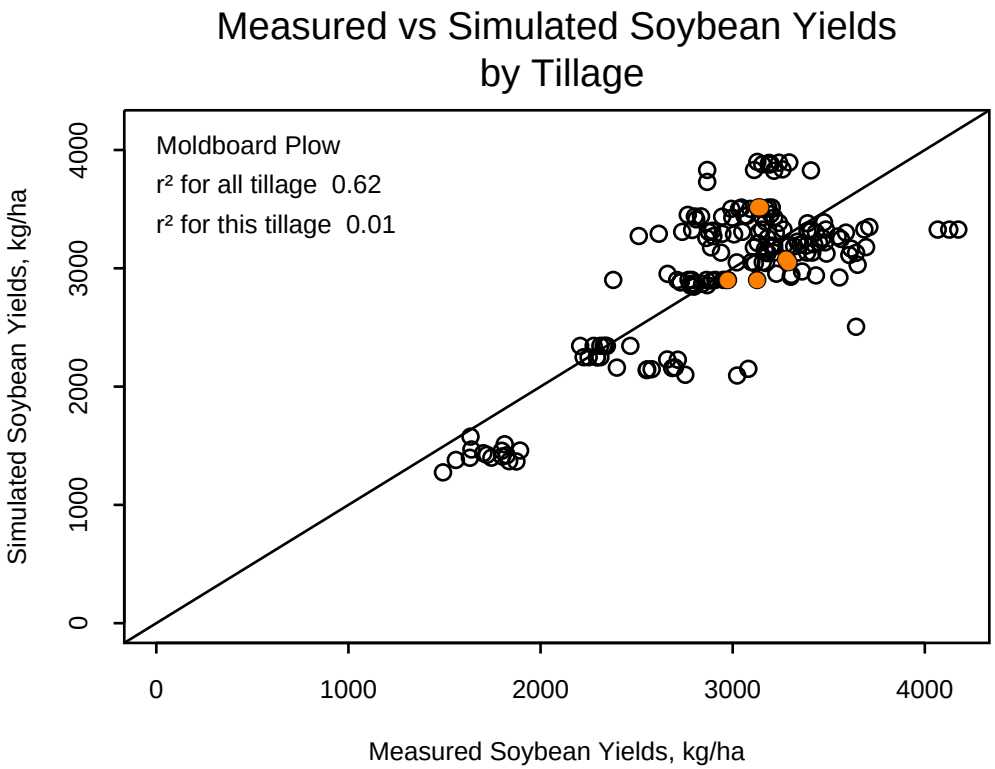

Measured vs Simulated Corn Yields
by Tillage
Chisel Plow
r² for all tillage 0.35
r² for this tillage 0.38
Simulated Corn Yields, kg/ha
Measured Corn Yields, kg/ha
0
2000
4000
6000
8000
10000

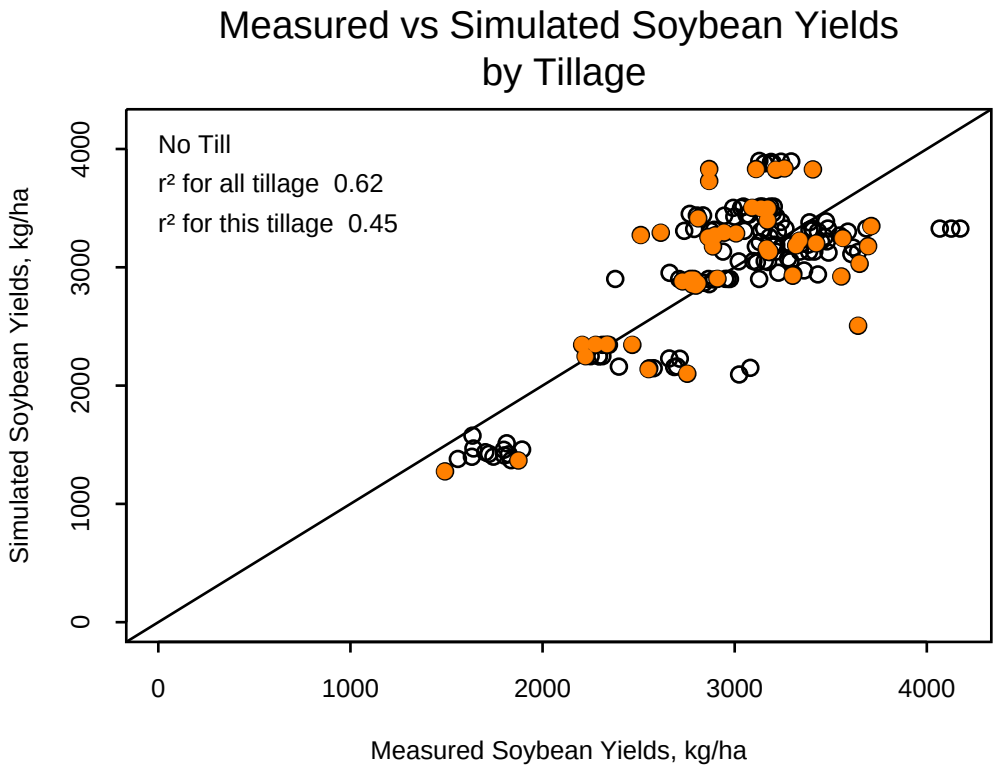

Measured vs Simulated Corn Yields
by Tillage
Moldboard Plow
r² for all tillage 0.35
r² for this tillage 0.1
Simulated Corn Yields, kg/ha
Measured Corn Yields, kg/ha
0
2000
4000
6000
8000
10000

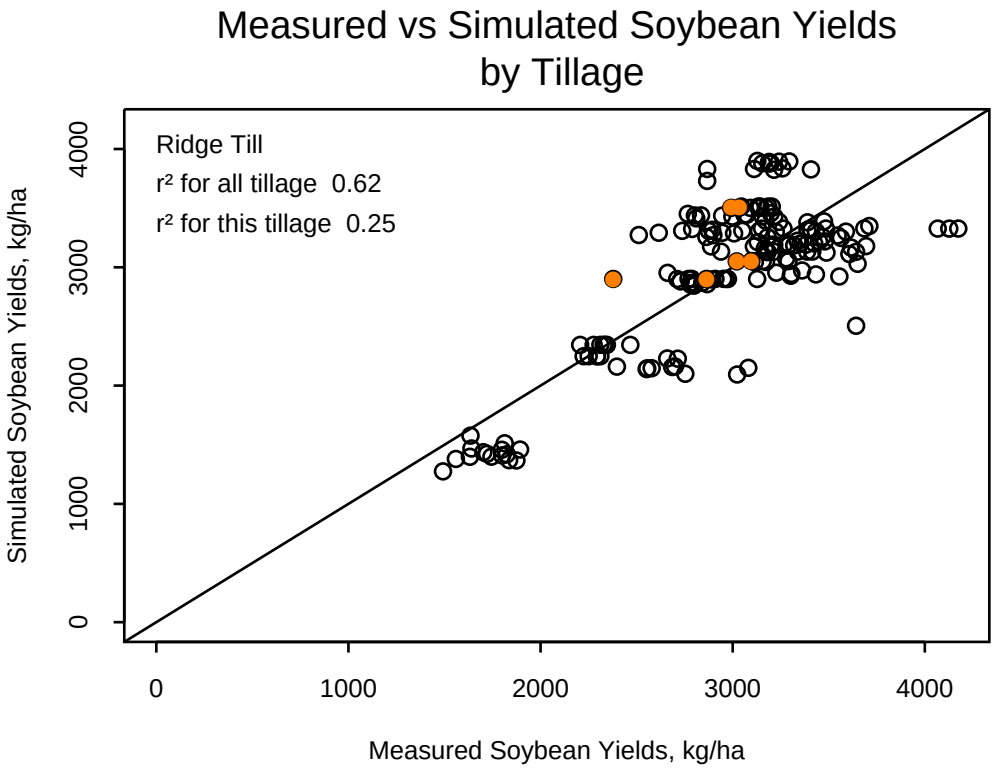

Measured vs Simulated Corn Yields
by Tillage
No Till
r² for all tillage 0.35
r² for this tillage 0.33
Simulated Corn Yields, kg/ha
Measured Corn Yields, kg/ha
0
2000
4000
6000
8000
10000

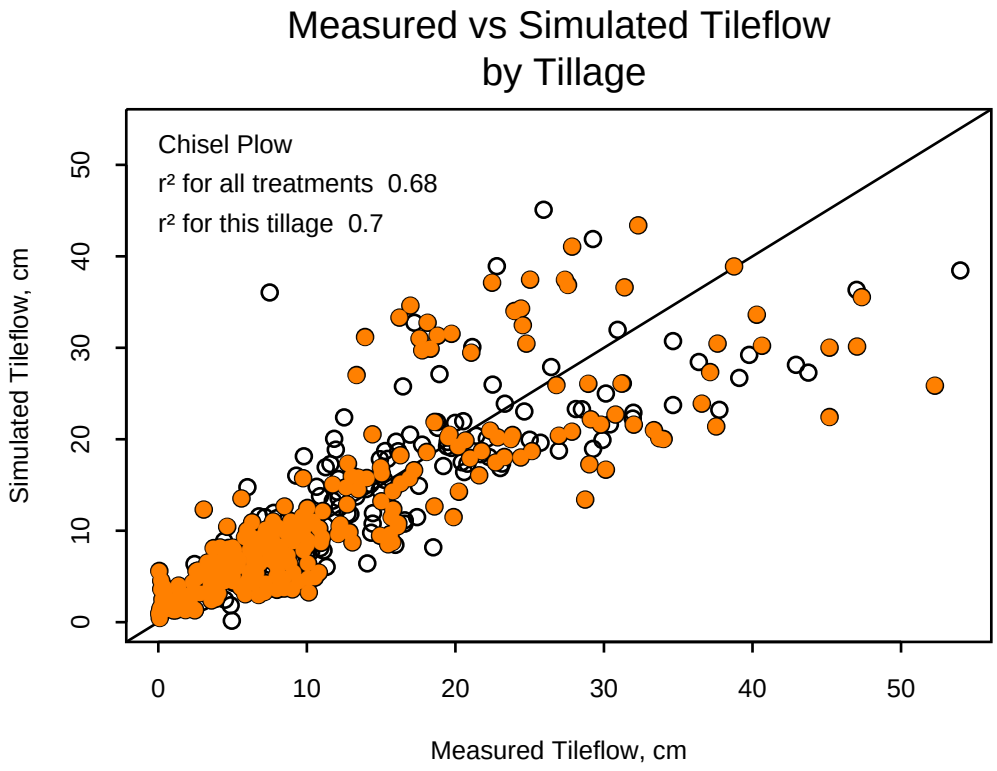

Measured vs Simulated Corn Yields
by Tillage
Ridge Till
r² for all tillage 0.35
r² for this tillage 0.2
Simulated Corn Yields, kg/ha
Measured Corn Yields, kg/ha
0
2000
4000
6000
8000
10000

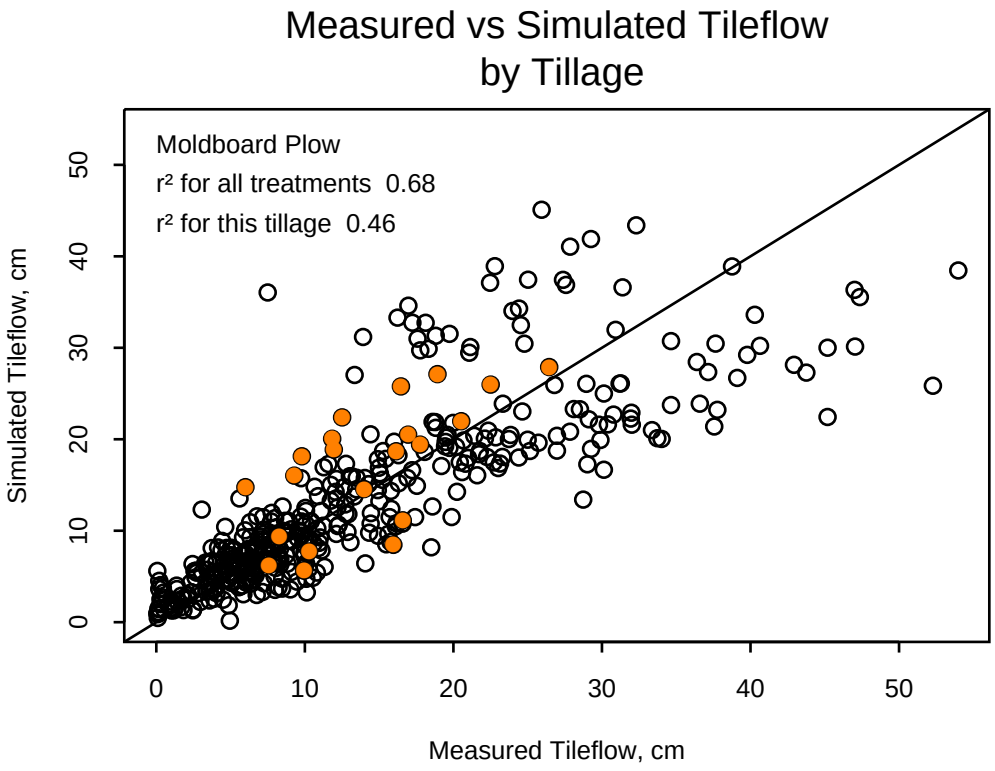

Measured vs Simulated Soybean Yields
by Tillage
Chisel Plow
r² for all tillage 0.62
r² for this tillage 0.7
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
0
1000
2000
3000
4000

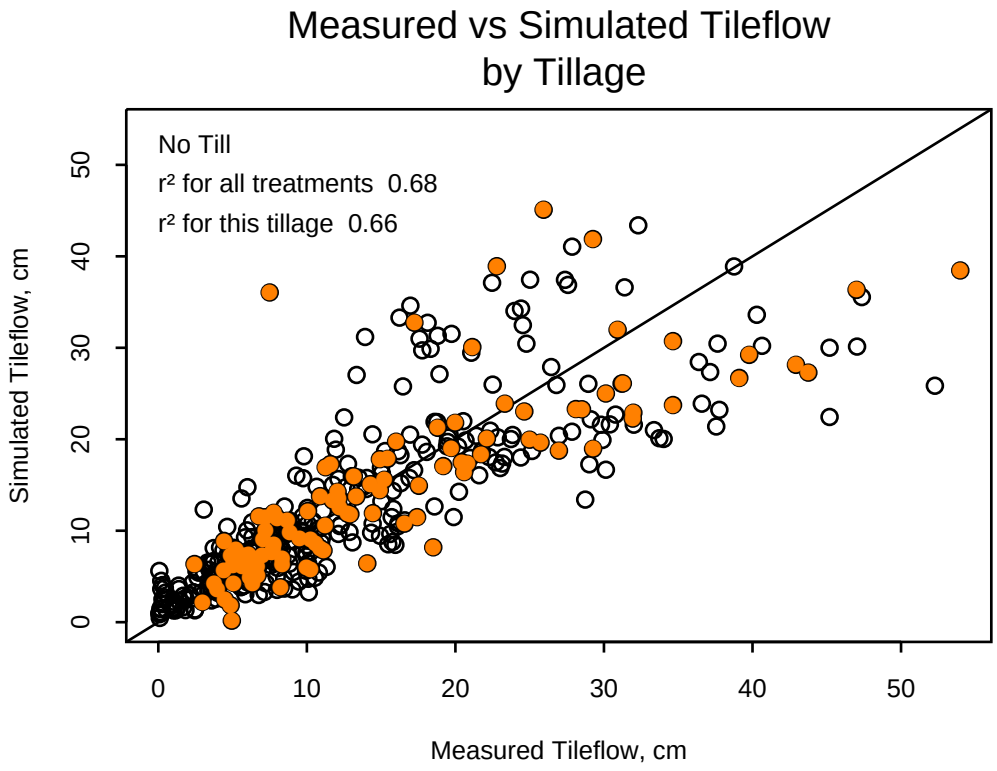

Measured vs Simulated Soybean Yields
by Tillage
Moldboard Plow
r² for all tillage 0.62
r² for this tillage 0.01
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
0
1000
2000
3000
4000

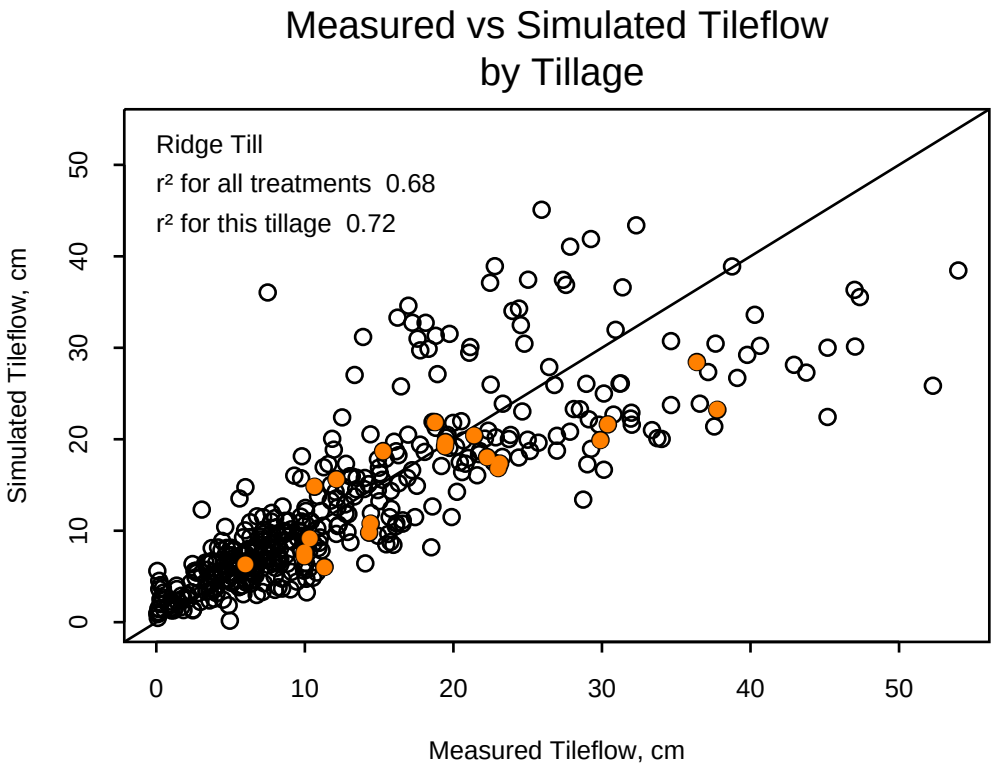

Measured vs Simulated Soybean Yields
by Tillage
No Till
r² for all tillage 0.62
r² for this tillage 0.45
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
0
1000
2000
3000
4000

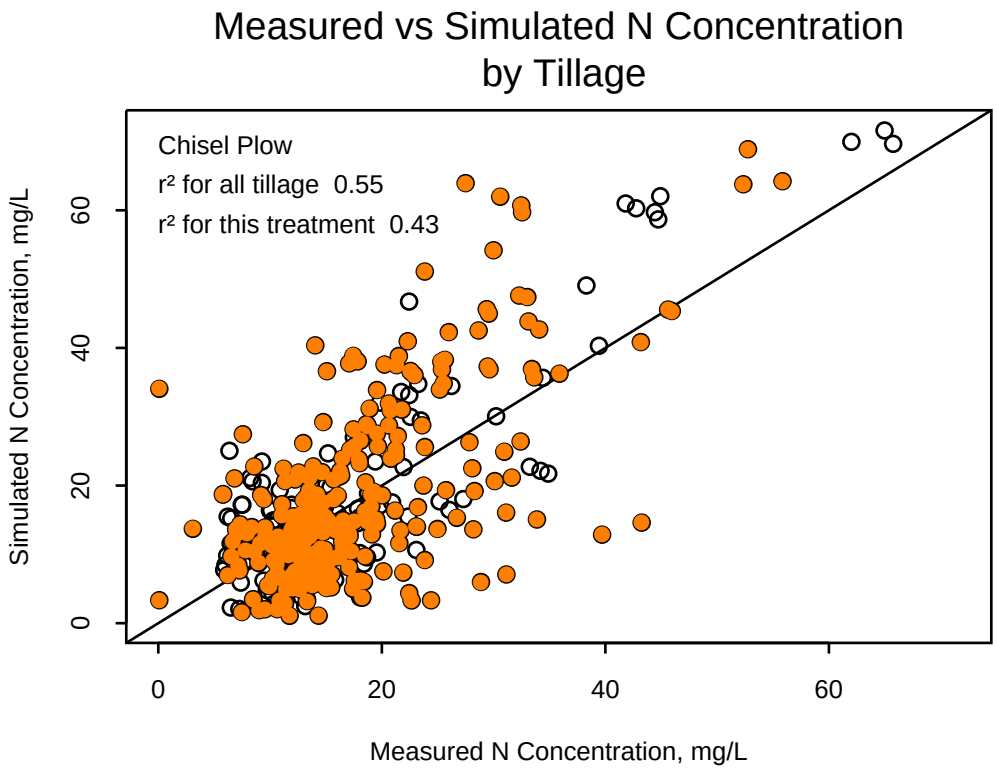

Measured vs Simulated Soybean Yields
by Tillage
Ridge Till
r² for all tillage 0.62
r² for this tillage 0.25
Simulated Soybean Yields, kg/ha
Measured Soybean Yields, kg/ha
0
1000
2000
3000
4000

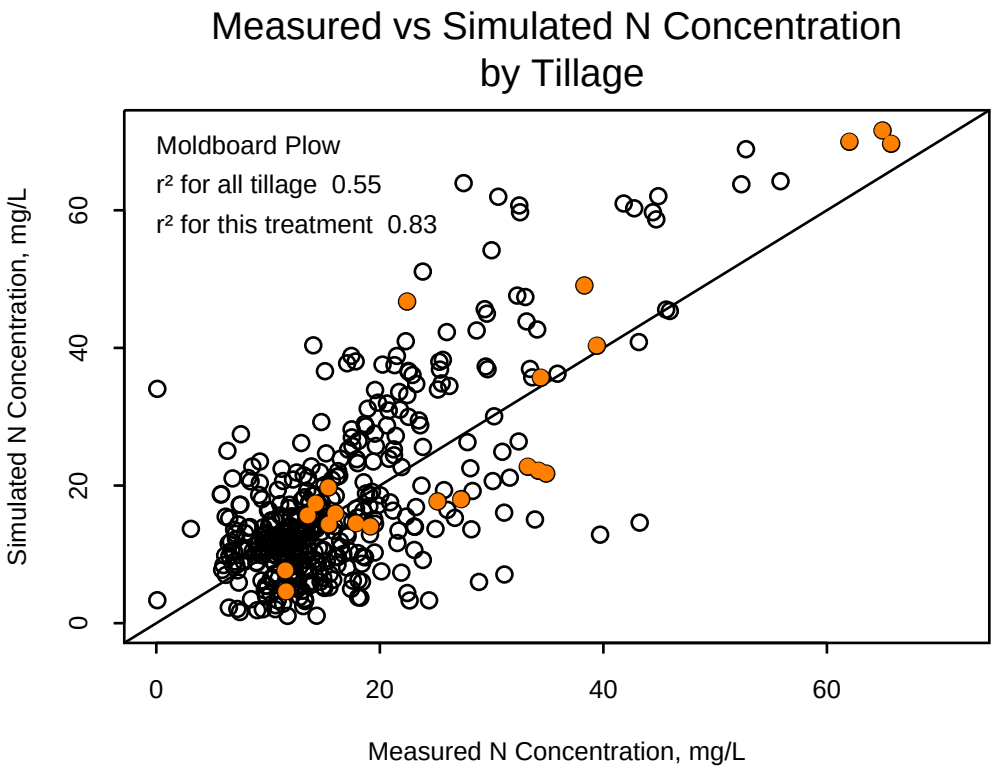

Measured vs Simulated Tileflow
by Tillage
Chisel Plow
r² for all treatments 0.68
r² for this tillage 0.7
Simulated Tileflow, cm
Measured Tileflow, cm
0
10
20
30
40
50

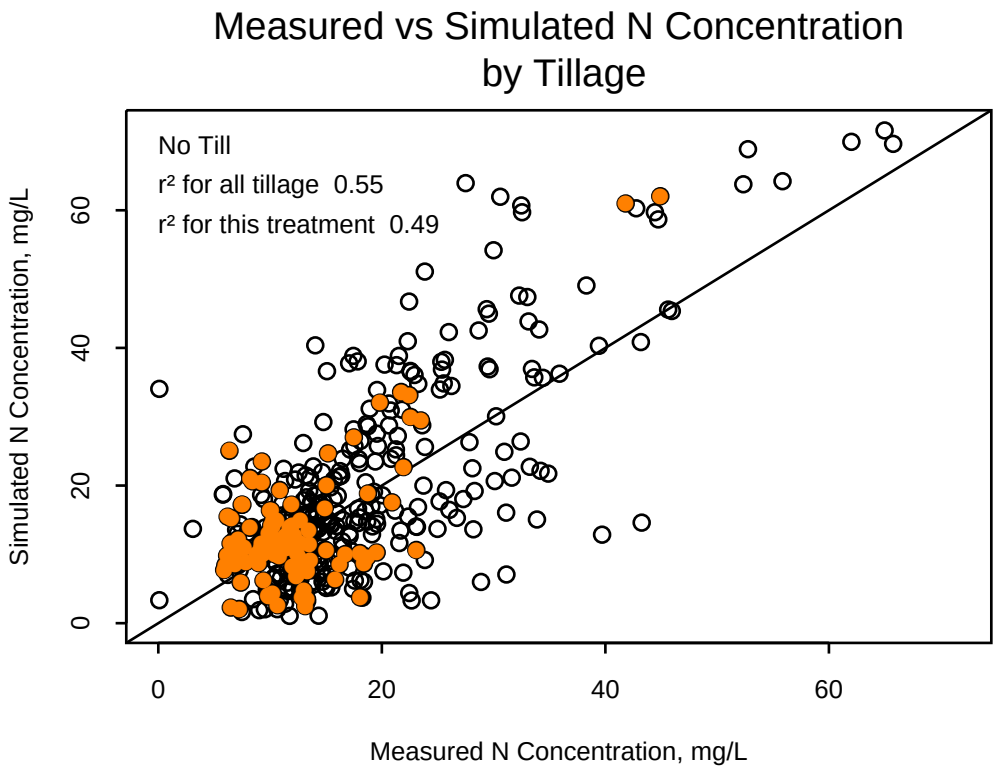

Measured vs Simulated Tileflow
by Tillage
Moldboard Plow
r² for all treatments 0.68
r² for this tillage 0.46
Simulated Tileflow, cm
Measured Tileflow, cm
0
10
20
30
40
50

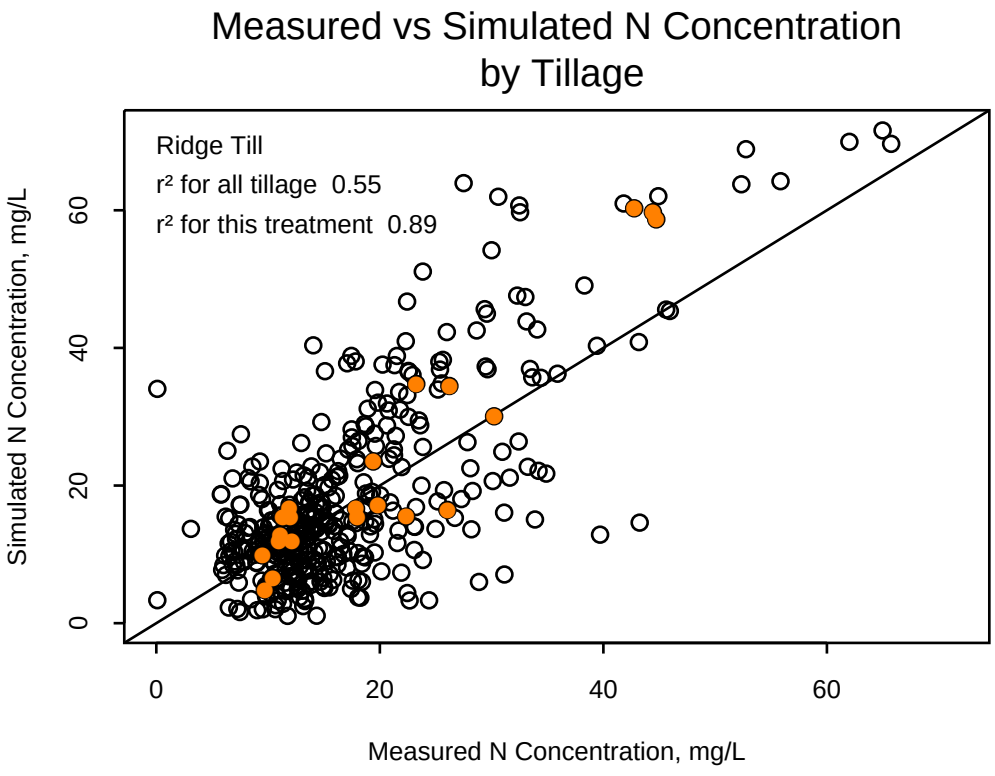

Measured vs Simulated Tileflow
by Tillage
No Till
r² for all treatments 0.68
r² for this tillage 0.66
Simulated Tileflow, cm
Measured Tileflow, cm
0
10
20
30
40
50

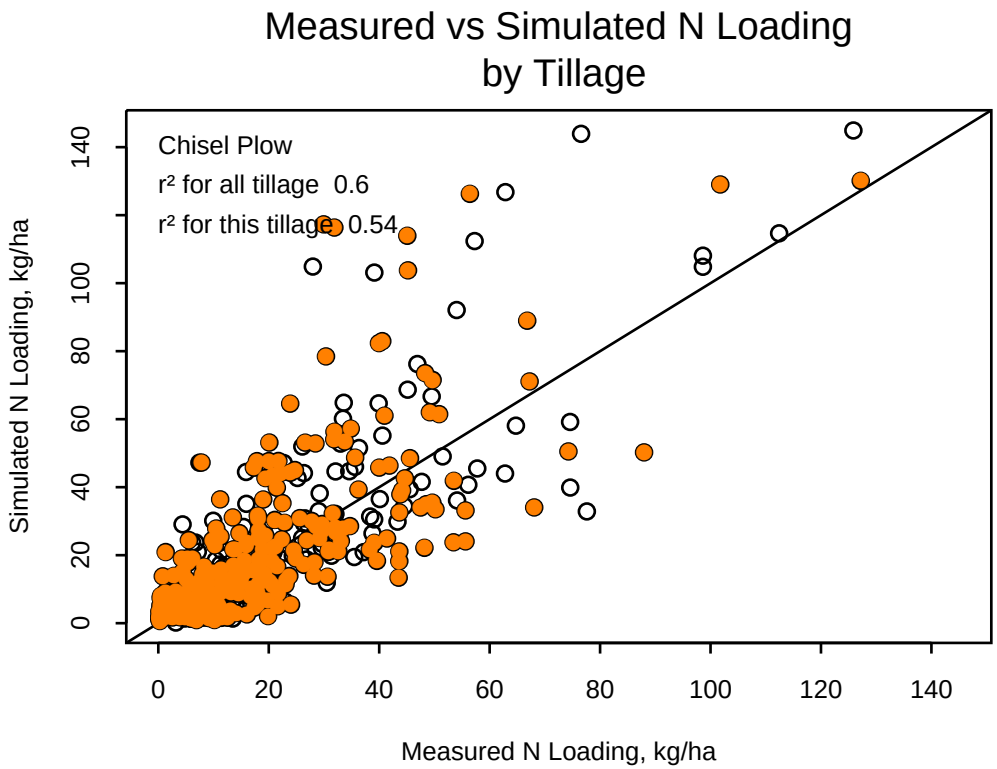

Measured vs Simulated Tileflow
by Tillage
Ridge Till
r² for all treatments 0.68
r² for this tillage 0.72
Simulated Tileflow, cm
Measured Tileflow, cm
0
10
20
30
40
50

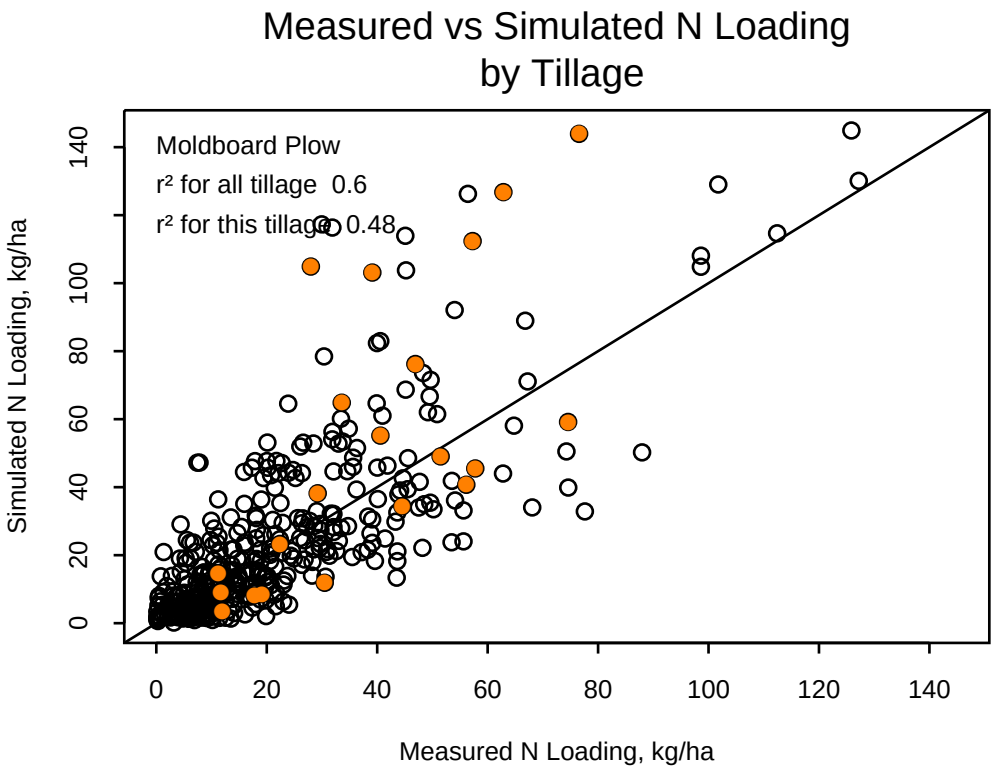

Measured vs Simulated N Concentration
by Tillage
Chisel Plow
r² for all tillage 0.55
r² for this treatment 0.43
Simulated N Concentration, mg/L
Measured N Concentration, mg/L
0
20
40
60

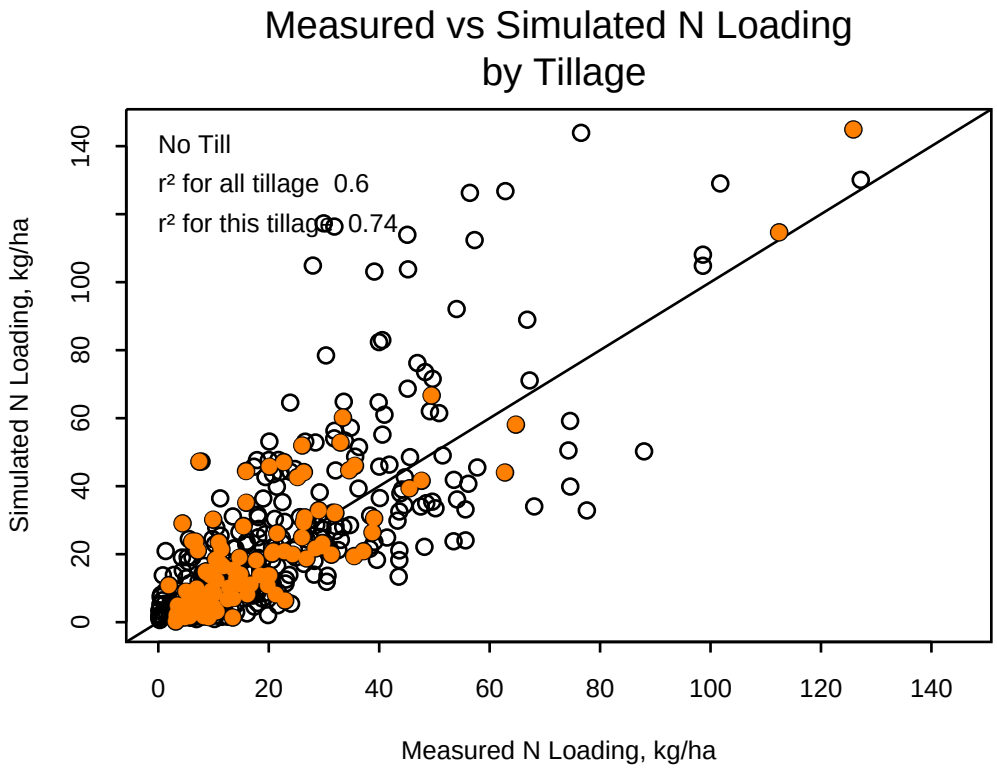

Measured vs Simulated N Concentration
by Tillage
Moldboard Plow
r² for all tillage 0.55
r² for this treatment 0.83
Simulated N Concentration, mg/L
Measured N Concentration, mg/L
0
20
40
60

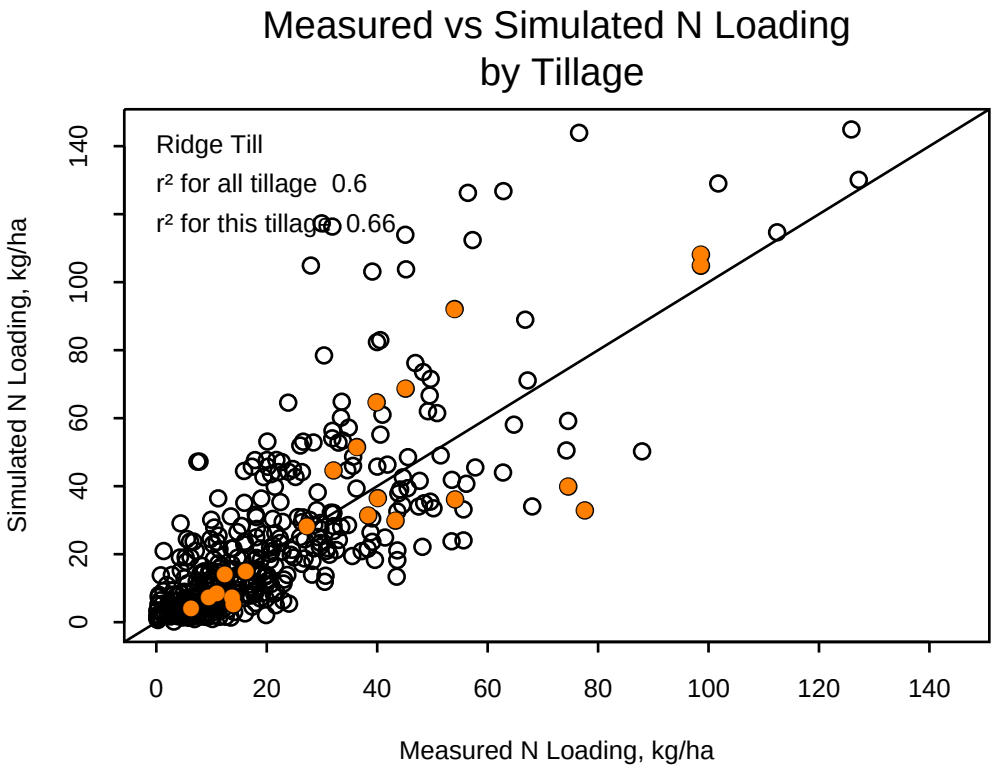

Measured vs Simulated N Concentration
by Tillage
No Till
r² for all tillage 0.55
r² for this treatment 0.49
Simulated N Concentration, mg/L
Measured N Concentration, mg/L
0
20
40
60

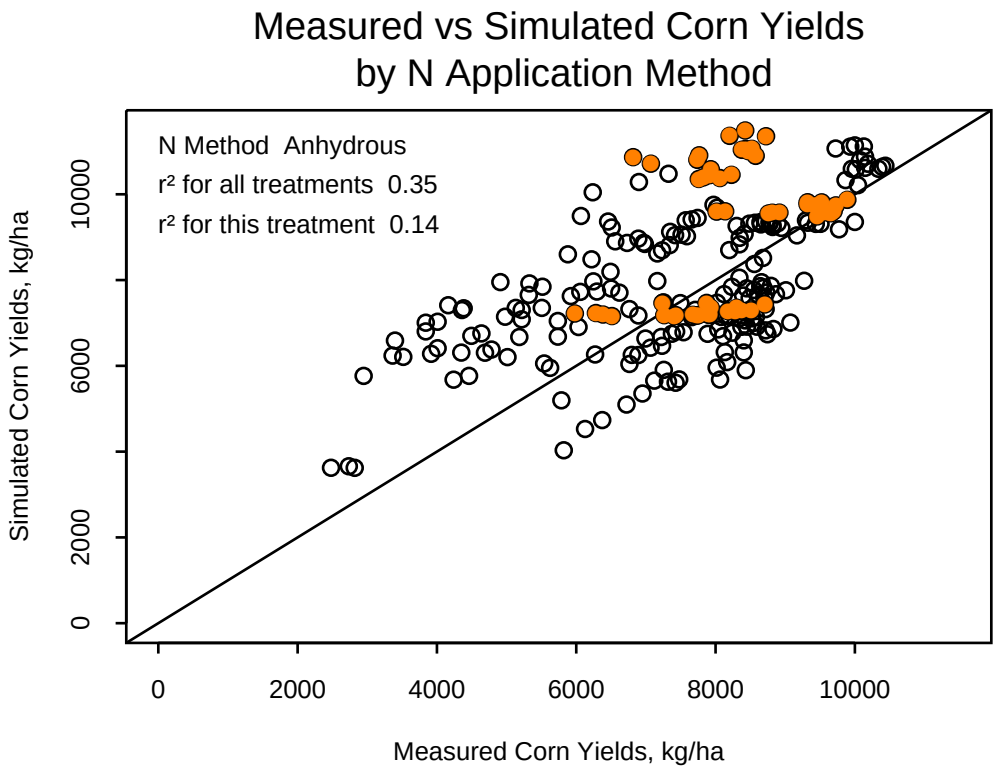

Measured vs Simulated N Concentration
by Tillage
Ridge Till
r² for all tillage 0.55
r² for this treatment 0.89
Simulated N Concentration, mg/L
Measured N Concentration, mg/L
0
20
40
60

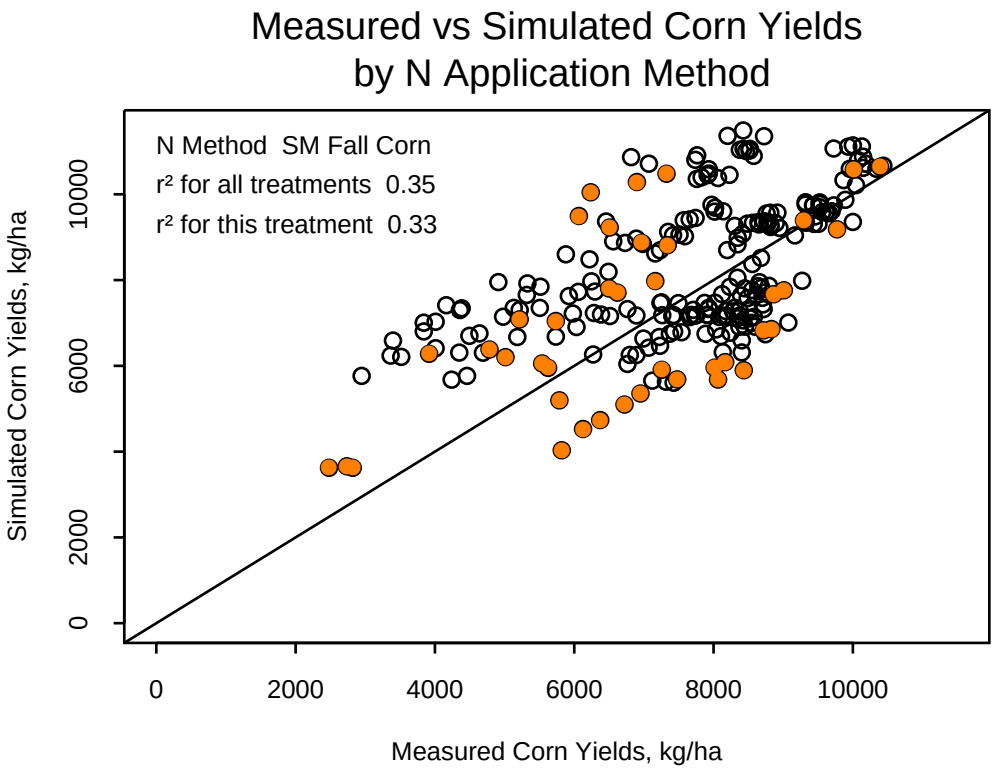

Measured vs Simulated N Loading
by Tillage
Chisel Plow
r² for all tillage 0.6
r² for this tillage 0.54
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
0
20
40
60
80
100
120
140

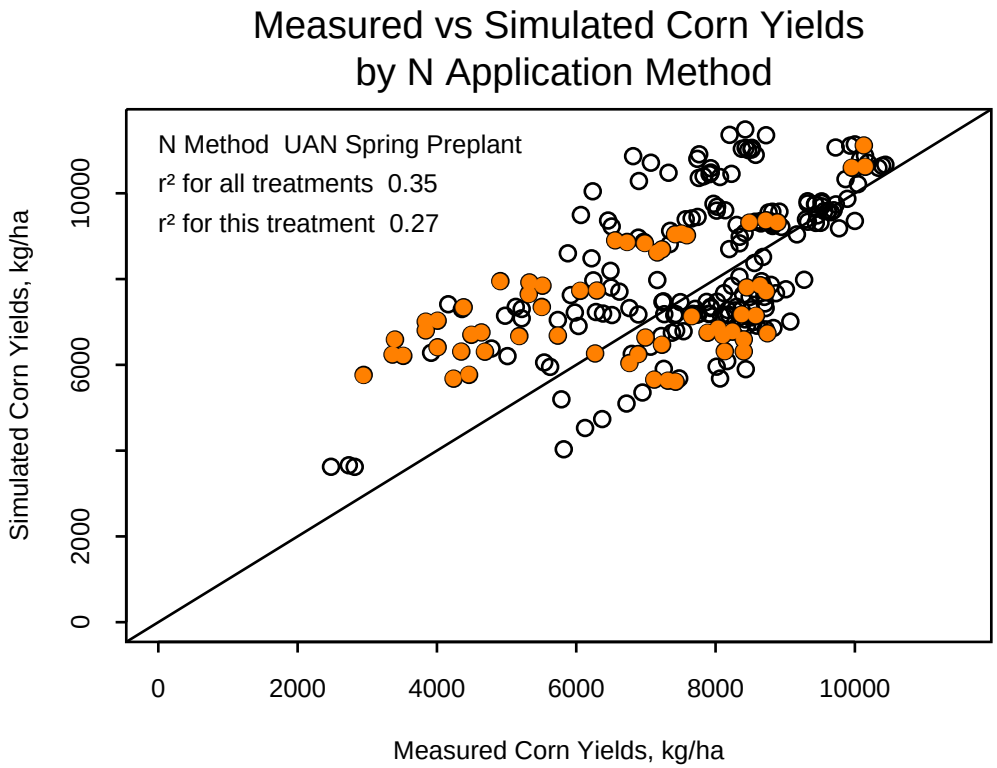

Measured vs Simulated N Loading
by Tillage
Moldboard Plow
r² for all tillage 0.6
r² for this tillage 0.48
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
0
20
40
60
80
100
120
140

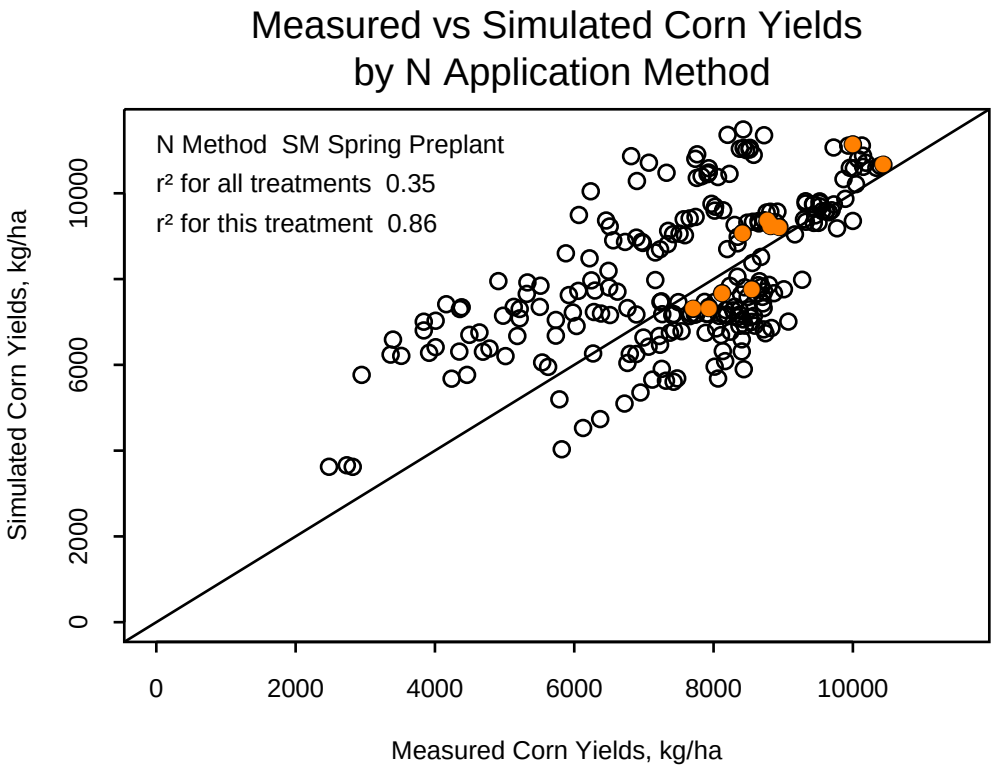

Measured vs Simulated N Loading
by Tillage
No Till
r² for all tillage 0.6
r² for this tillage 0.74
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
0
20
40
60
80
100
120
140

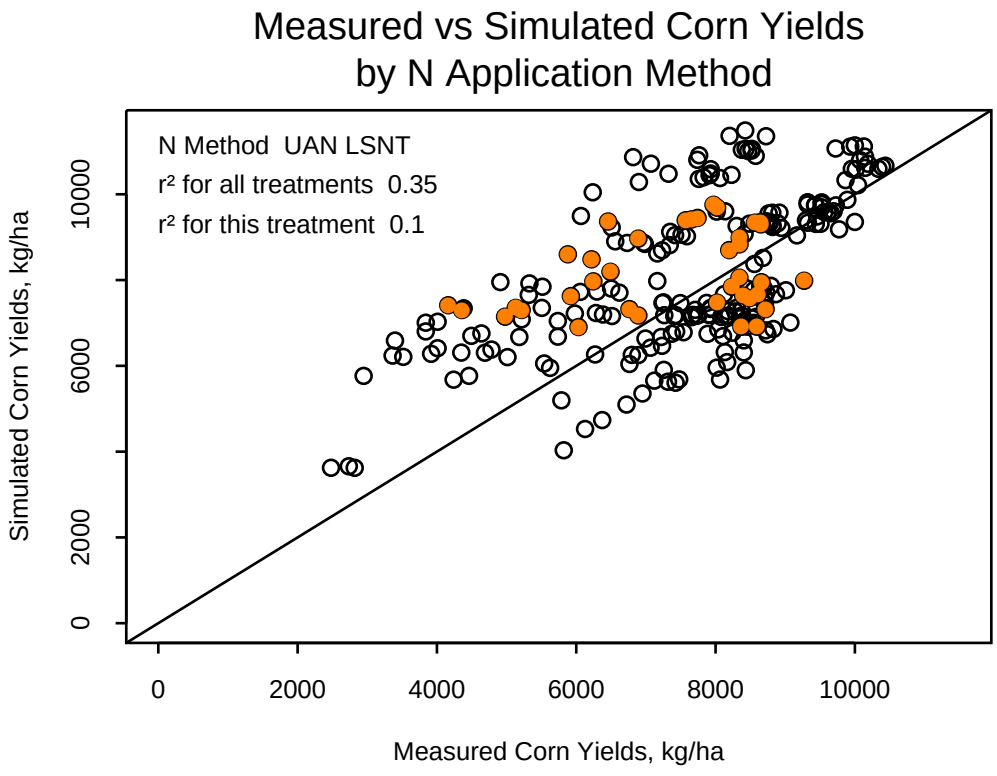

Measured vs Simulated N Loading
by Tillage
Ridge Till
r² for all tillage 0.6
r² for this tillage 0.66
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
0
20
40
60
80
100
120
140

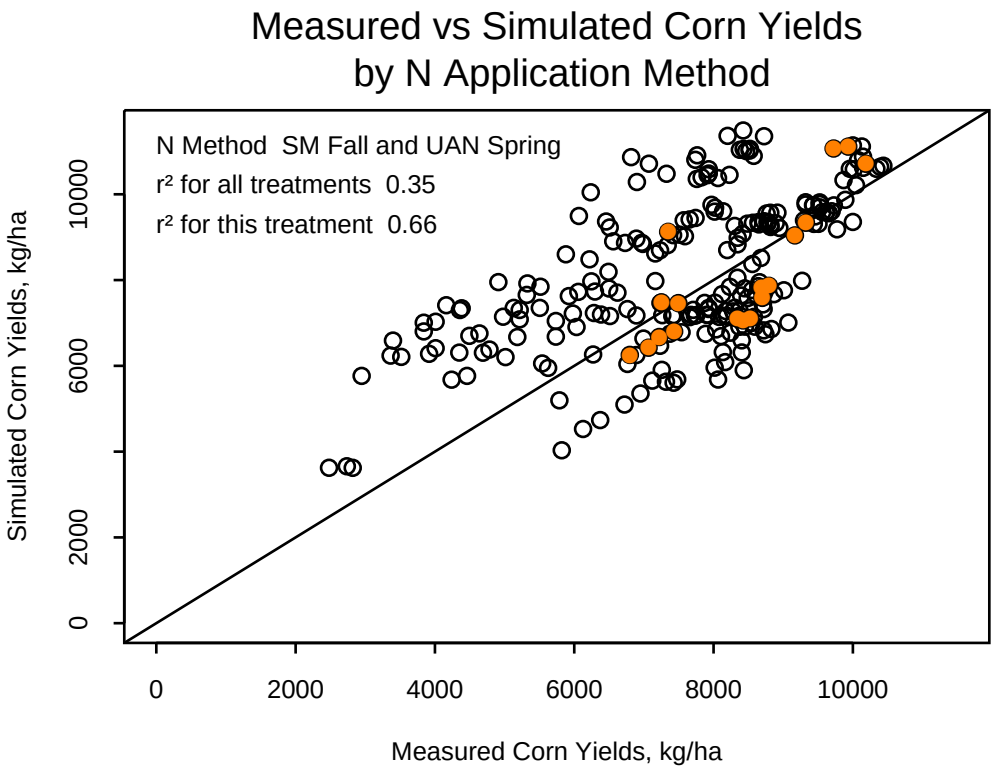

Measured vs Simulated Corn Yields
by N Application Method
N Method Anhydrous
r² for all treatments 0.35
r² for this treatment 0.14
Simulated Corn Yields, kg/ha
Measured Corn Yields, kg/ha
0
2000
4000
6000
8000
10000

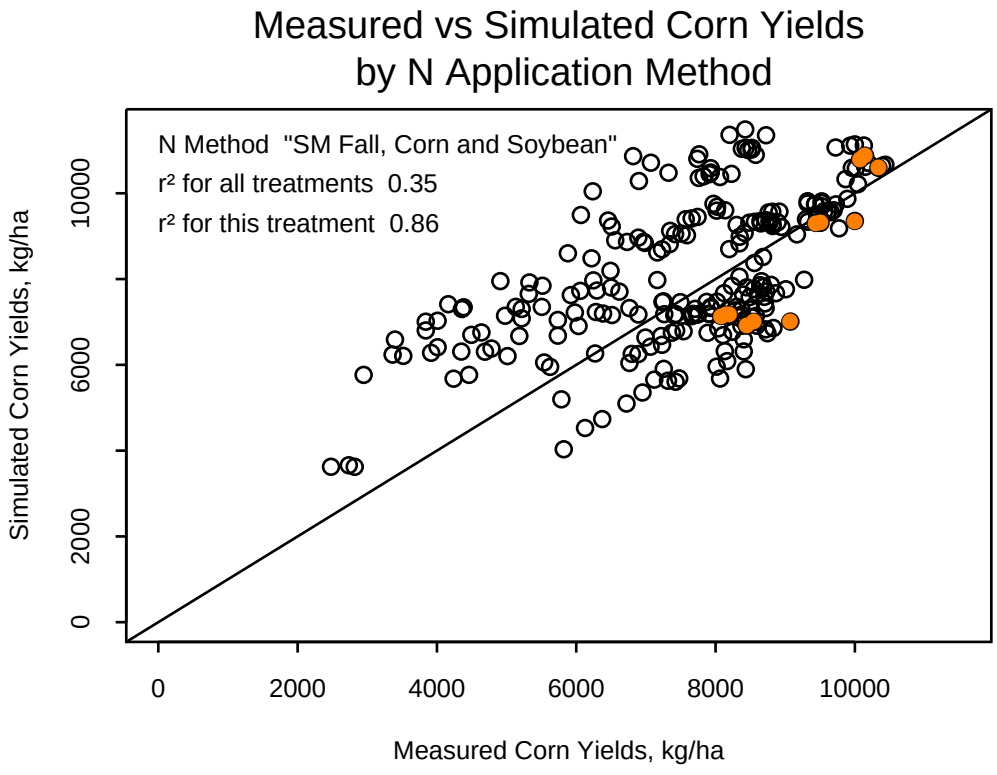

Measured vs Simulated Corn Yields
by N Application Method
N Method SM Fall Corn
r² for all treatments 0.35
r² for this treatment 0.33
Simulated Corn Yields, kg/ha
Measured Corn Yields, kg/ha
0
2000
4000
6000
8000
10000

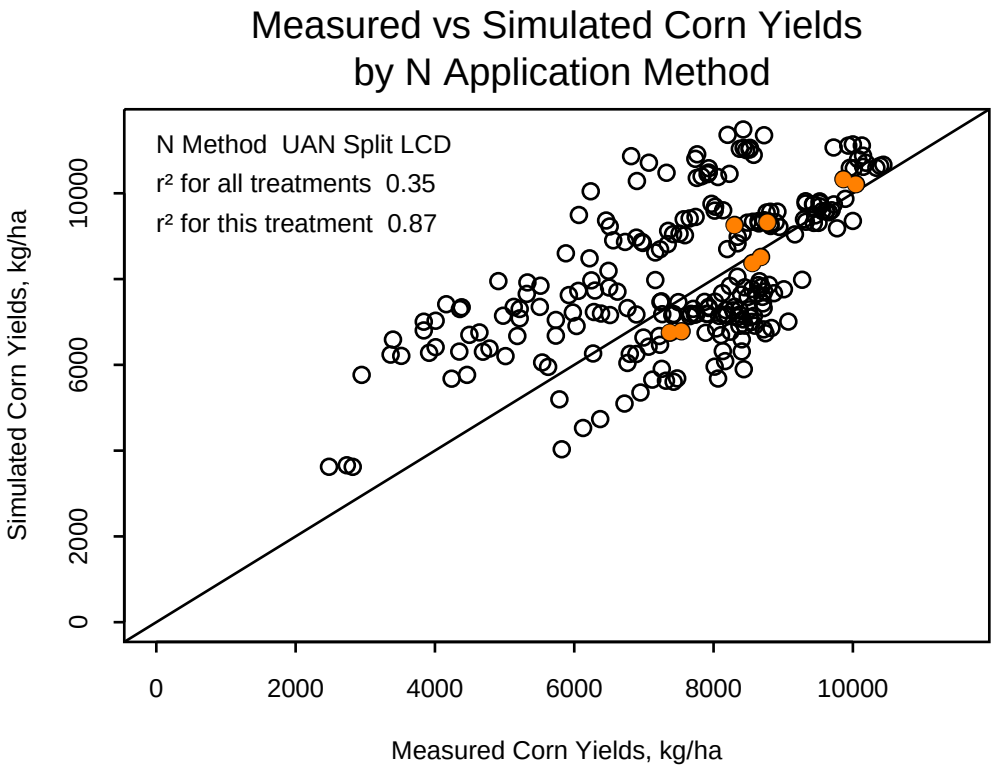

Measured vs Simulated Corn Yields
by N Application Method
N Method UAN Spring Preplant
r² for all treatments 0.35
r² for this treatment 0.27
Simulated Corn Yields, kg/ha
Measured Corn Yields, kg/ha
0
2000
4000
6000
8000
10000

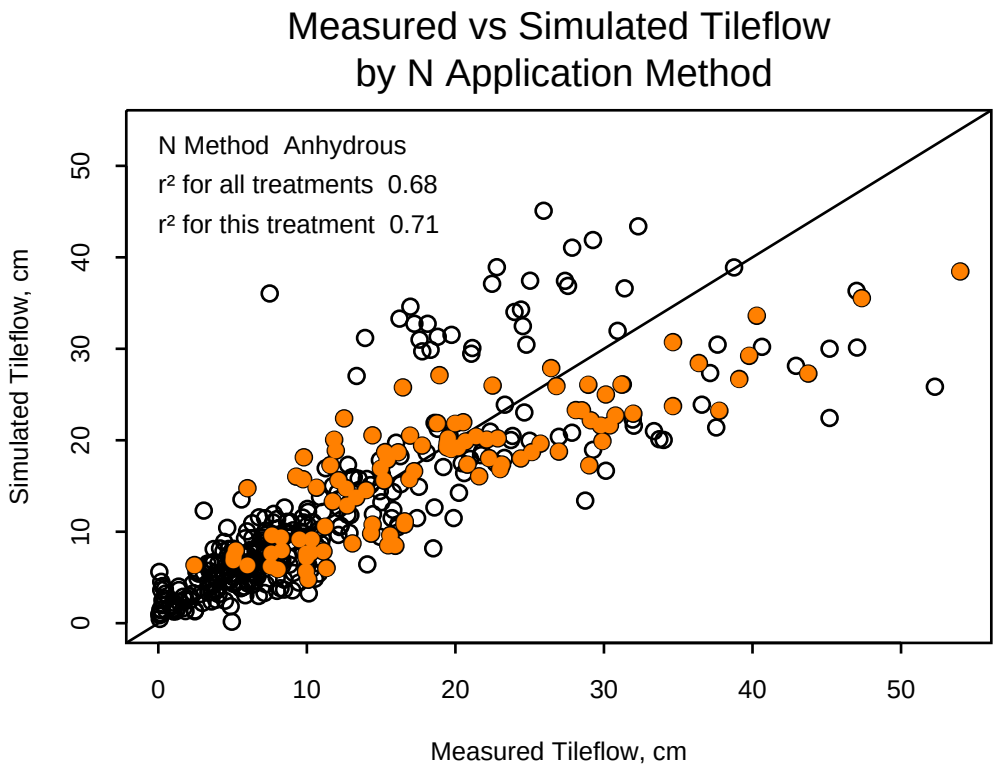

Measured vs Simulated Corn Yields
by N Application Method
N Method SM Spring Preplant
r² for all treatments 0.35
r² for this treatment 0.86
Simulated Corn Yields, kg/ha
Measured Corn Yields, kg/ha
0
2000
4000
6000
8000
10000

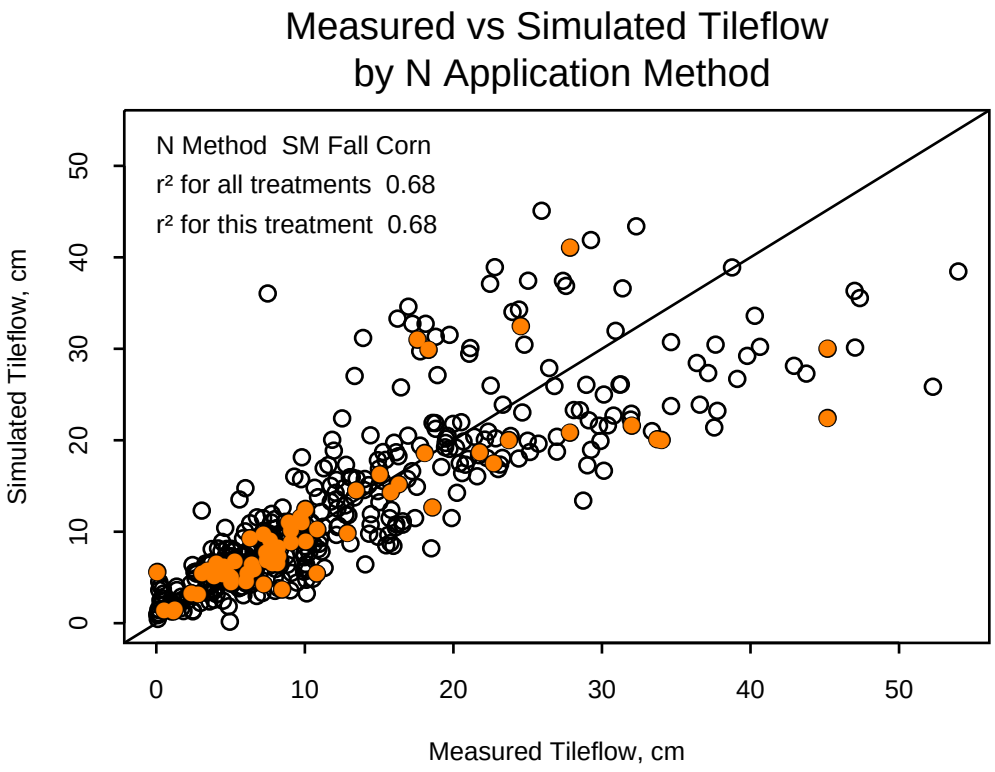

Measured vs Simulated Corn Yields
by N Application Method
N Method UAN LSNT
r² for all treatments 0.35
r² for this treatment 0.1
Simulated Corn Yields, kg/ha
Measured Corn Yields, kg/ha
0
2000
4000
6000
8000
10000

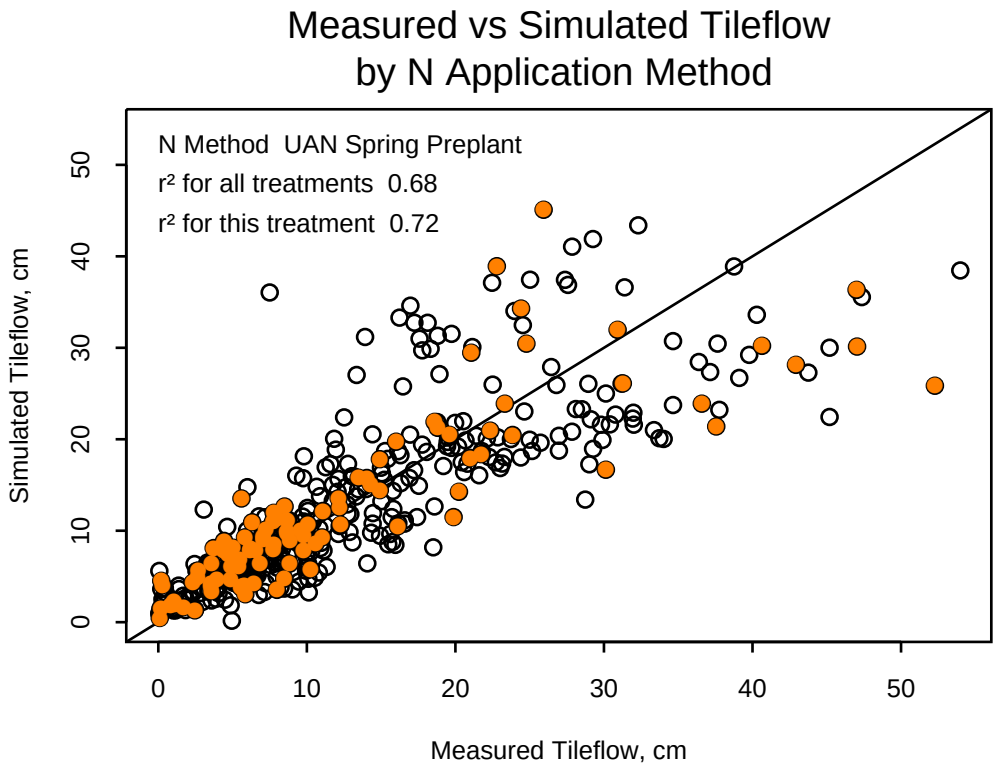

Measured vs Simulated Corn Yields
by N Application Method
N Method SM Fall and UAN Spring
r² for all treatments 0.35
r² for this treatment 0.66
Simulated Corn Yields, kg/ha
Measured Corn Yields, kg/ha
0
2000
4000
6000
8000
10000

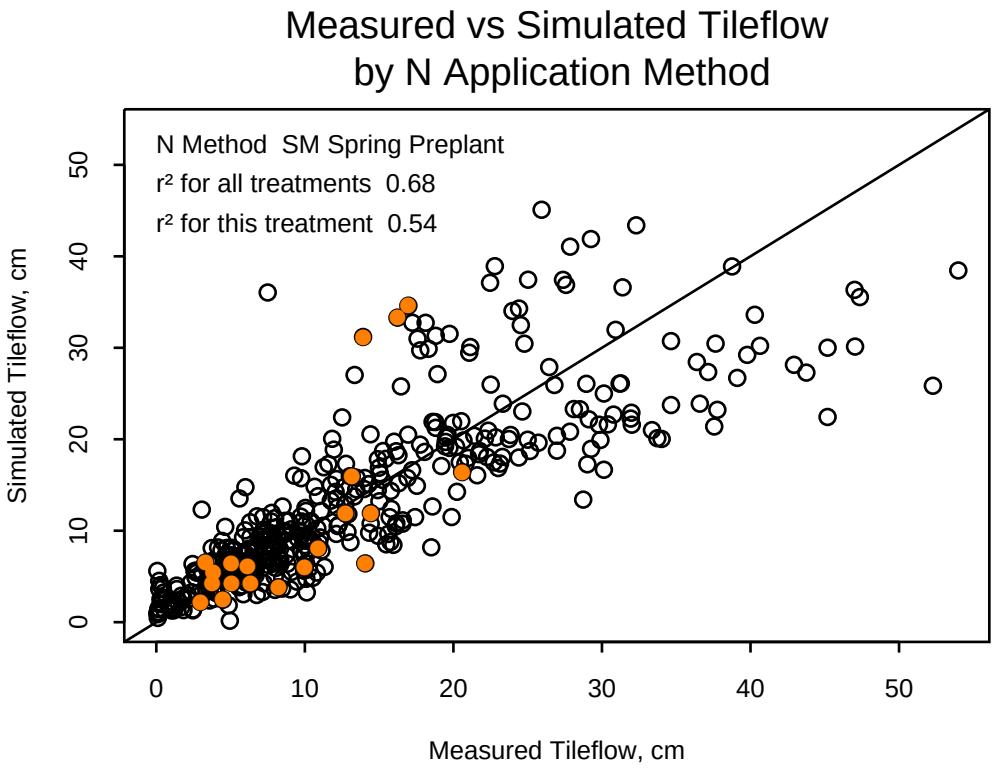

Measured vs Simulated Corn Yields
by N Application Method
N Method "SM Fall, Corn and Soybean"
r² for all treatments 0.35
r² for this treatment 0.86
Simulated Corn Yields, kg/ha
Measured Corn Yields, kg/ha
0
2000
4000
6000
8000
10000

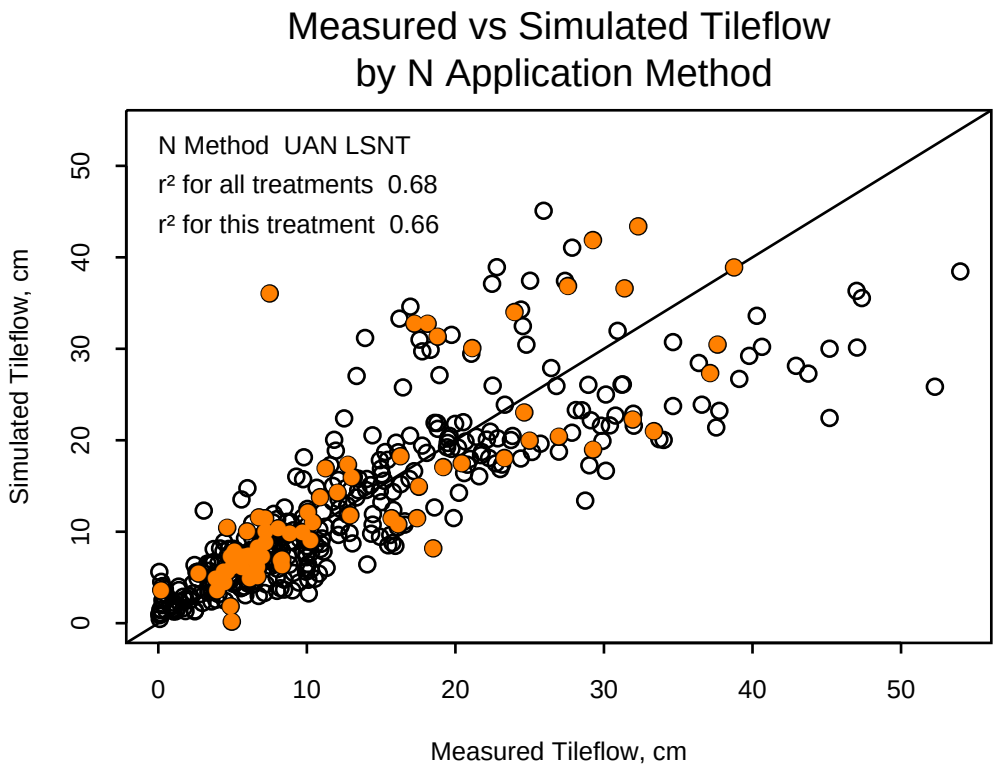

Measured vs Simulated Corn Yields
by N Application Method
N Method UAN Split LCD
r² for all treatments 0.35
r² for this treatment 0.87
Simulated Corn Yields, kg/ha
Measured Corn Yields, kg/ha
0
2000
4000
6000
8000
10000

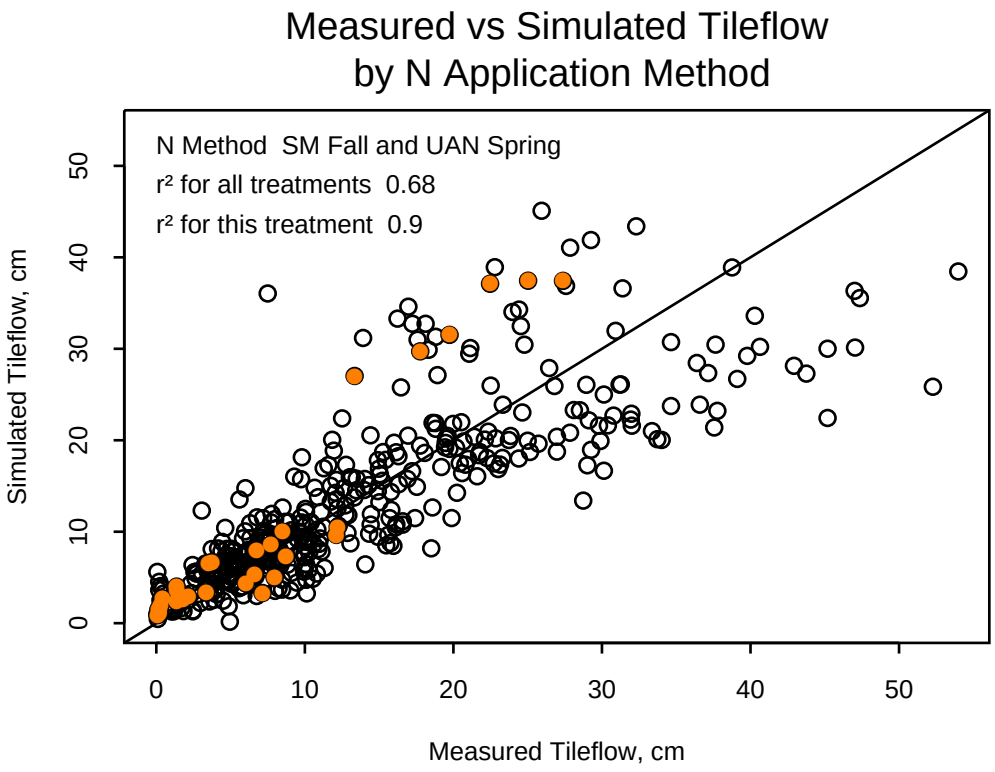

Measured vs Simulated Tileflow
by N Application Method
N Method Anhydrous
r² for all treatments 0.68
r² for this treatment 0.71
Simulated Tileflow, cm
Measured Tileflow, cm
0
10
20
30
40
50

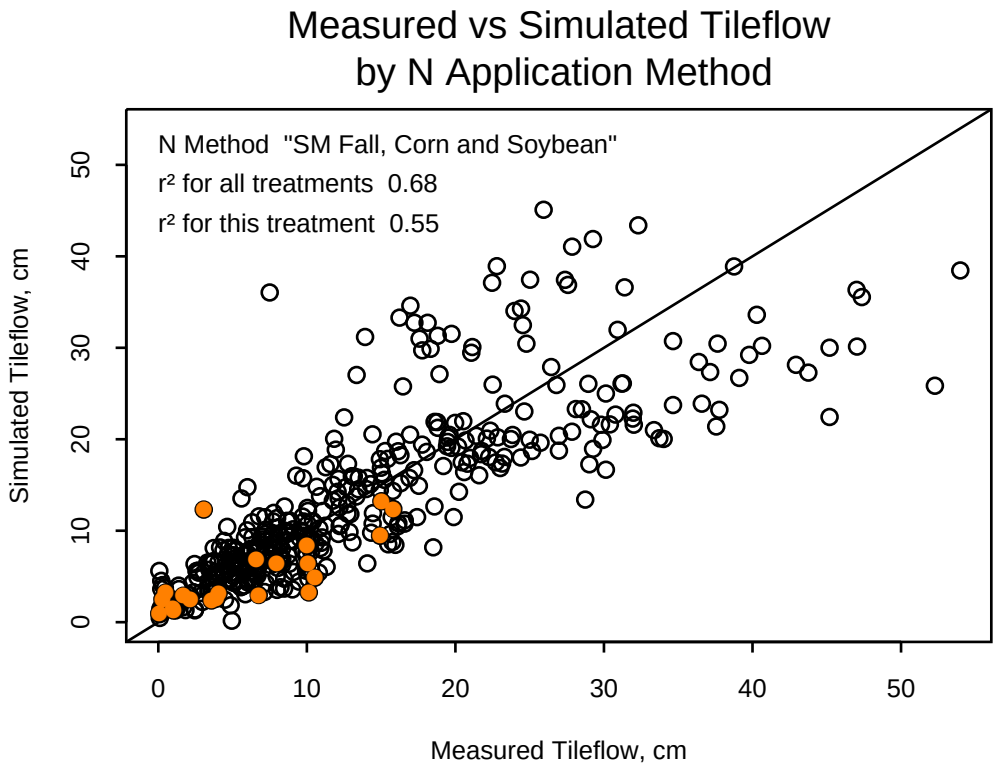

Measured vs Simulated Tileflow
by N Application Method
N Method SM Fall Corn
r² for all treatments 0.68
r² for this treatment 0.68
Simulated Tileflow, cm
Measured Tileflow, cm
0
10
20
30
40
50

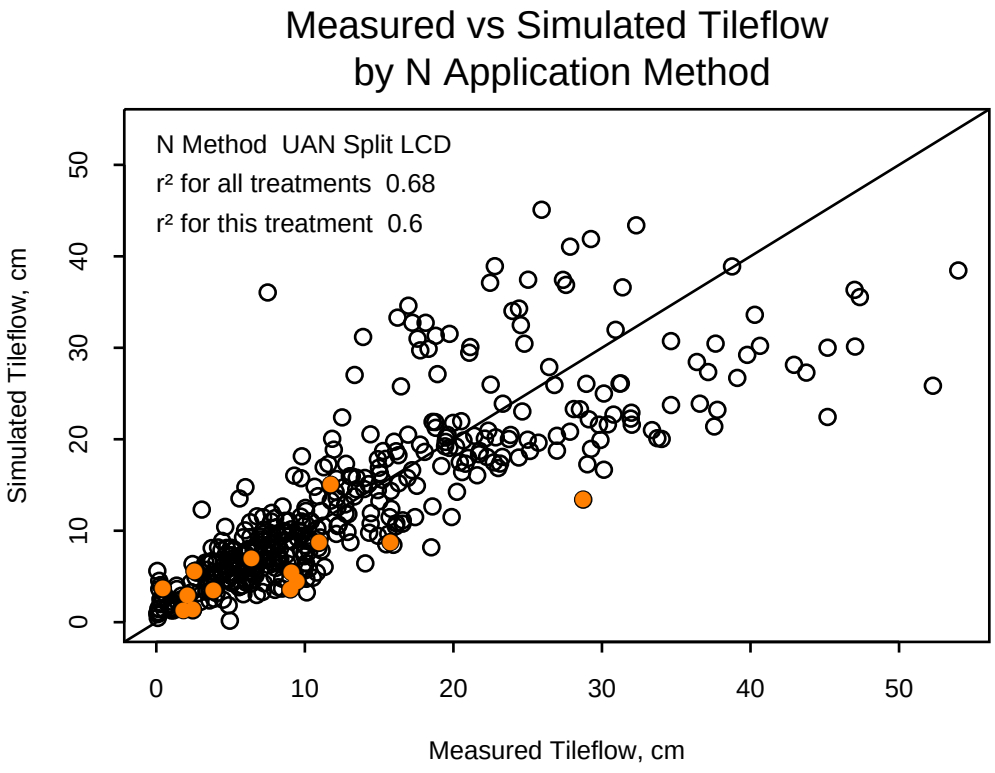

Measured vs Simulated Tileflow
by N Application Method
N Method UAN Spring Preplant
r² for all treatments 0.68
r² for this treatment 0.72
Simulated Tileflow, cm
Measured Tileflow, cm
0
10
20
30
40
50

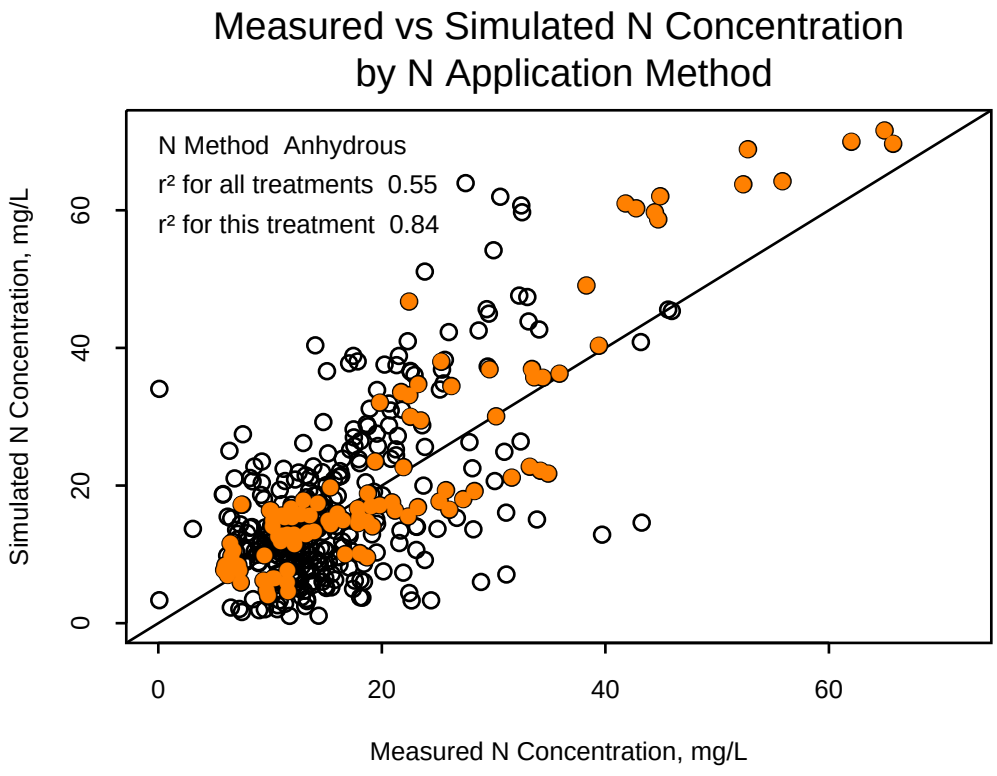

Measured vs Simulated Tileflow
by N Application Method
N Method SM Spring Preplant
r² for all treatments 0.68
r² for this treatment 0.54
Simulated Tileflow, cm
Measured Tileflow, cm
0
10
20
30
40
50

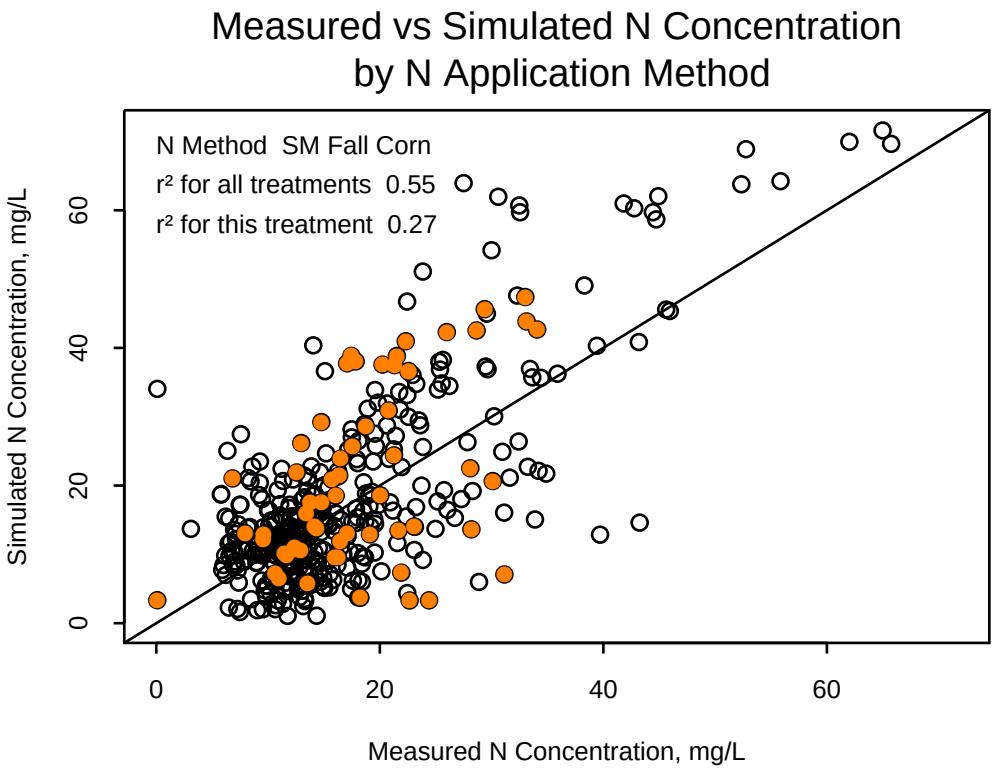

Measured vs Simulated Tileflow
by N Application Method
N Method UAN LSNT
r² for all treatments 0.68
r² for this treatment 0.66
Simulated Tileflow, cm
Measured Tileflow, cm
0
10
20
30
40
50

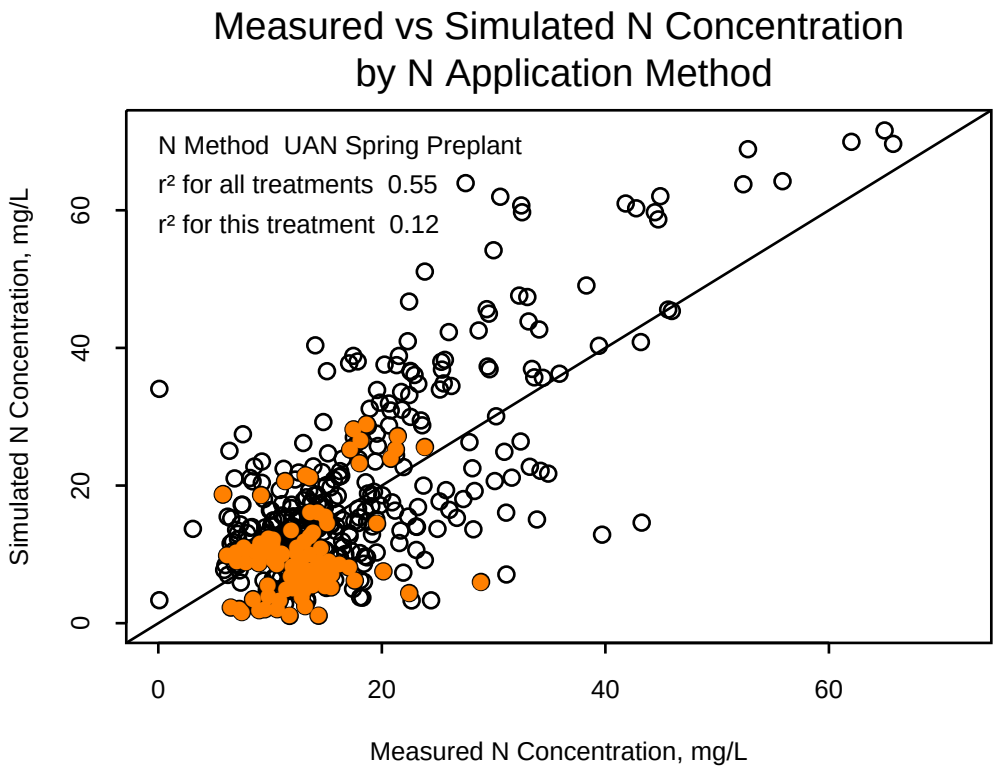

Measured vs Simulated Tileflow
by N Application Method
N Method SM Fall and UAN Spring
r² for all treatments 0.68
r² for this treatment 0.9
Simulated Tileflow, cm
Measured Tileflow, cm
0
10
20
30
40
50

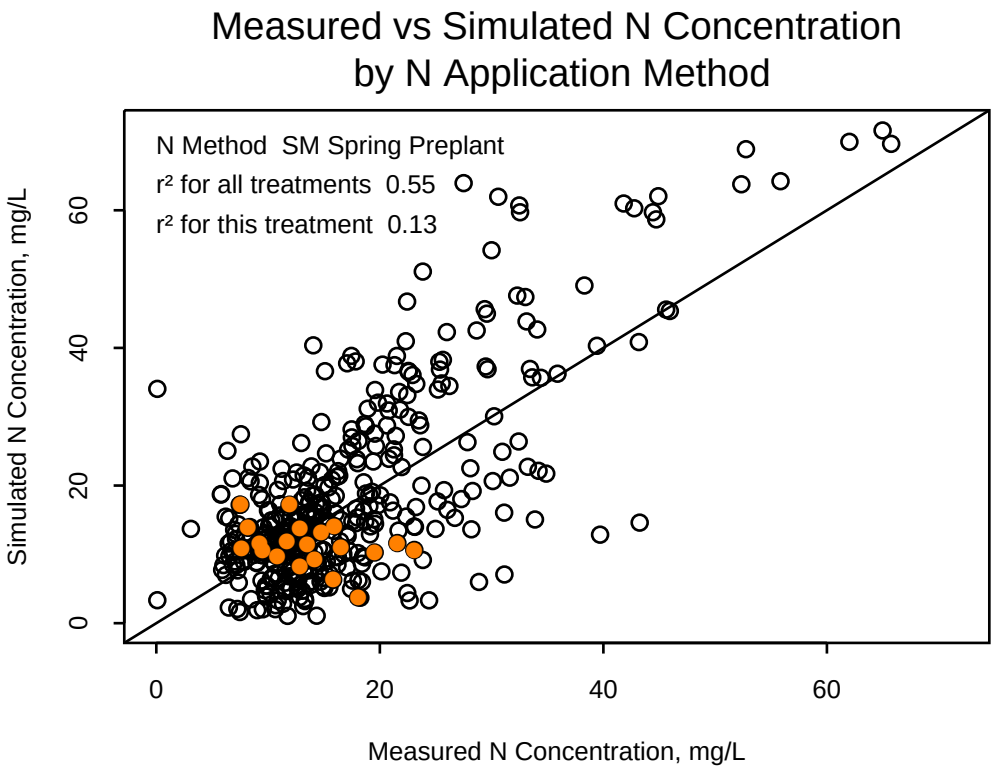

Measured vs Simulated Tileflow
by N Application Method
N Method "SM Fall, Corn and Soybean"
r² for all treatments 0.68
r² for this treatment 0.55
Simulated Tileflow, cm
Measured Tileflow, cm
0
10
20
30
40
50

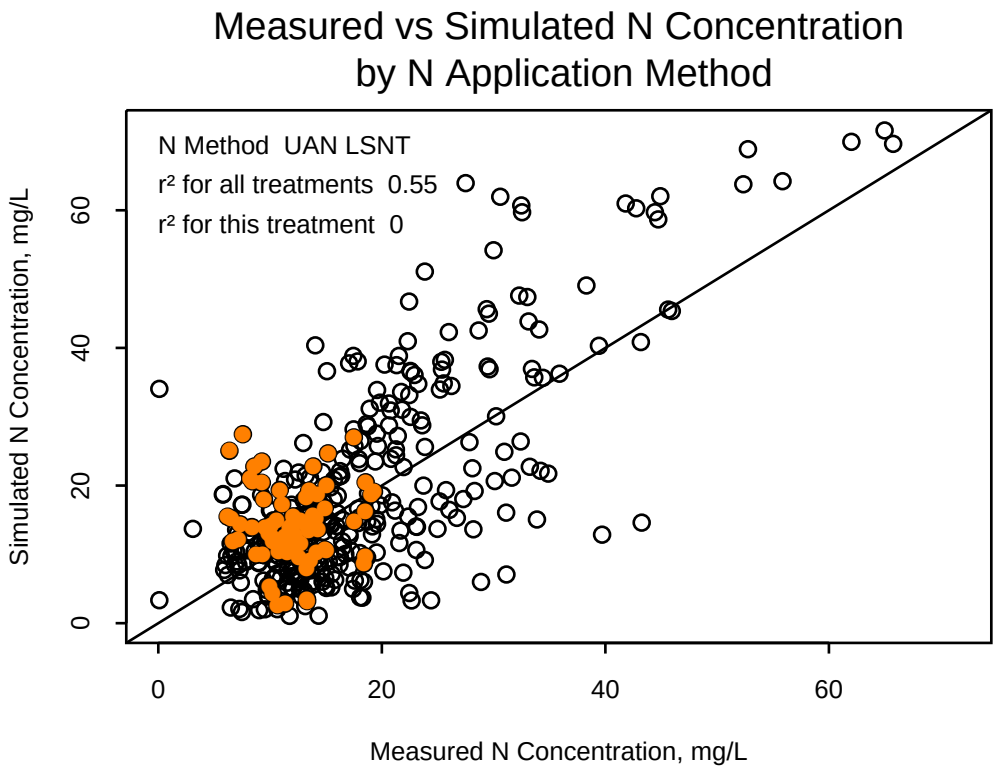

Measured vs Simulated Tileflow
by N Application Method
N Method UAN Split LCD
r² for all treatments 0.68
r² for this treatment 0.6
Simulated Tileflow, cm
Measured Tileflow, cm
0
10
20
30
40
50

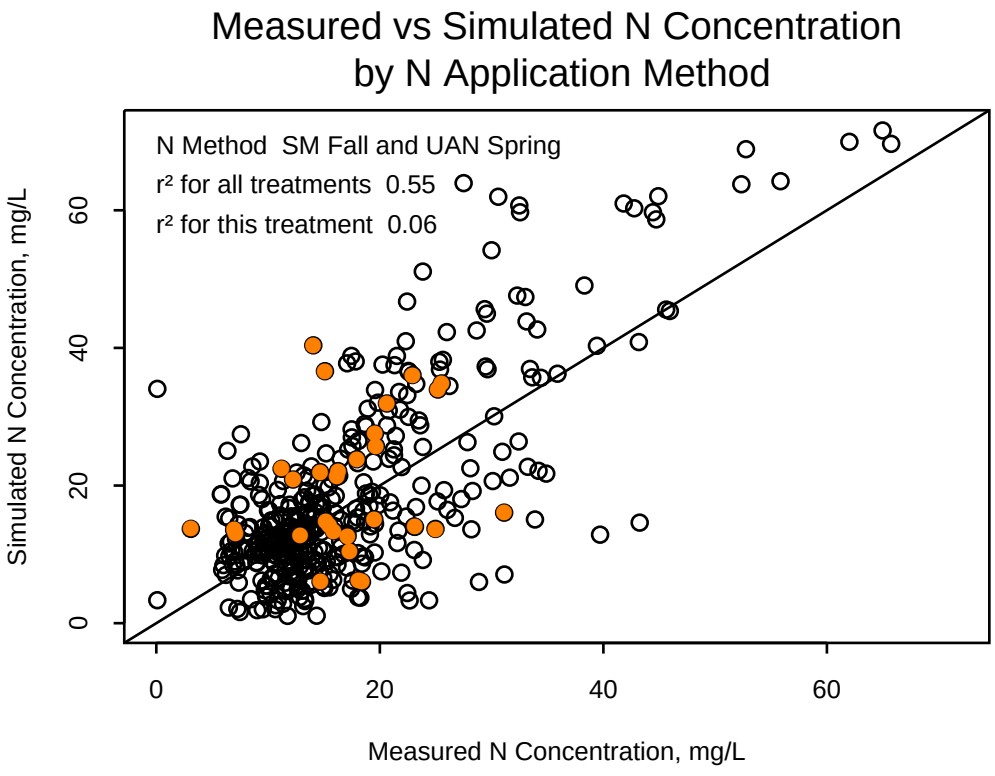

Measured vs Simulated N Concentration
by N Application Method
N Method Anhydrous
r² for all treatments 0.55
r² for this treatment 0.84
Simulated N Concentration, mg/L
Measured N Concentration, mg/L
0
20
40
60

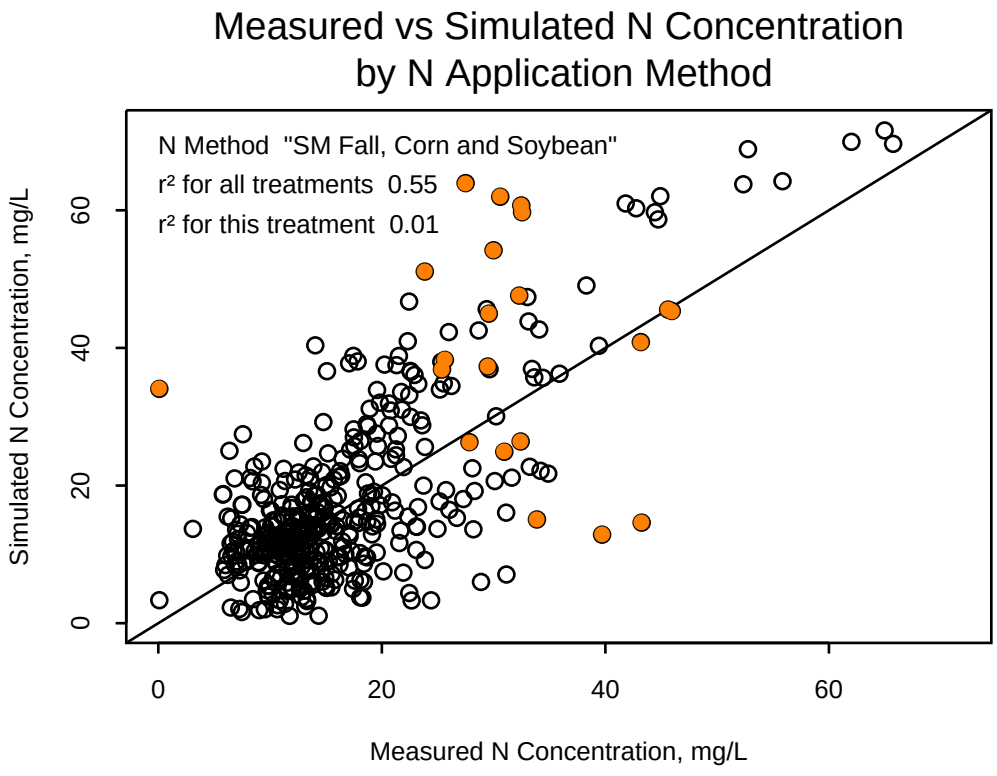

Measured vs Simulated N Concentration
by N Application Method
N Method SM Fall Corn
r² for all treatments 0.55
r² for this treatment 0.27
Simulated N Concentration, mg/L
Measured N Concentration, mg/L
0
20
40
60

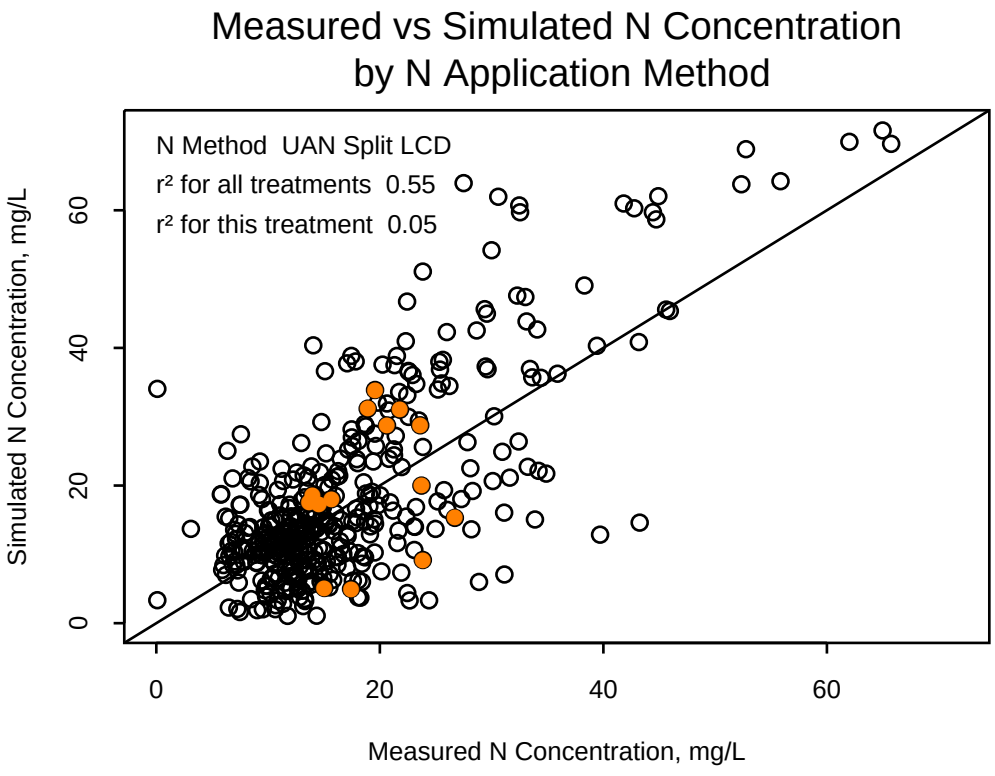

Measured vs Simulated N Concentration
by N Application Method
N Method UAN Spring Preplant
r² for all treatments 0.55
r² for this treatment 0.12
Simulated N Concentration, mg/L
Measured N Concentration, mg/L
0
20
40
60

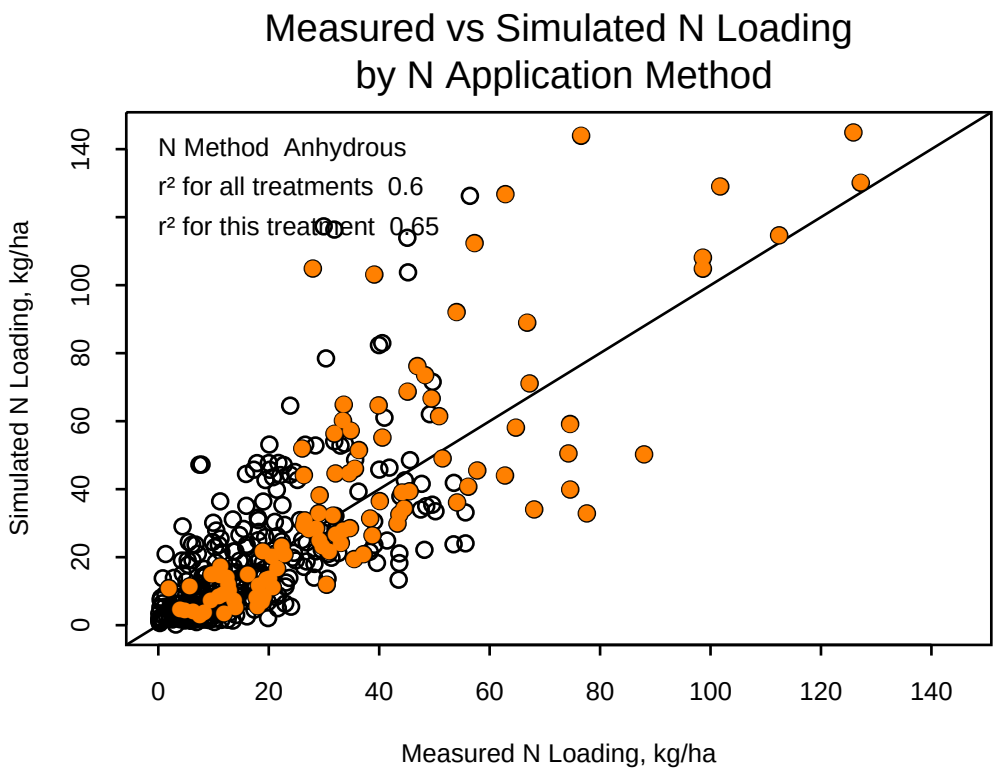

Measured vs Simulated N Concentration
by N Application Method
N Method SM Spring Preplant
r² for all treatments 0.55
r² for this treatment 0.13
Simulated N Concentration, mg/L
Measured N Concentration, mg/L
0
20
40
60

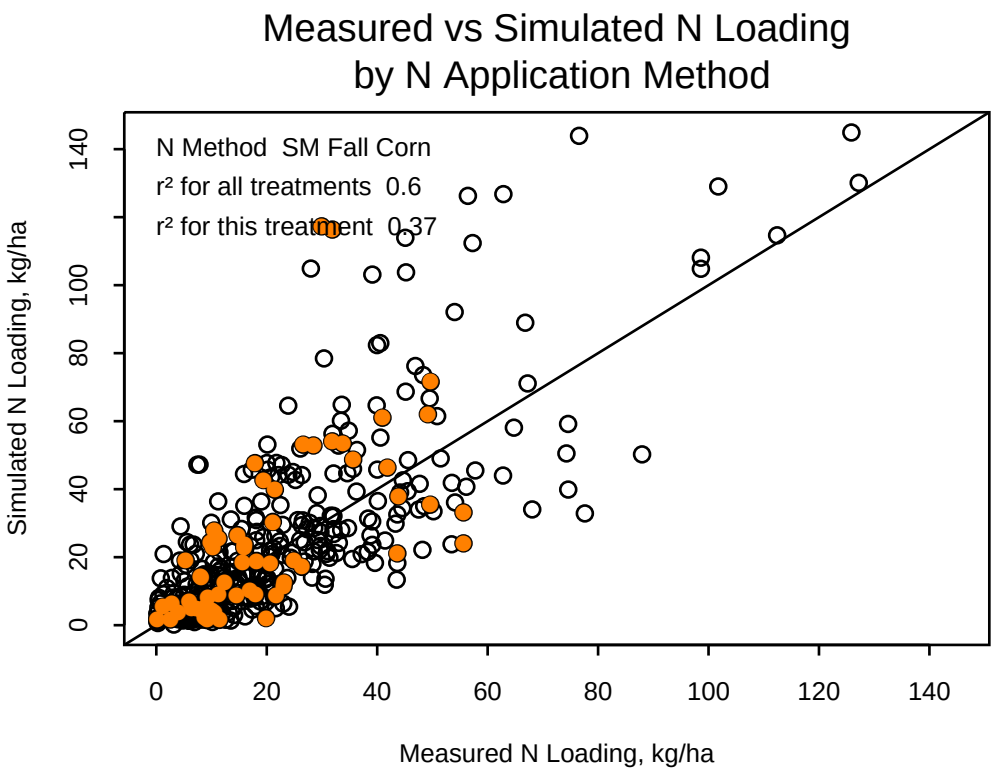

Measured vs Simulated N Concentration
by N Application Method
N Method UAN LSNT
r² for all treatments 0.55
r² for this treatment 0
Simulated N Concentration, mg/L
Measured N Concentration, mg/L
0
20
40
60

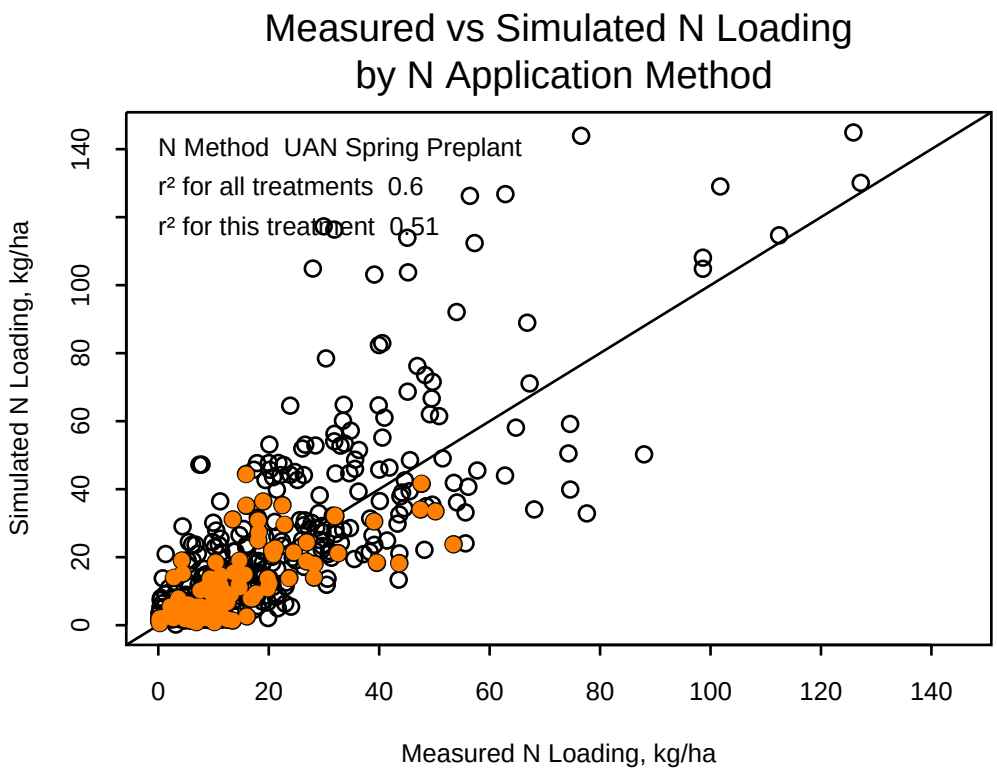

Measured vs Simulated N Concentration
by N Application Method
N Method SM Fall and UAN Spring
r² for all treatments 0.55
r² for this treatment 0.06
Simulated N Concentration, mg/L
Measured N Concentration, mg/L
0
20
40
60

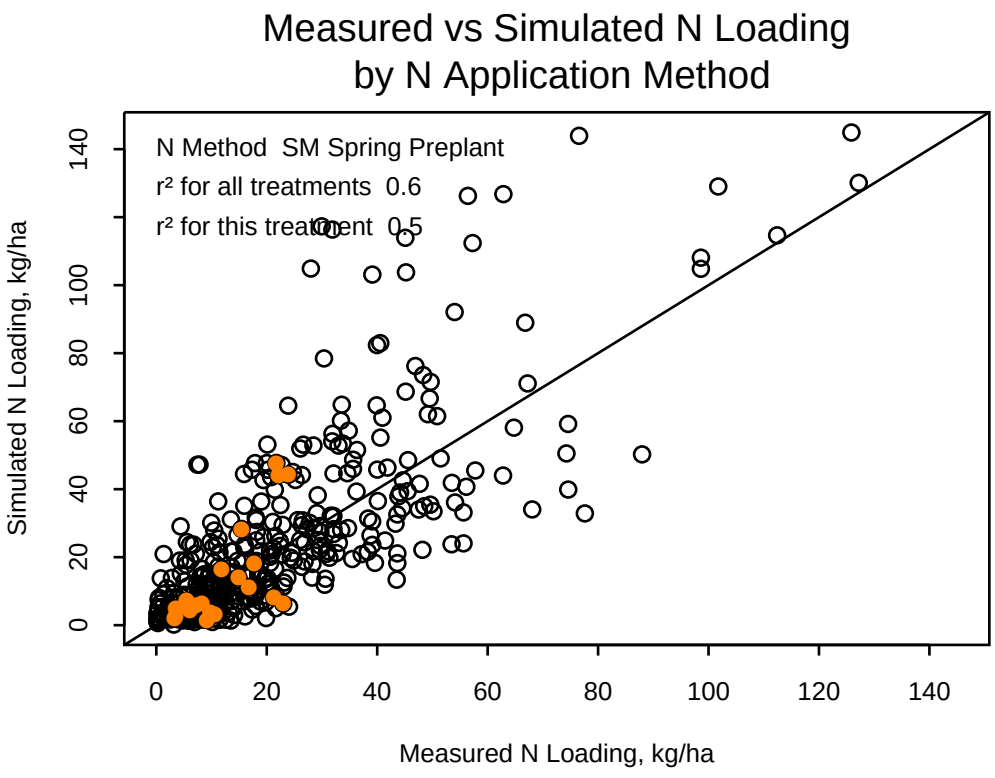

Measured vs Simulated N Concentration
by N Application Method
N Method "SM Fall, Corn and Soybean"
r² for all treatments 0.55
r² for this treatment 0.01
Simulated N Concentration, mg/L
Measured N Concentration, mg/L
0
20
40
60

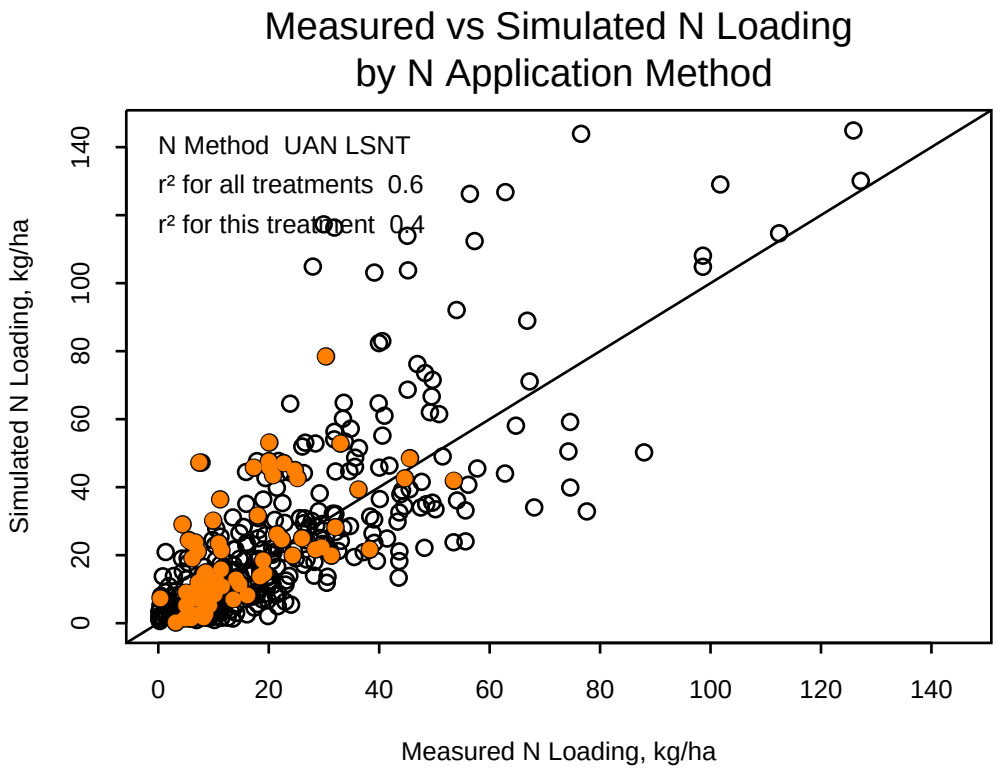

Measured vs Simulated N Concentration
by N Application Method
N Method UAN Split LCD
r² for all treatments 0.55
r² for this treatment 0.05
Simulated N Concentration, mg/L
Measured N Concentration, mg/L
0
20
40
60

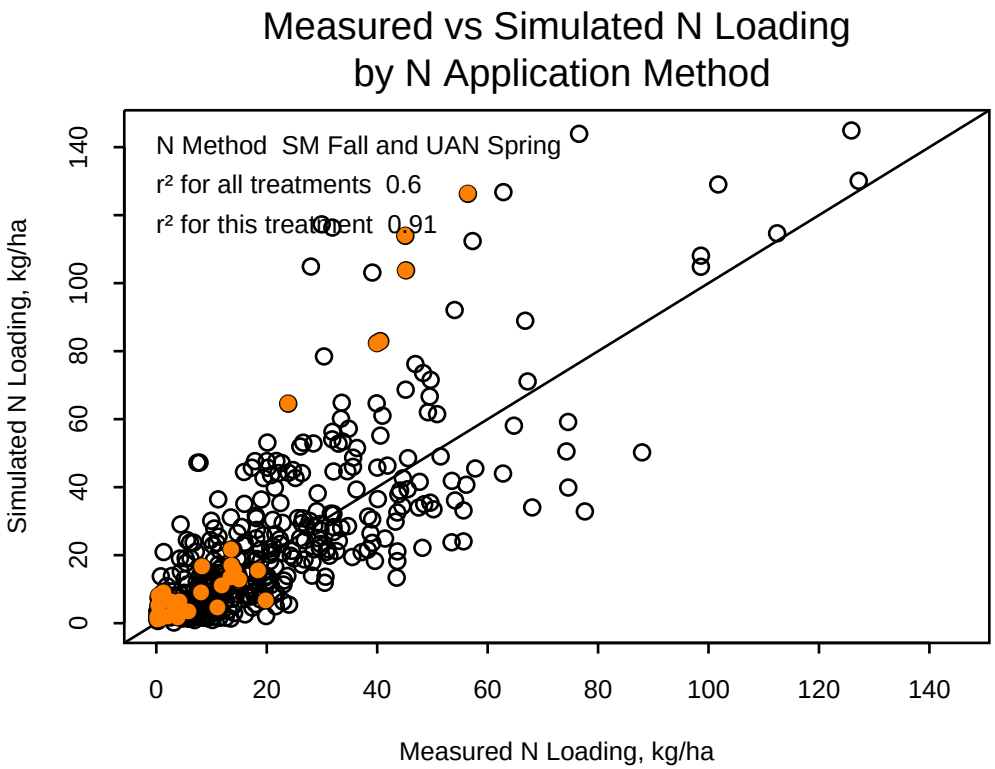

Measured vs Simulated N Loading
by N Application Method
N Method Anhydrous
r² for all treatments 0.6
r² for this treatment 0.65
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
0
20
40
60
80
100
120
140

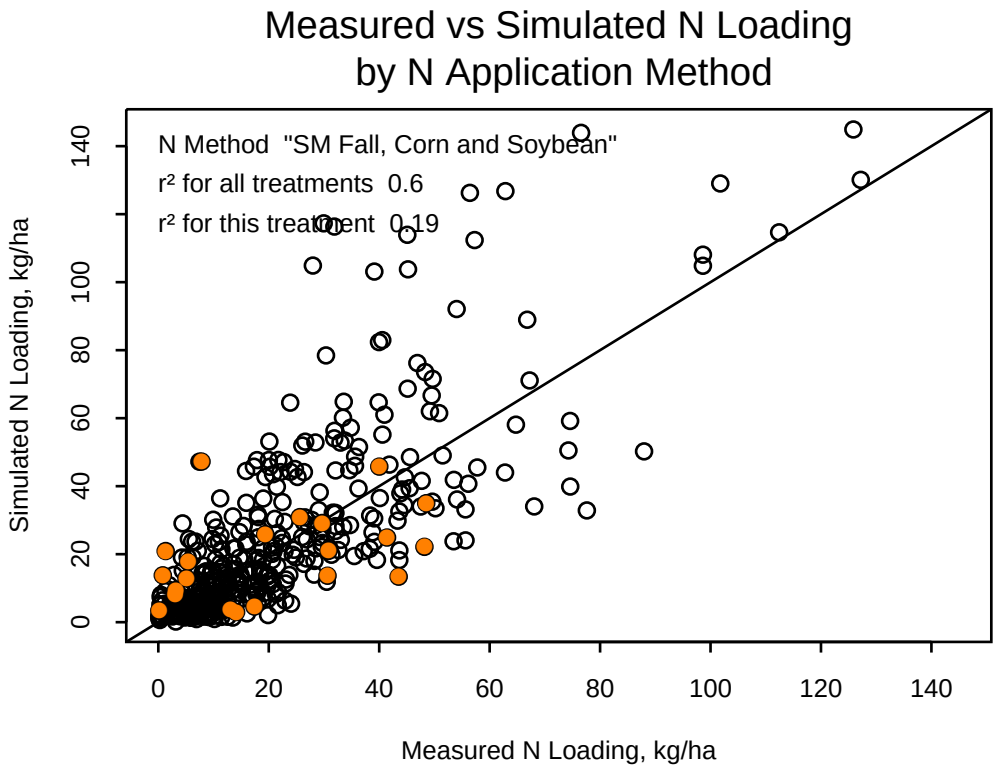

Measured vs Simulated N Loading
by N Application Method
N Method SM Fall Corn
r² for all treatments 0.6
r² for this treatment 0.37
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
0
20
40
60
80
100
120
140

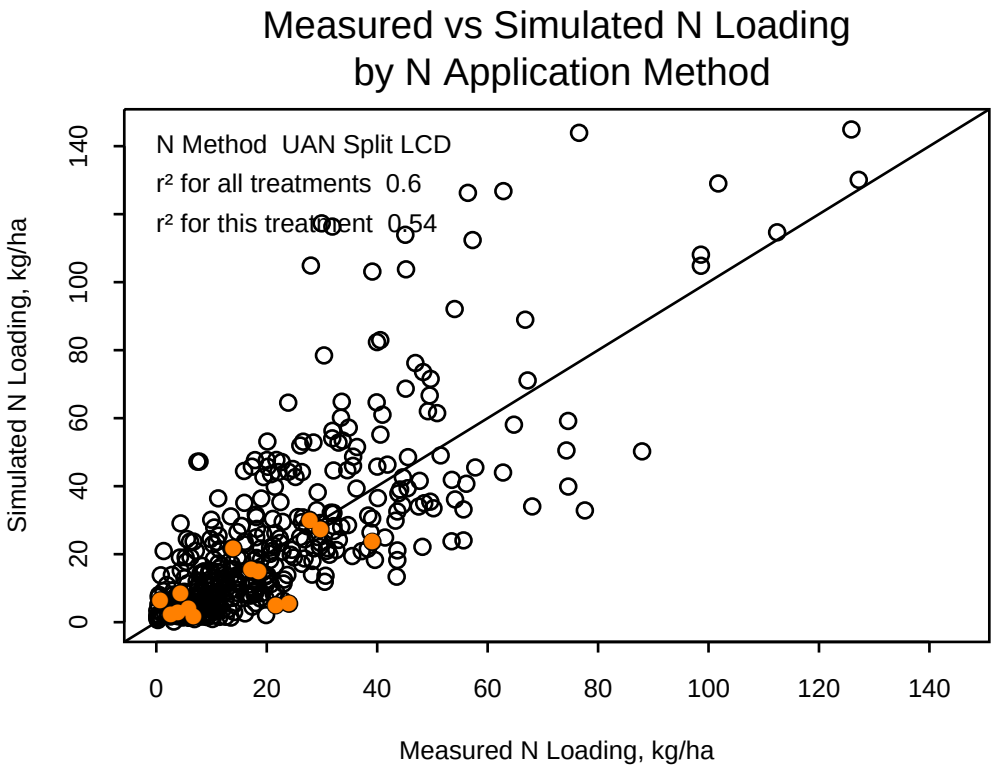

Measured vs Simulated N Loading
by N Application Method
N Method UAN Spring Preplant
r² for all treatments 0.6
r² for this treatment 0.51
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
0
20
40
60
80
100
120
140

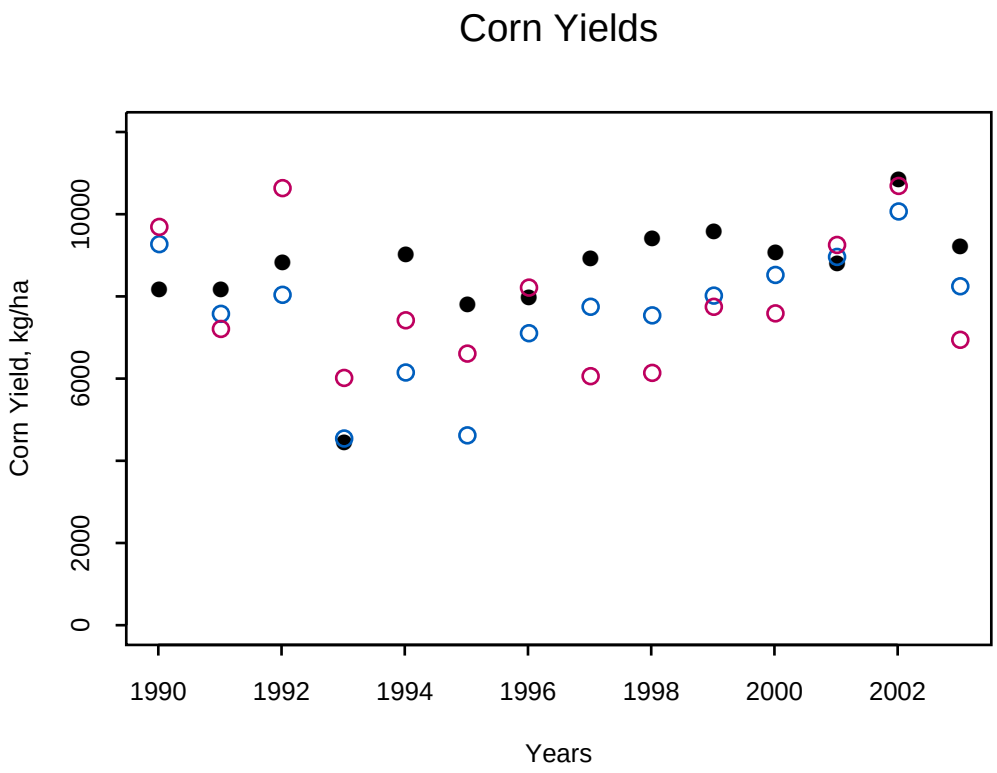

Measured vs Simulated N Loading
by N Application Method
N Method SM Spring Preplant
r² for all treatments 0.6
r² for this treatment 0.5
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
0
20
40
60
80
100
120
140

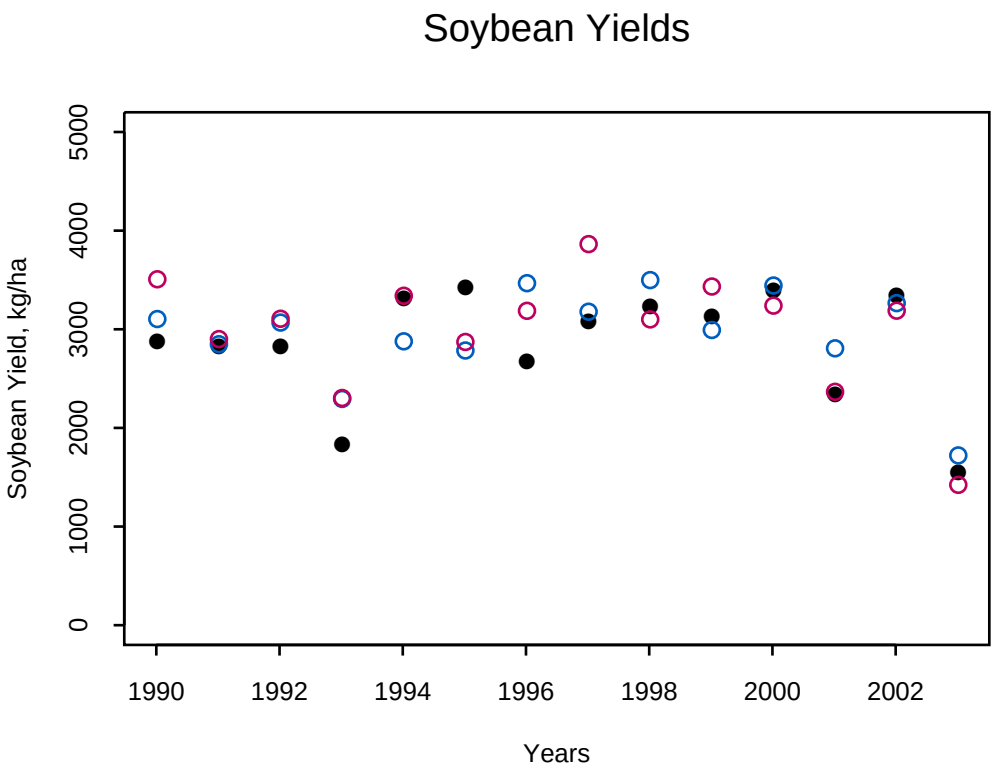

Measured vs Simulated N Loading
by N Application Method
N Method UAN LSNT
r² for all treatments 0.6
r² for this treatment 0.4
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
0
20
40
60
80
100
120
140

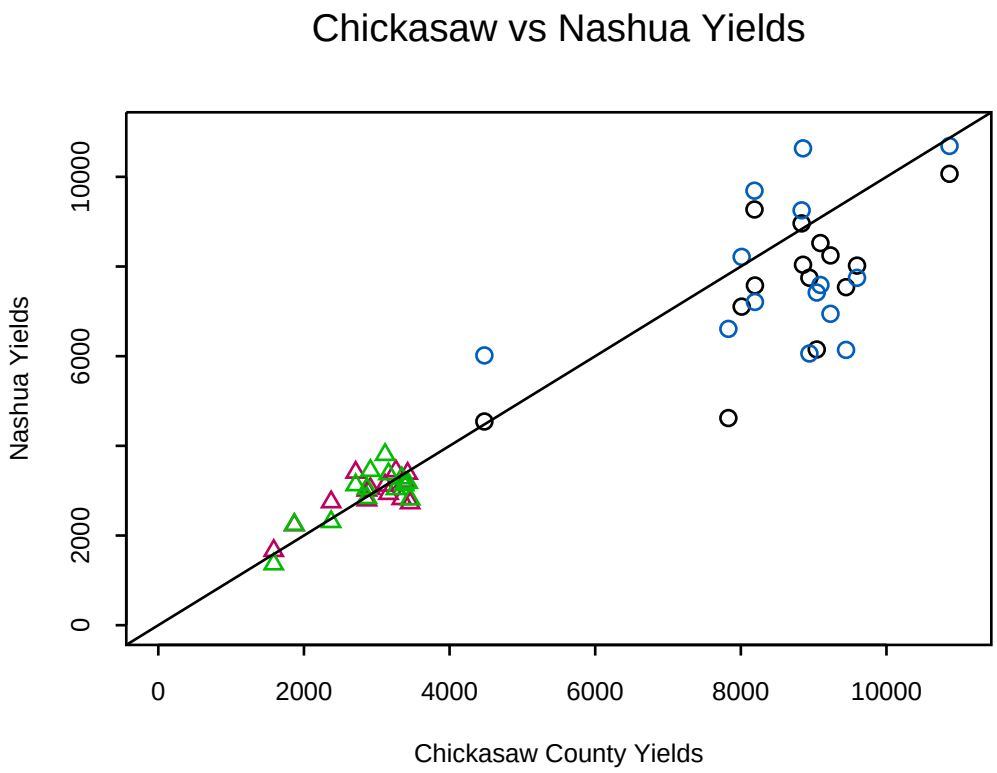

Measured vs Simulated N Loading
by N Application Method
N Method SM Fall and UAN Spring
r² for all treatments 0.6
r² for this treatment 0.91
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
0
20
40
60
80
100
120
140


Measured vs Simulated N Loading
by N Application Method
N Method "SM Fall, Corn and Soybean"
r² for all treatments 0.6
r² for this treatment 0.19
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
0
20
40
60
80
100
120
140


Measured vs Simulated N Loading
by N Application Method
N Method UAN Split LCD
r² for all treatments 0.6
r² for this treatment 0.54
Simulated N Loading, kg/ha
Measured N Loading, kg/ha
0
20
40
60
80
100
120
140


Corn Yields
Corn Yield, kg/ha
0
2000
6000
10000
1990
1992
1994
1996
1998
2000
2002
Years


Soybean Yields
Soybean Yield, kg/ha
0
1000
2000
3000
4000
5000
1990
1992
1994
1996
1998
2000
2002
Years


Chickasaw vs Nashua Yields
Nashua Yields
0
2000
6000
10000
0
2000
4000
6000
8000
10000
Chickasaw County Yields