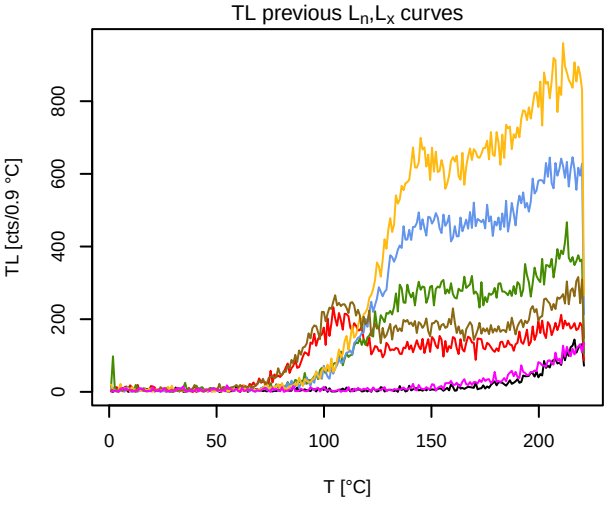
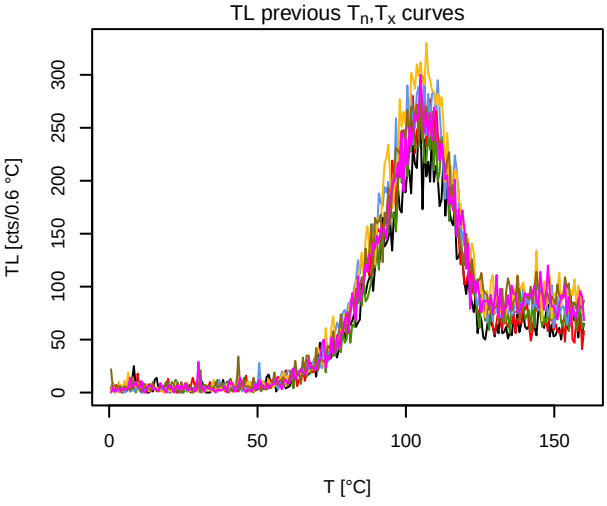
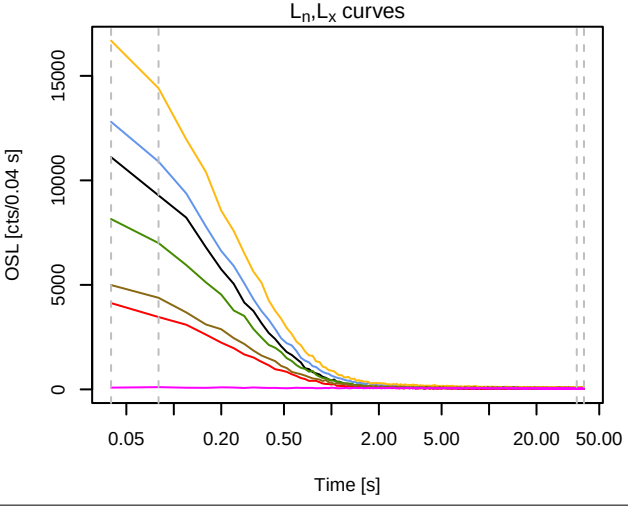
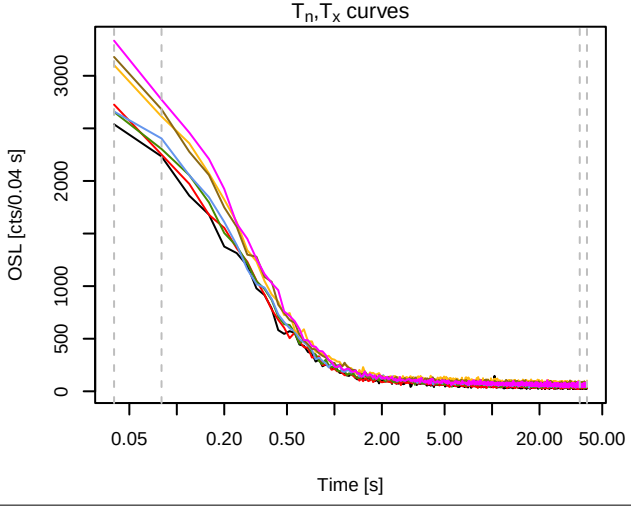
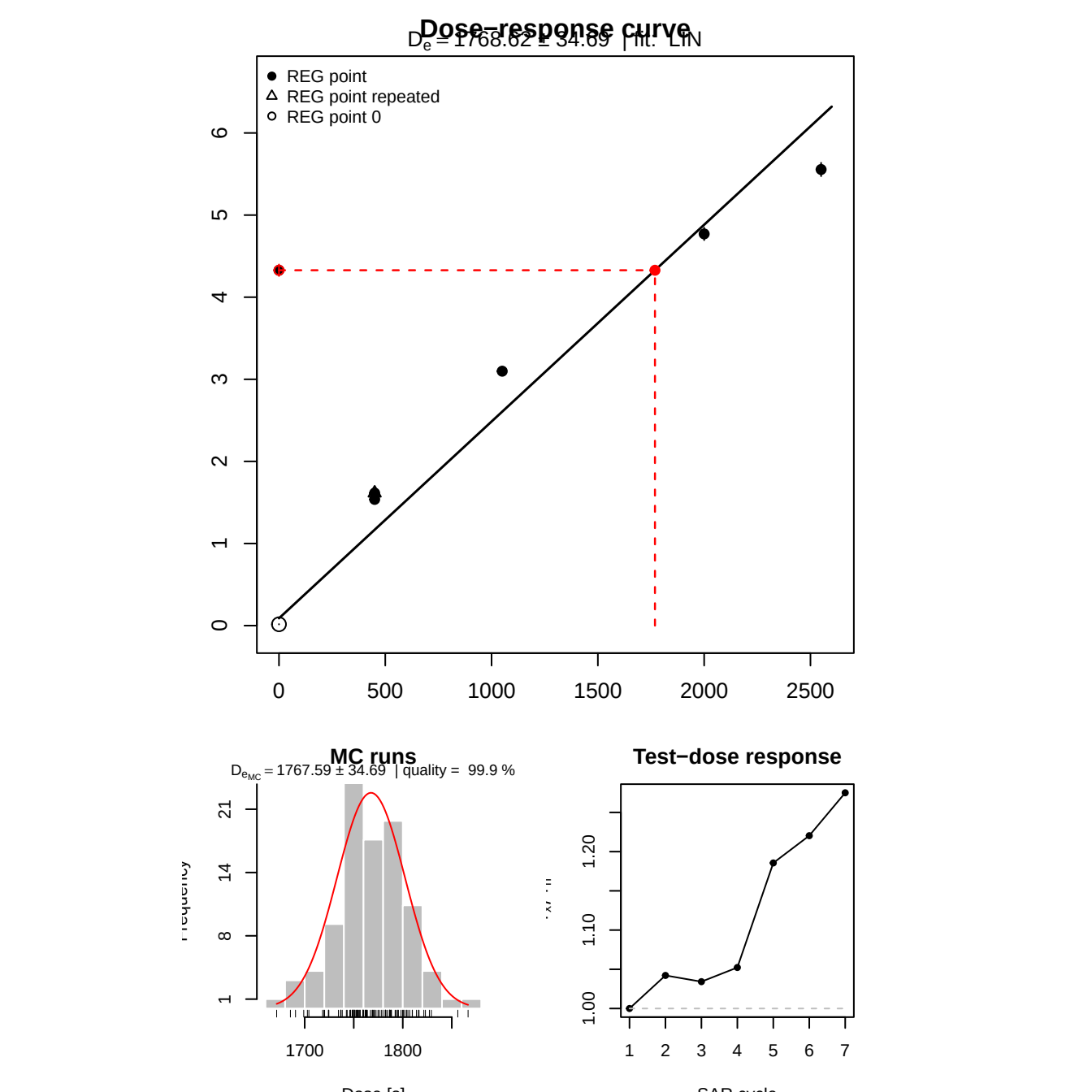

TL previous L_n,L_x curves
TL [cts/0.9 °C]
0
200
400
600
800
0
50
100
150
200
T [°C]


TL previous T_n,T_x curves
TL [cts/0.6 °C]
0
50
100
150
200
250
300
0
50
100
150
T [°C]


L_n,L_x curves
OSL [cts/0.04 s]
0
5000
10000
15000
0.05
0.20
0.50
2.00
5.00
20.00
50.00
Time [s]

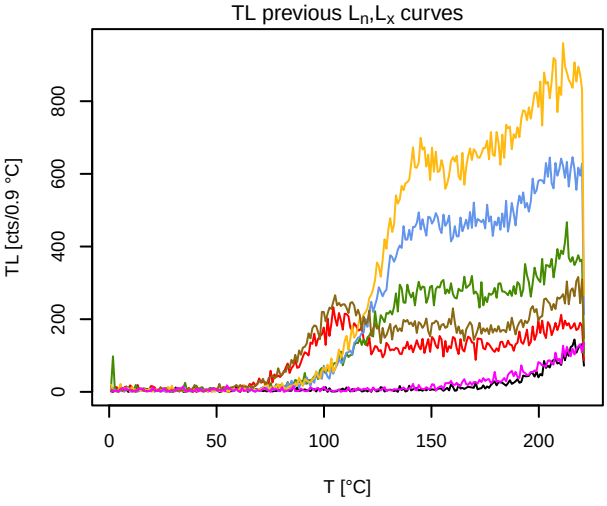

T_n,T_x curves
OSL [cts/0.04 s]
0
500
1000
2000
3000
0.05
0.20
0.50
2.00
5.00
20.00
50.00
Time [s]

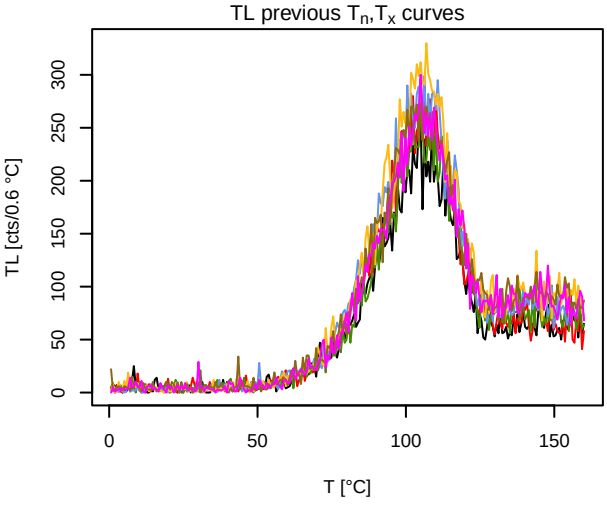
Natural
(0)
R1
(450)
R2
(1050)
R3
(2000)
R4
(2550)
R5
(450)
R0
(0)

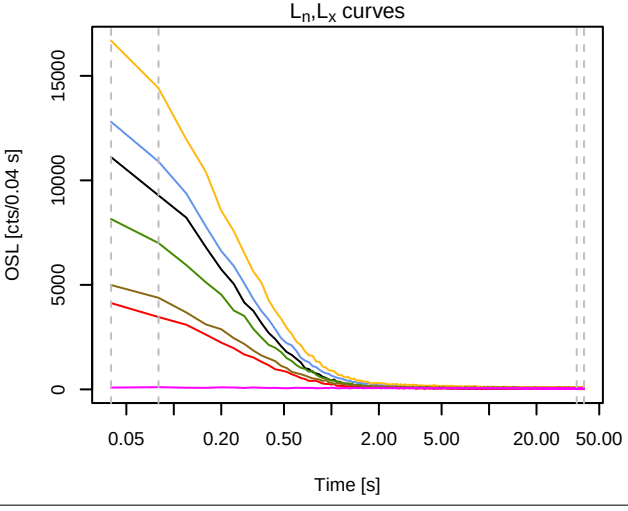

Dose–response curve
De = 1768.62 ± 34.69 | fit: LIN
REG point
REG point repeated
REG point 0
0
1
2
3
4
5
6
0
500
1000
1500
2000
2500
MC runs
DeMC = 1767.59 ± 34.69 | quality = 99.9 %
Frequency
1
8
14
21
1700
1800
Test−dose response
1.00
1.10
1.20
1
2
3
4
5
6
7

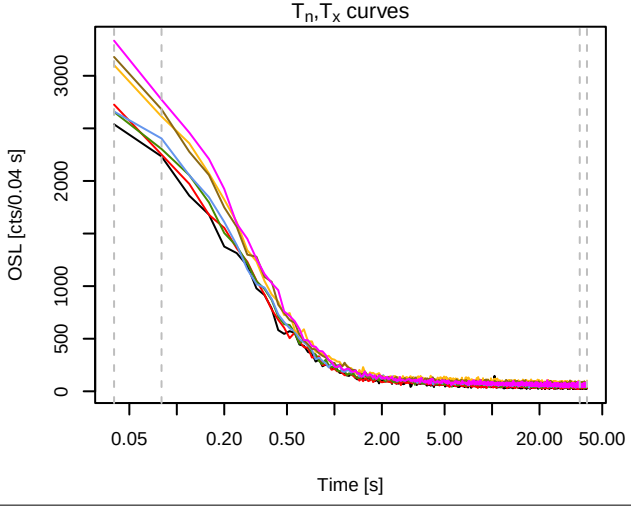
Rejection criteria
Recycling R.
Recuperation
Testdose Err.
Palaeodose Err.
− 0.2
0/1
+ 0.2

IRSL
0
10
20
30
40

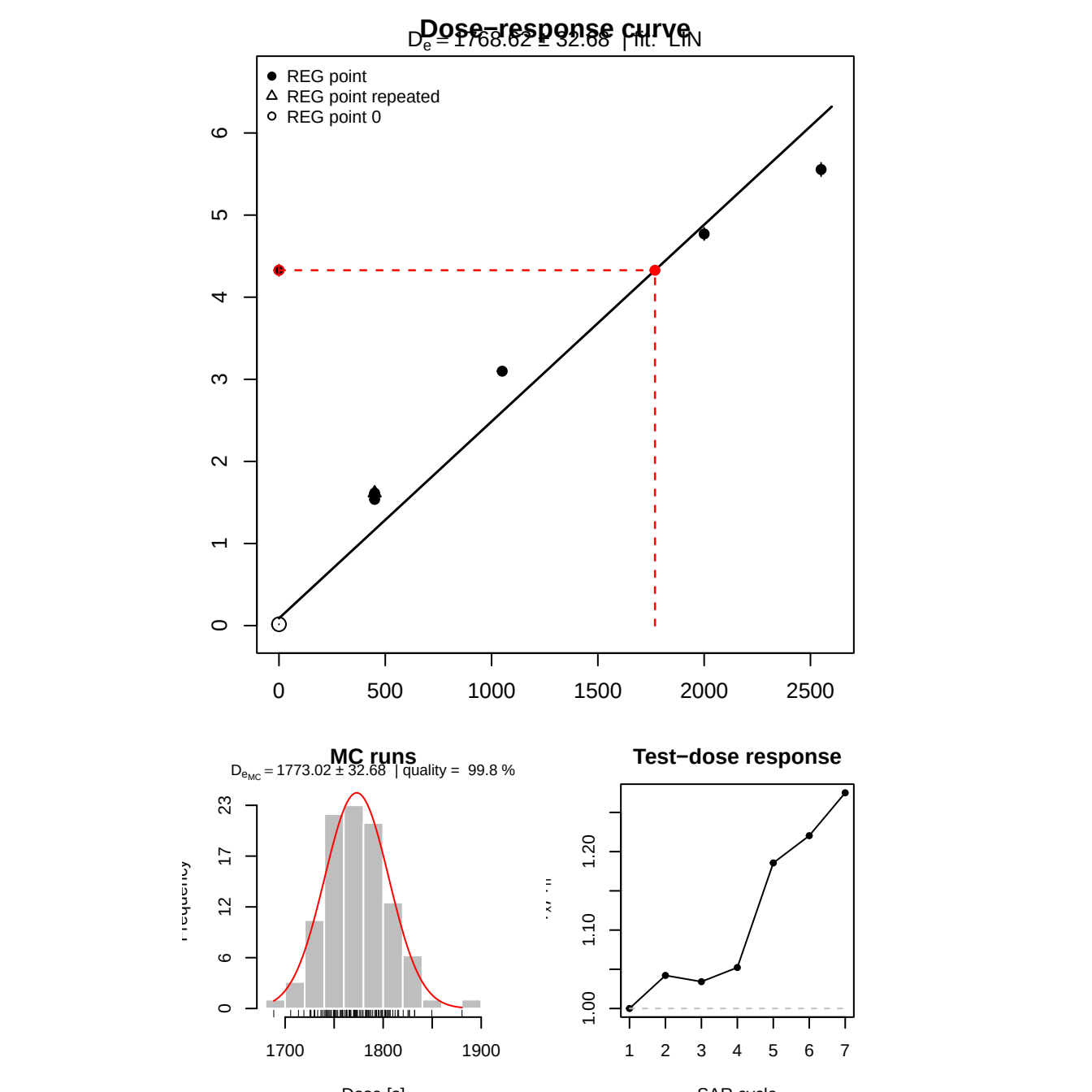

TL previous L_n,L_x curves
TL [cts/0.9 °C]
0
200
400
600
800
0
50
100
150
200
T [°C]


TL previous T_n,T_x curves
TL [cts/0.6 °C]
0
50
100
150
200
250
300
0
50
100
150
T [°C]


L_n,L_x curves
OSL [cts/0.04 s]
0
5000
10000
15000
0.05
0.20
0.50
2.00
5.00
20.00
50.00
Time [s]


T_n,T_x curves
OSL [cts/0.04 s]
0
500
1000
2000
3000
0.05
0.20
0.50
2.00
5.00
20.00
50.00
Time [s]

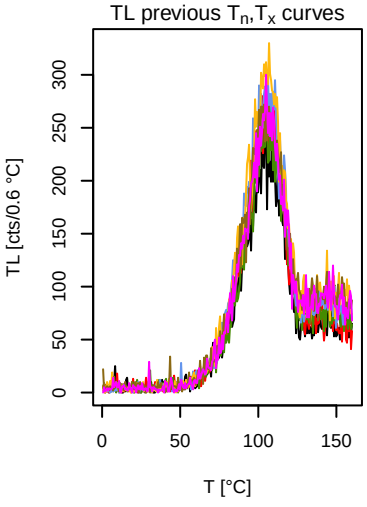
Natural
(0)
R1
(450)
R2
(1050)
R3
(2000)
R4
(2550)
R5
(450)
R0
(0)

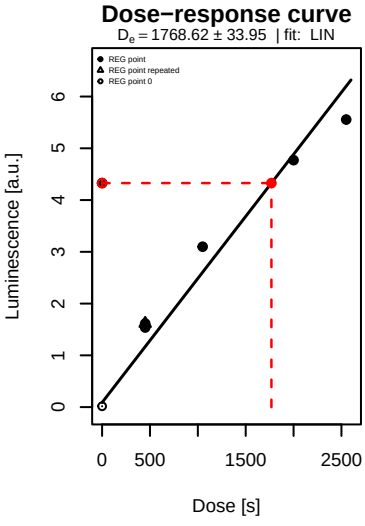

Dose–response curve
De = 1768.62 ± 32.68 | fit: LIN
REG point
REG point repeated
REG point 0
0
1
2
3
4
5
6
0
500
1000
1500
2000
2500
MC runs
DeMC = 1773.02 ± 32.68 | quality = 99.8 %
Frequency
0
6
12
17
23
1700
1800
1900
Test−dose response
1.00
1.10
1.20
1
2
3
4
5
6
7

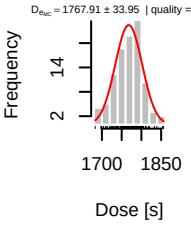
Rejection criteria
Recycling R.
Recuperation
Testdose Err.
Palaeodose Err.
− 0.2
0/1
+ 0.2

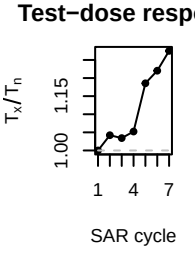
IRSL
0
10
20
30
40

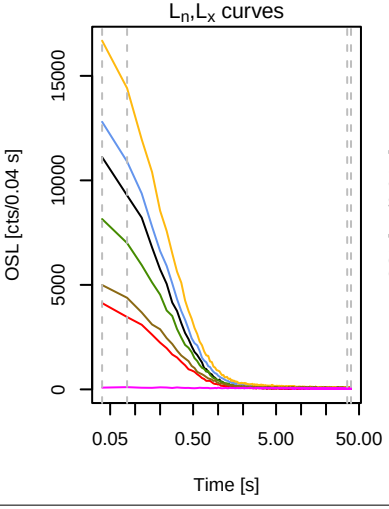
No TL curve detected

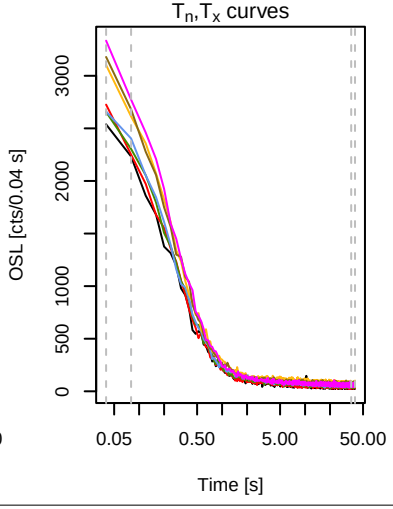


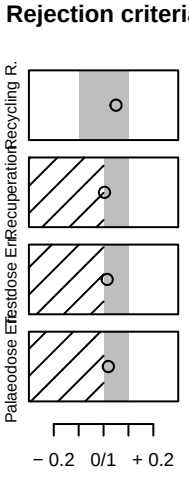


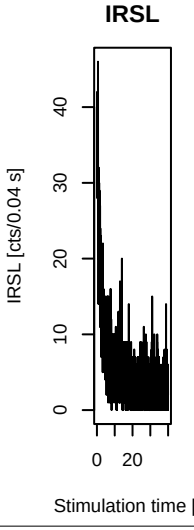






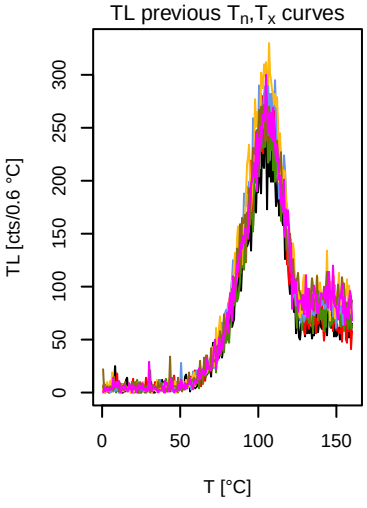


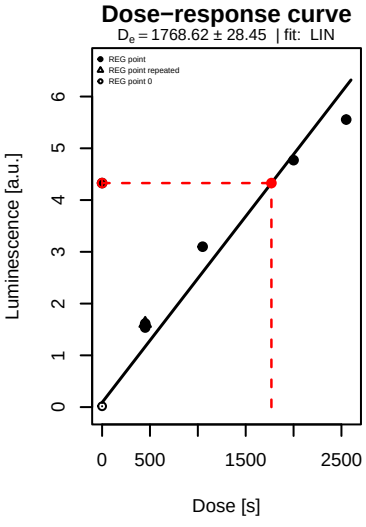


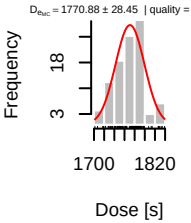


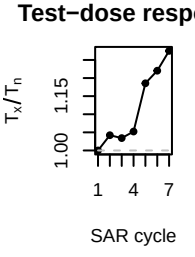
Natural (0) | R1 (450) | R2 (1050) | R3 (2000) | R4 (2550) | R5 (450) | R0 (0)

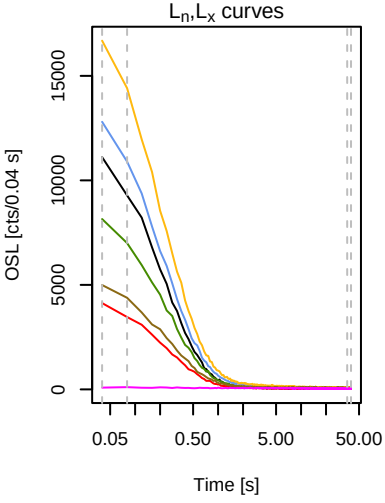
No TL curve detected

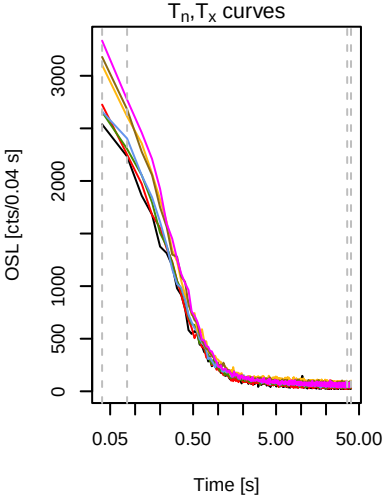


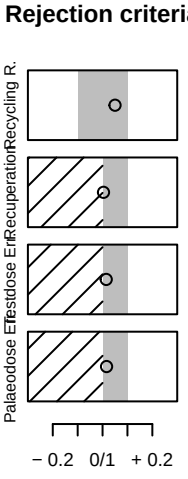


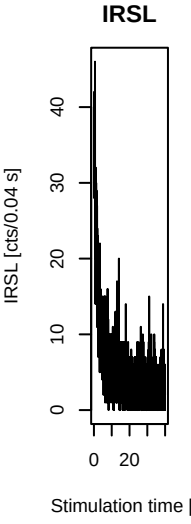








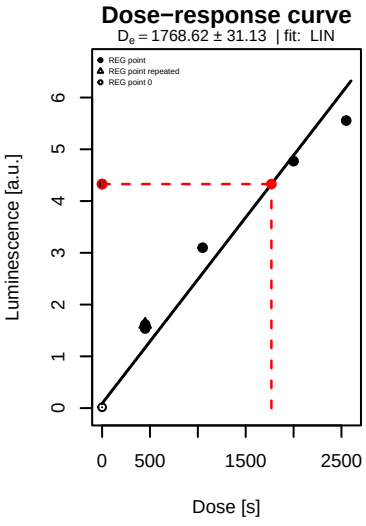


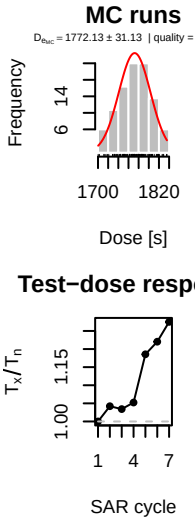


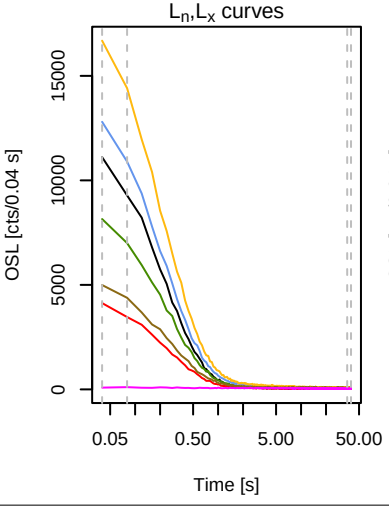
Natural (0) | R1 (450) | R2 (1050) | R3 (2000) | R4 (2550) | R5 (450) | R0 (0)

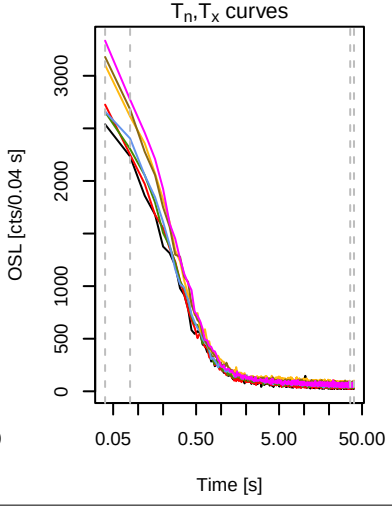
No TL curve detected

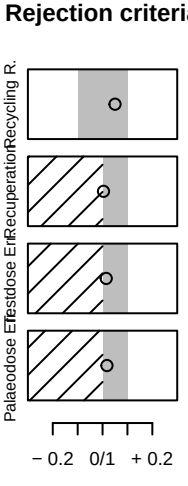
No TL curve detected

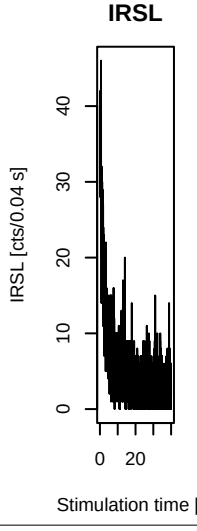








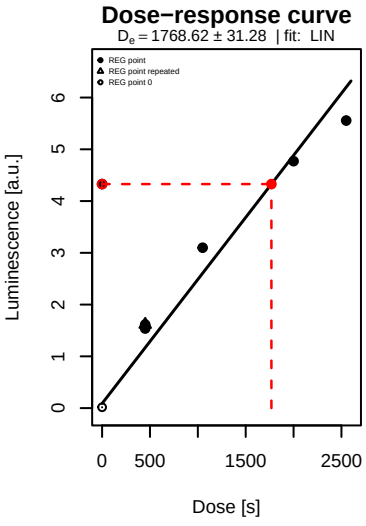


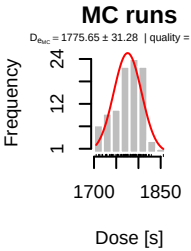


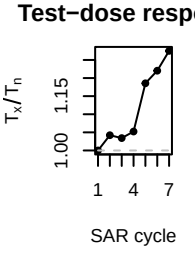
Natural (0) | R1 (450) | R2 (1050) | R3 (2000) | R4 (2550) | R5 (450) | R0 (0)

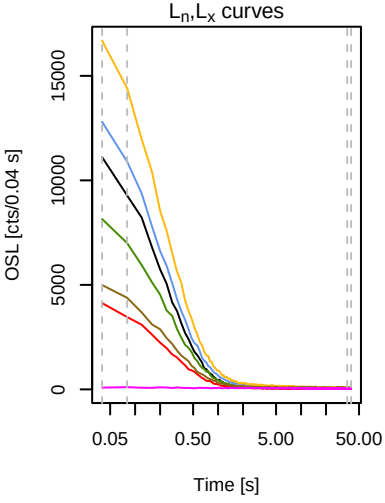
No TL curve detected

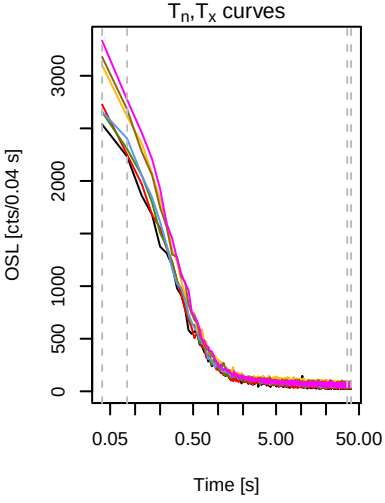
No TL curve detected

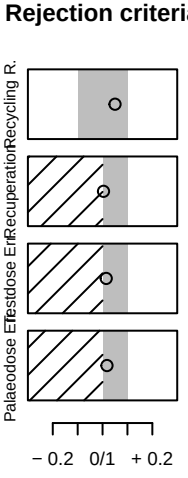


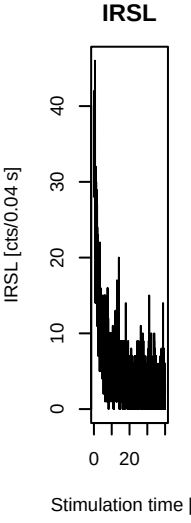












Natural (0)

R1 (450)

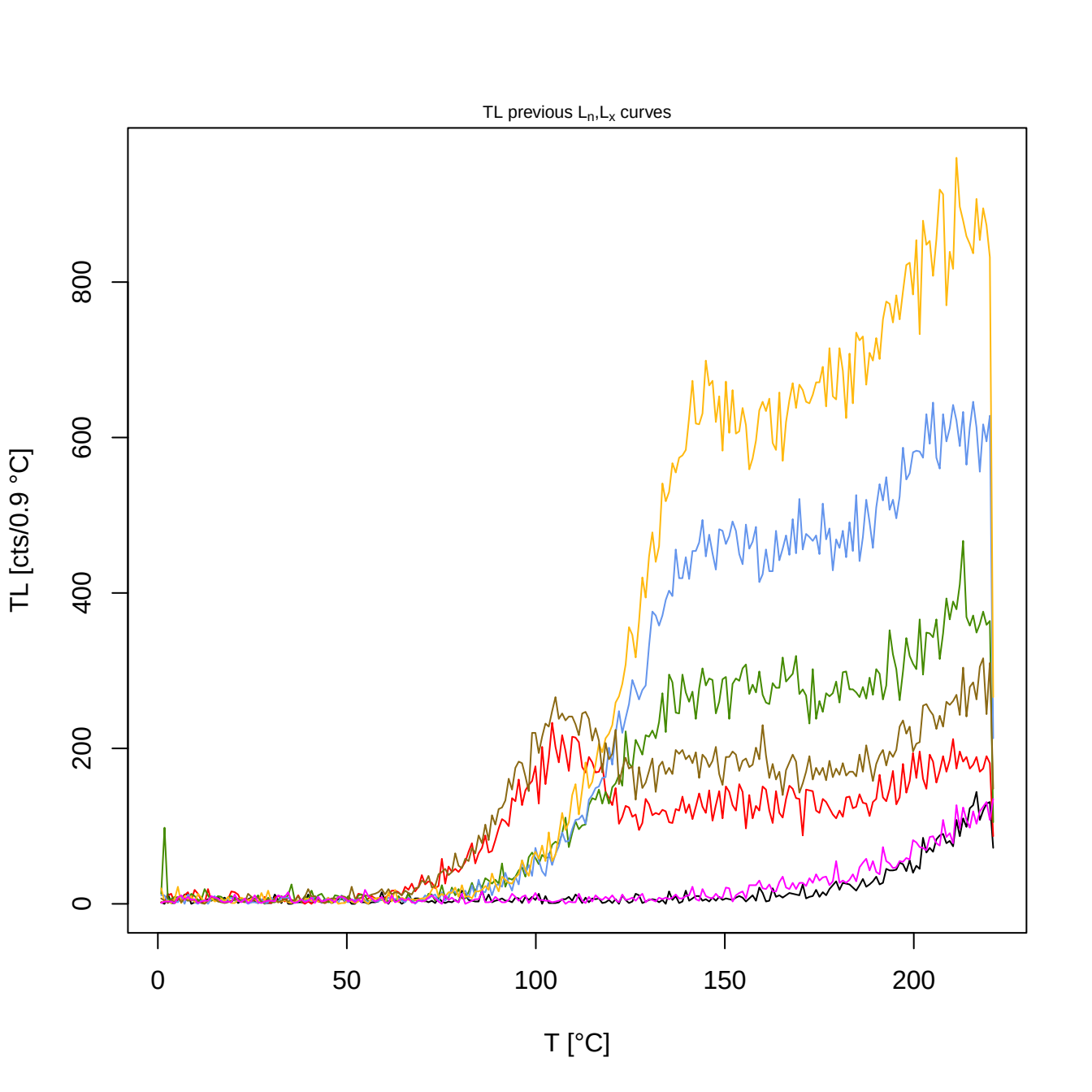
R2 (1050)

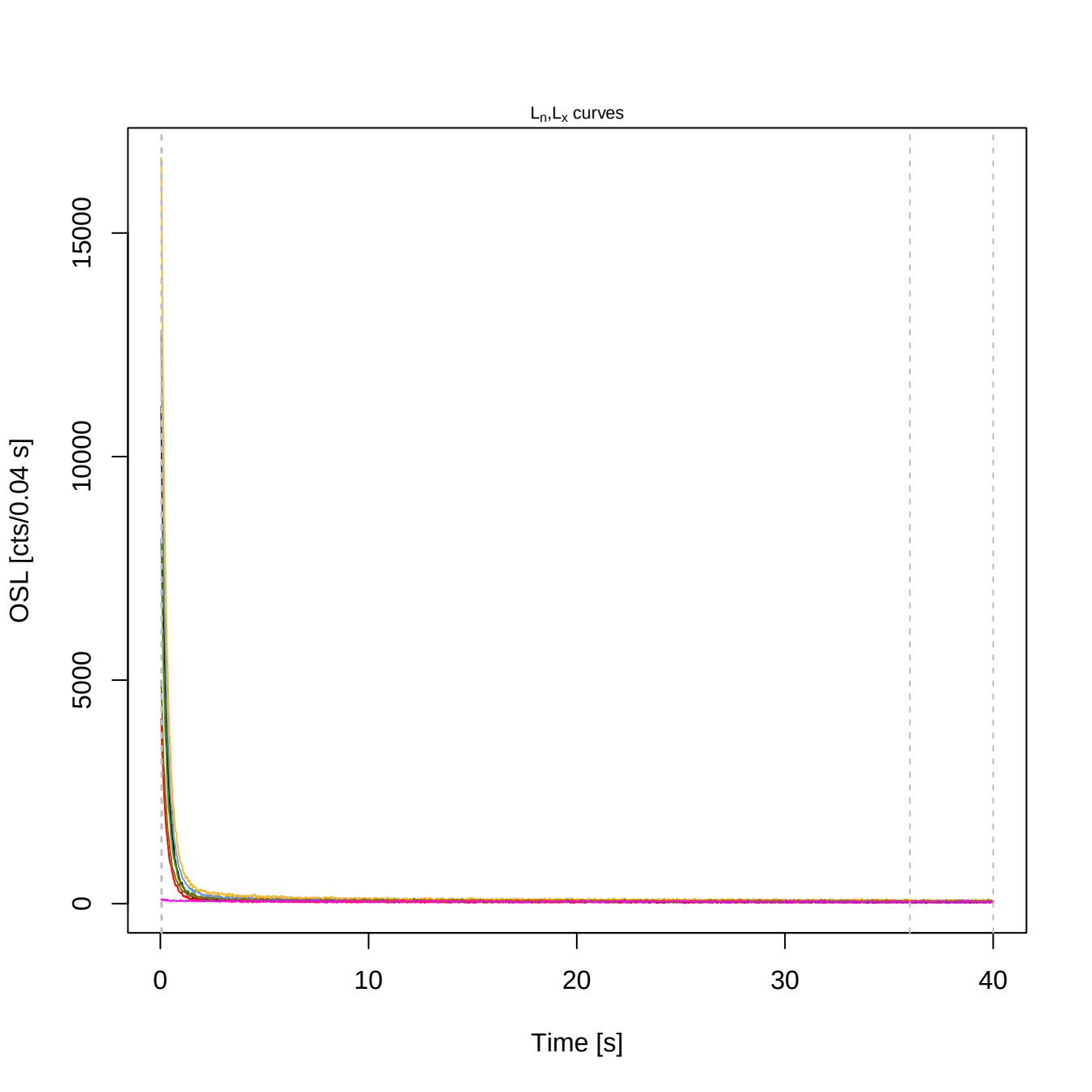
R3 (2000)

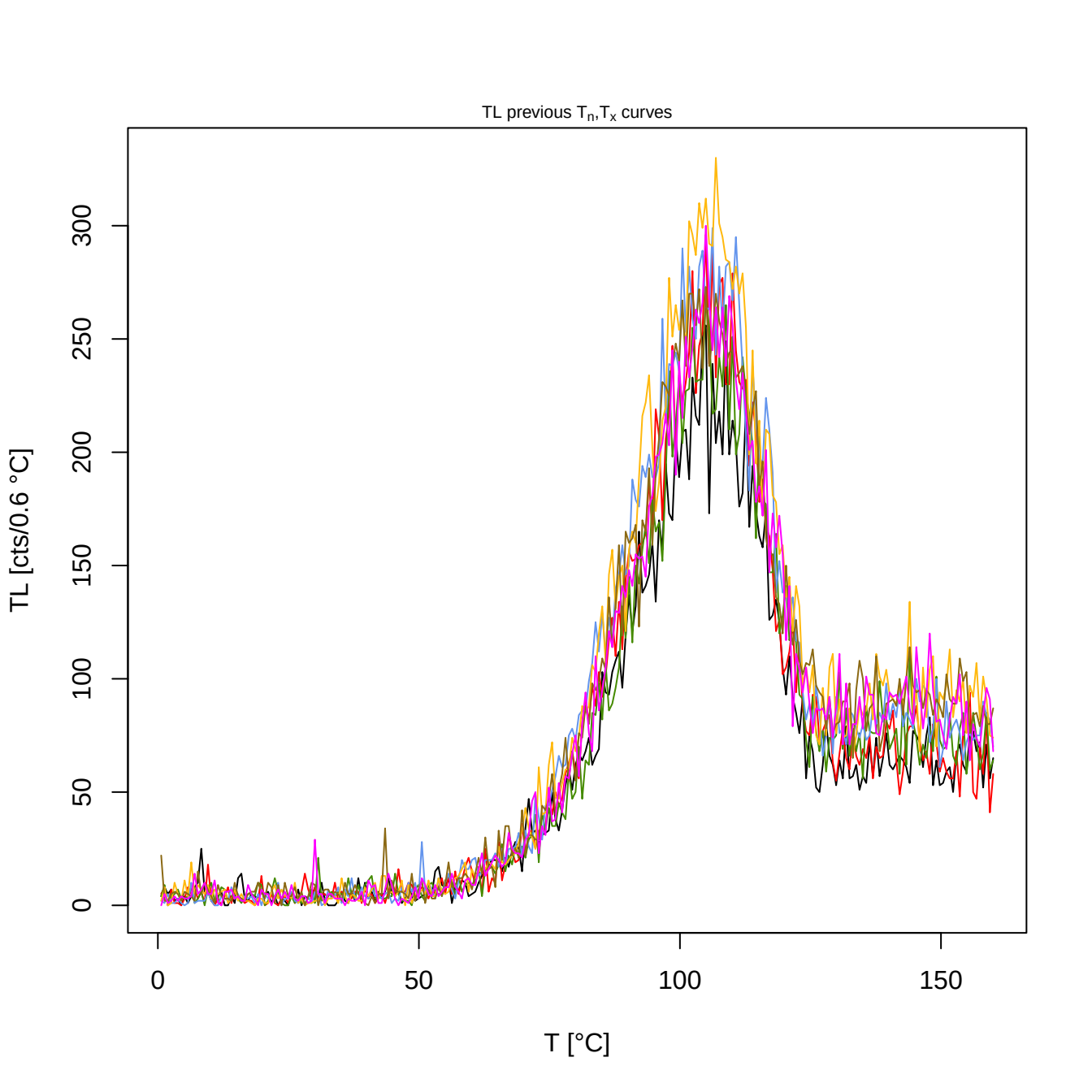
R4 (2550)

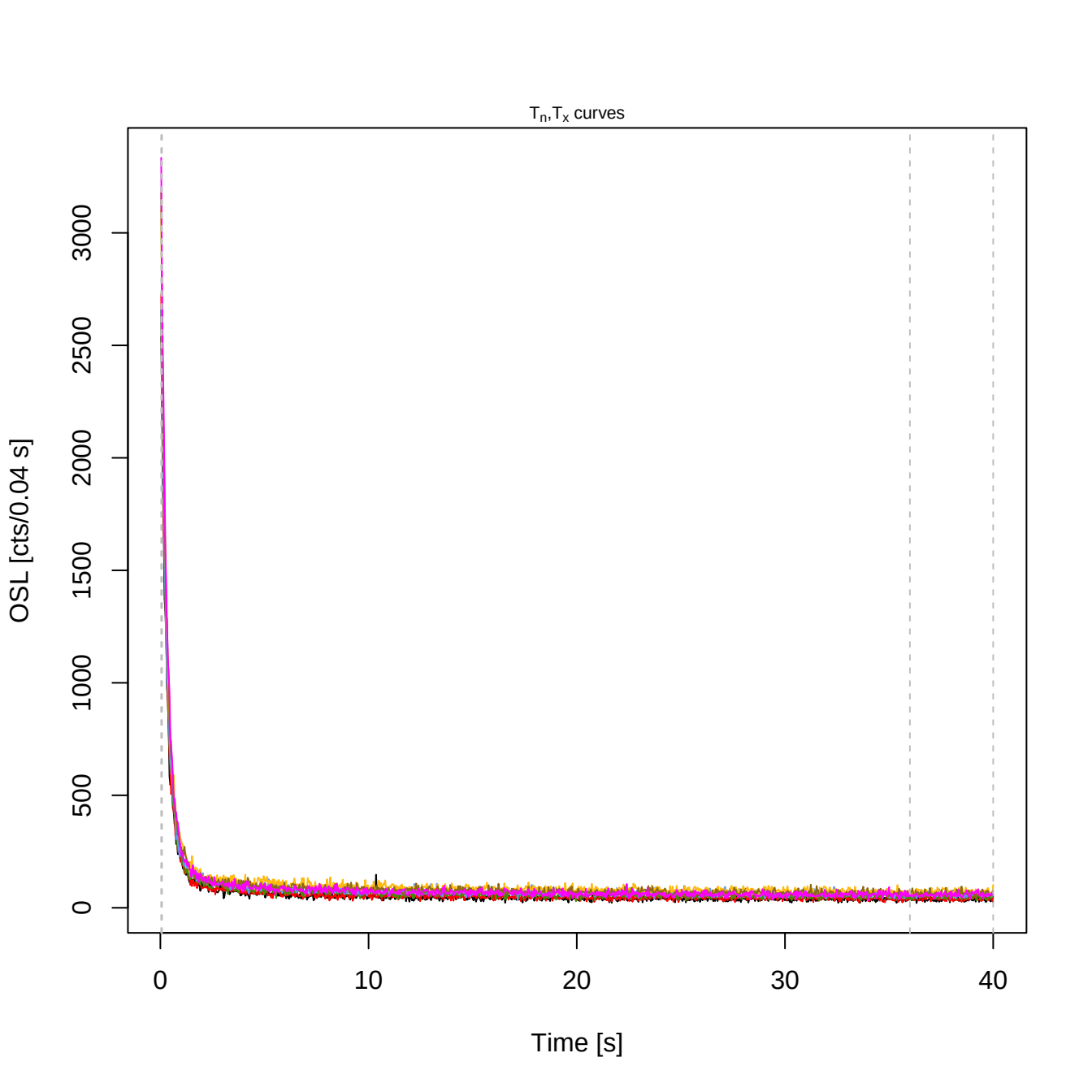
R5 (450)

R0 (0)

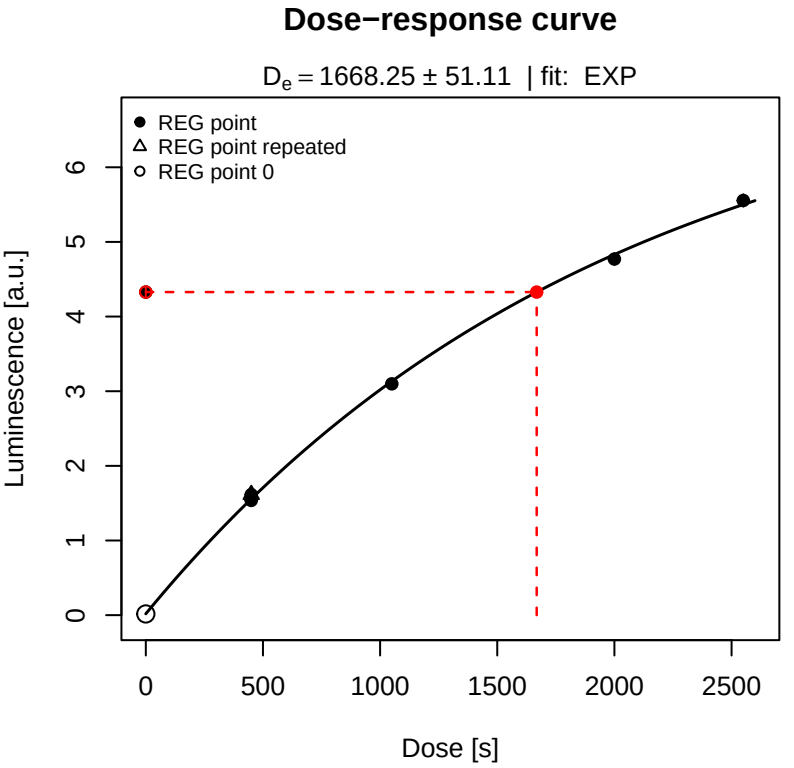

TL previous L_n,L_x curves
TL [cts/0.9 °C]
0
200
400
600
800
0
50
100
150
200
T [°C]

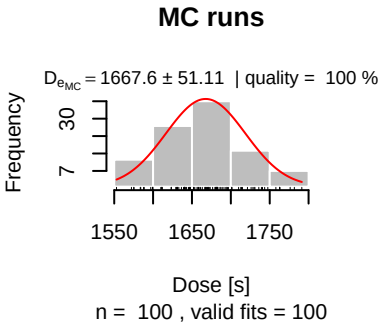

L_n,L_x curves
OSL [cts/0.04 s]
0
5000
10000
15000
0
10
20
30
40
Time [s]

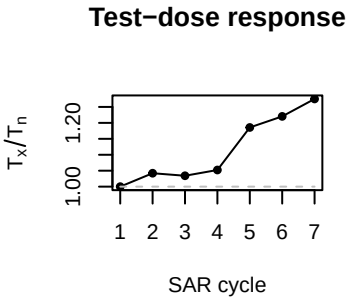

TL previous T_n,T_x curves
TL [cts/0.6 °C]
0
50
100
150
200
250
300
0
50
100
150
T [°C]

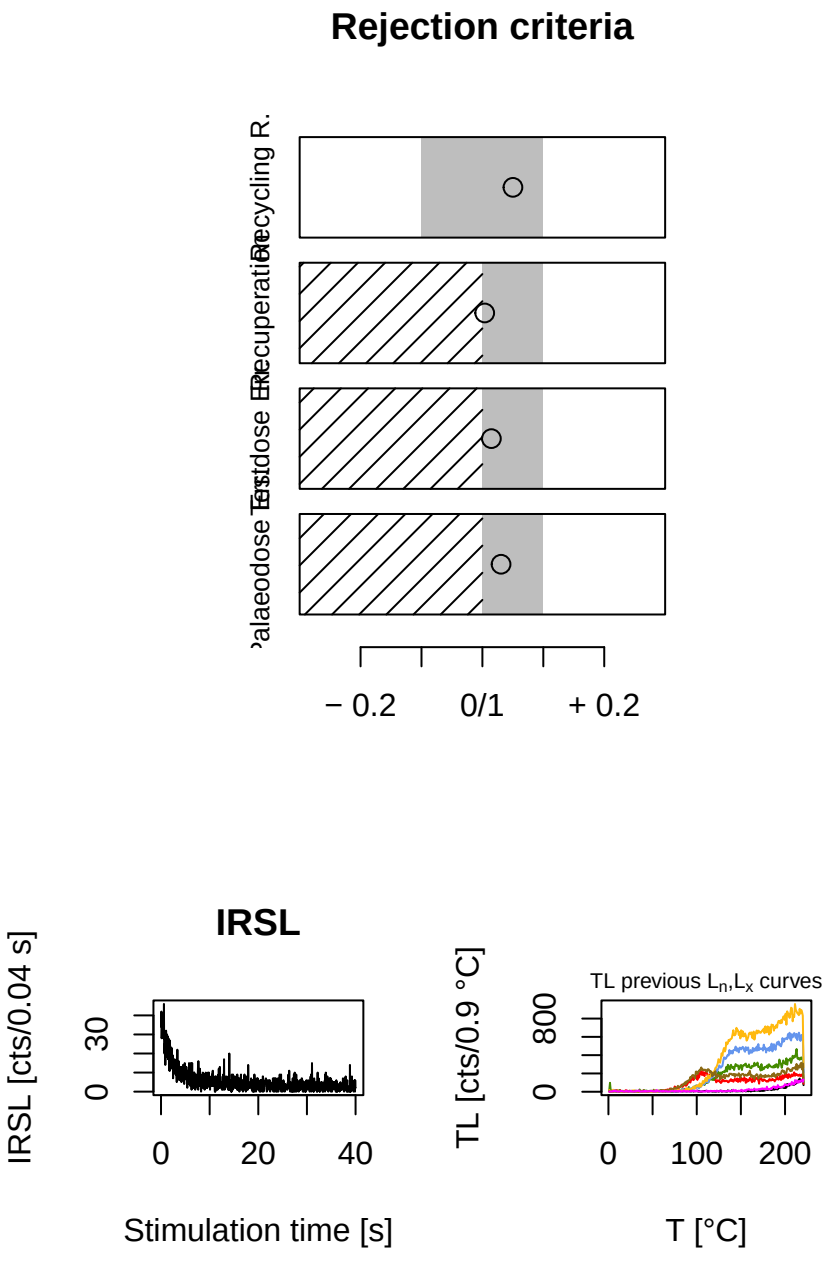

T_n, T_x curves
OSL [cts/0.04 s]
0
500
1000
1500
2000
2500
3000
0
10
20
30
40
Time [s]

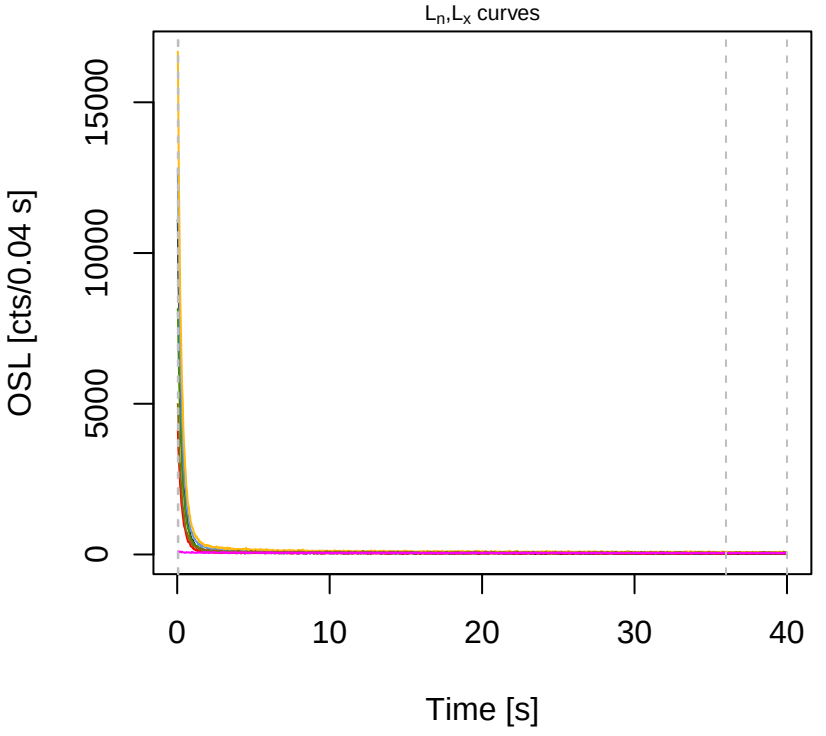
Natural
(0)
R1
(450)
R2
(1050)
R3
(2000)
R4
(2550)
R5
(450)
R0
(0)

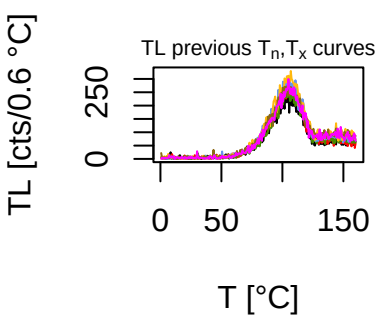

Dose−response curve
$D_e = 1668.25 \pm 51.11$ | fit: EXP
REG point
REG point repeated
REG point 0
Luminescence [a.u.]
0
1
2
3
4
5
6
0
500
1000
1500
2000
2500
Dose [s]

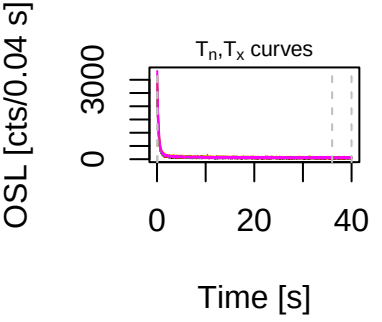

MC runs
$D_{e_{MC}} = 1667.6 \pm 51.11$ | quality = 100 %
Frequency
7
30
1550
1650
1750
Dose [s]
n = 100 , valid fits = 100


Test−dose response
T_x/T_n
1.00
1.20
1
2
3
4
5
6
7
SAR cycle

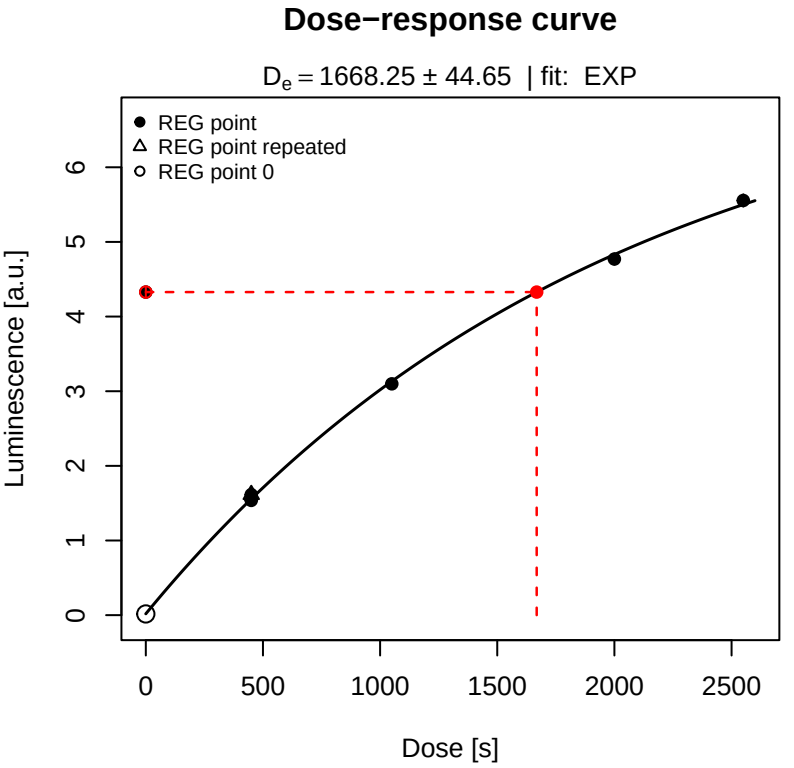

Rejection criteria
Recycling R.
Recuperation R.
Testdose ER
Palaeodose ER
− 0.2
0/1
+ 0.2
IRSL
IRSL [cts/0.04 s]
0
30
0
20
40
Stimulation time [s]
TL [cts/0.9 °C]
TL previous L_n,L_x curves
0
800
0
100
200
T [°C]

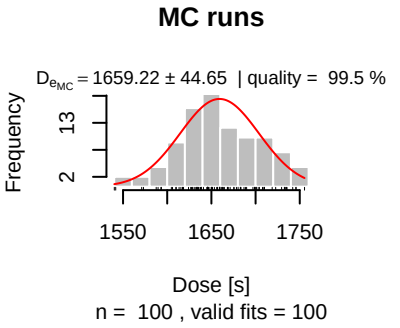

L_n,L_x curves
OSL [cts/0.04 s]
0
5000
10000
15000
0
10
20
30
40
Time [s]

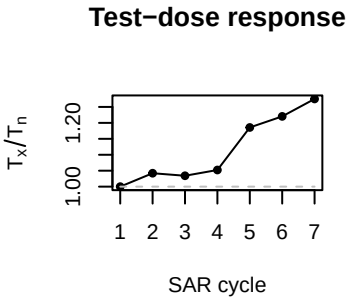

TL previous T_n,T_x curves
TL [cts/0.6 °C]
0
250
0
50
150
T [°C]

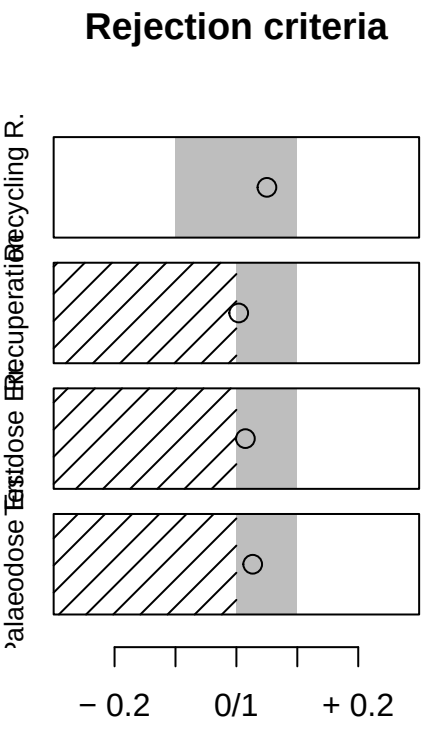

T_n,T_x curves
OSL [cts/0.04 s]
0
3000
0
20
40
Time [s]

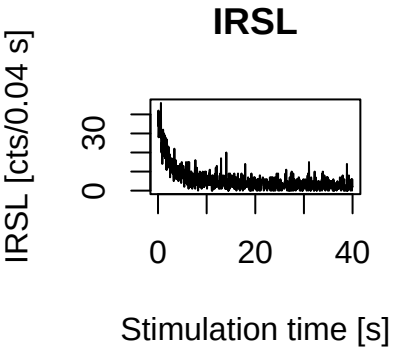
latural
(0)
R1
(450)
R2
(1050)
R3
(2000)
R4
(2550)
R5
(450)
R0
(0)

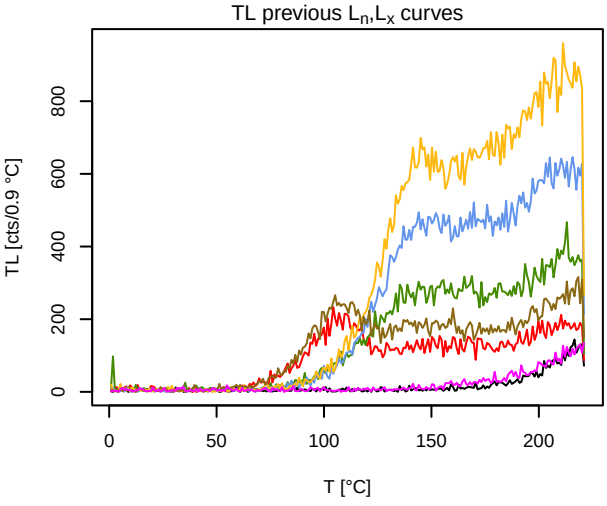

Dose−response curve
$D_e = 1668.25 \pm 44.65$ | fit: EXP
REG point
REG point repeated
REG point 0
Luminescence [a.u.]
0
1
2
3
4
5
6
0
500
1000
1500
2000
2500
Dose [s]

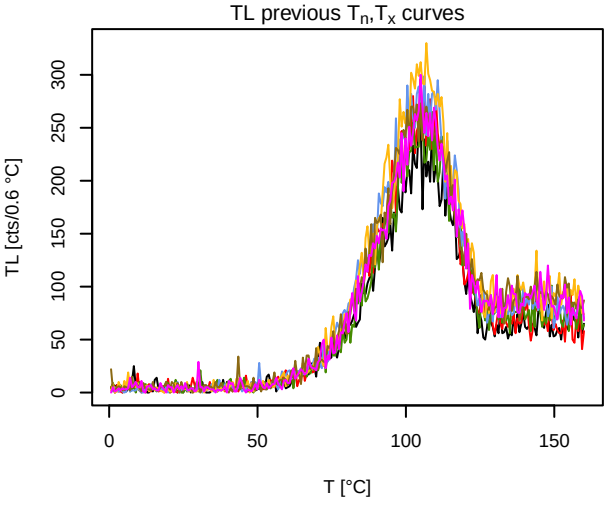

MC runs
$D_{e_{MC}} = 1659.22 \pm 44.65$ | quality = 99.5 %
Frequency
2
13
1550
1650
1750
Dose [s]
n = 100 , valid fits = 100

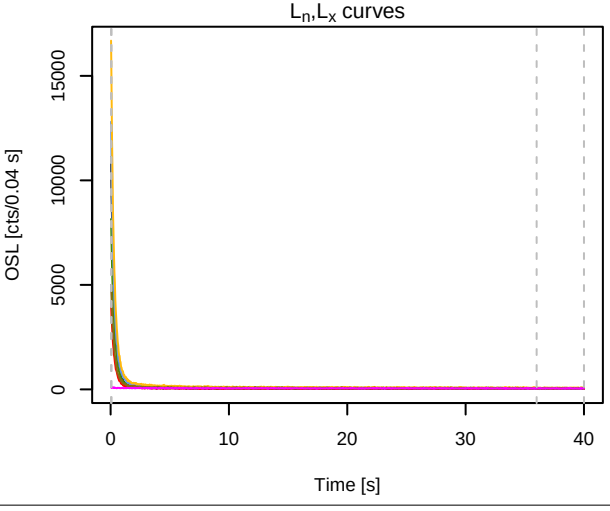

Test−dose response
T_x/T_n
1.00
1.20
1
2
3
4
5
6
7
SAR cycle

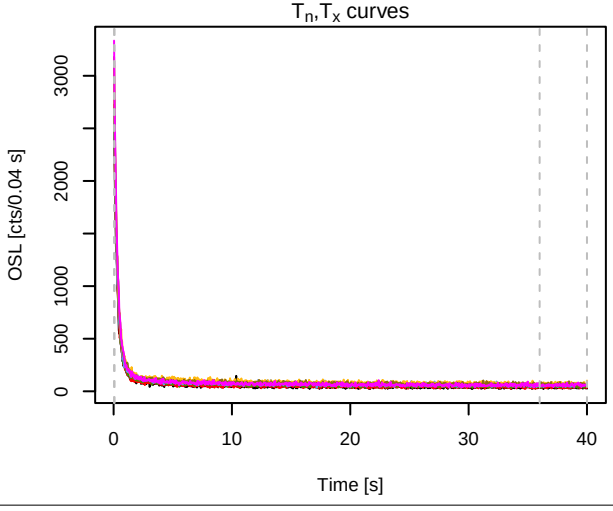

Rejection criteria
Recycling R.
Recuperation R.
Test dose ER
Palaeodose ER
− 0.2
0/1
+ 0.2


IRSL
IRSL [cts/0.04 s]
0
30
0
20
40
Stimulation time [s]

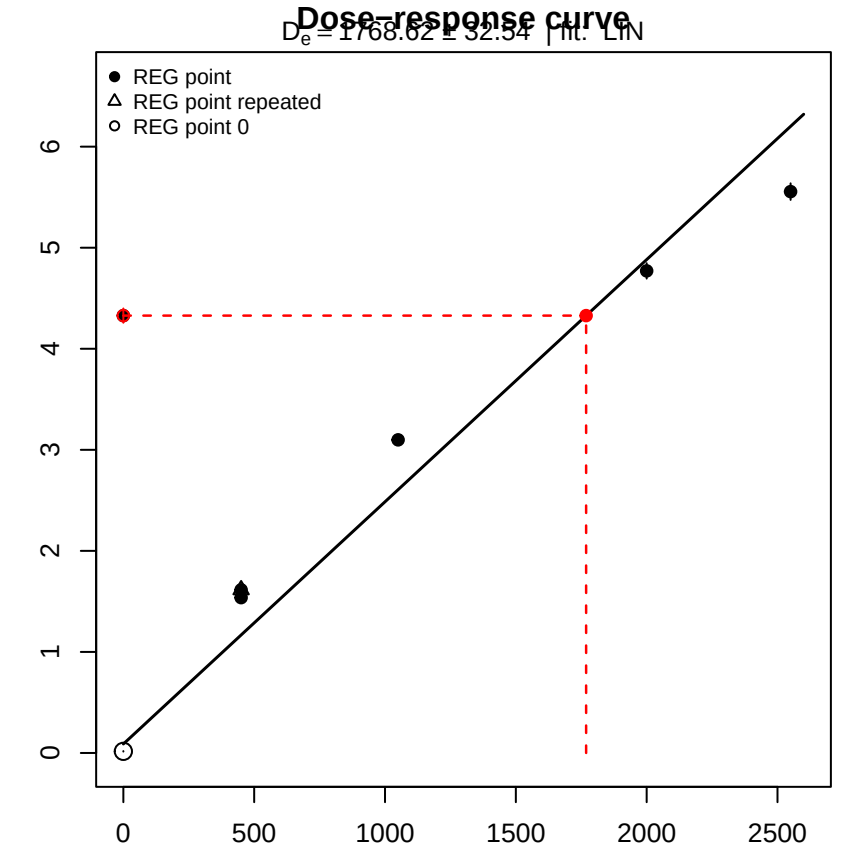


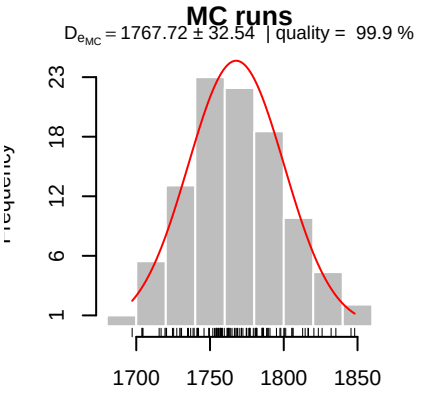


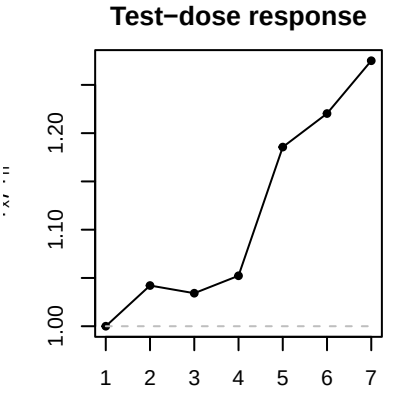




Natural (0) | R1 (450) | R2 (1050) | R3 (2000) | R4 (2550) | R5 (450) | R0 (0)

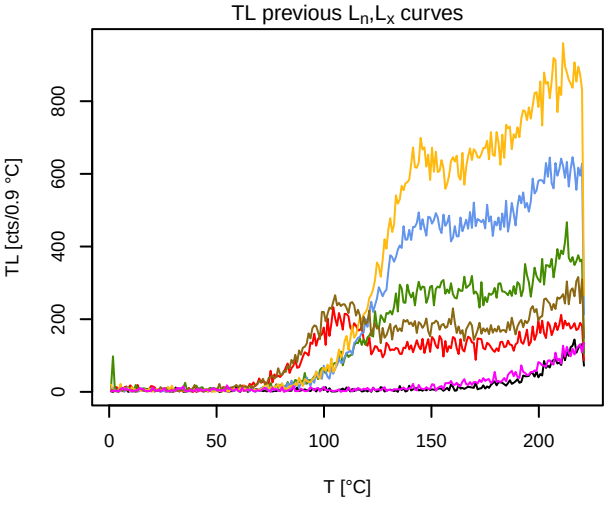

Dose–response curve
De = 1768.62 ± 32.54 | fit: LIN
REG point
REG point repeated
REG point 0
0
1
2
3
4
5
6
0
500
1000
1500
2000
2500

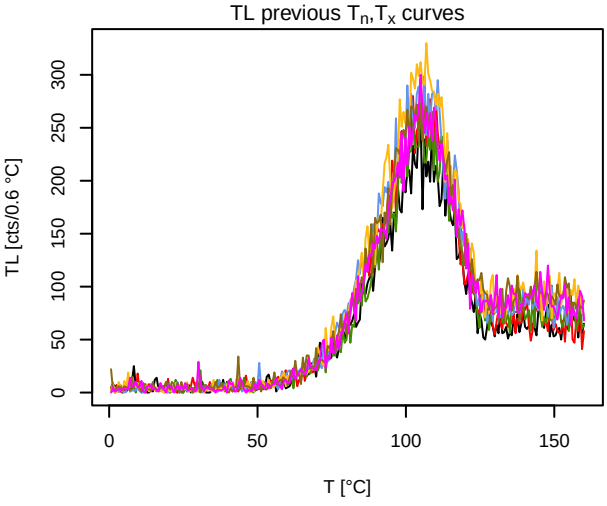

MC runs
DeMC = 1767.72 ± 32.54 | quality = 99.9 %
Frequency
1
6
12
18
23
1700
1750
1800
1850

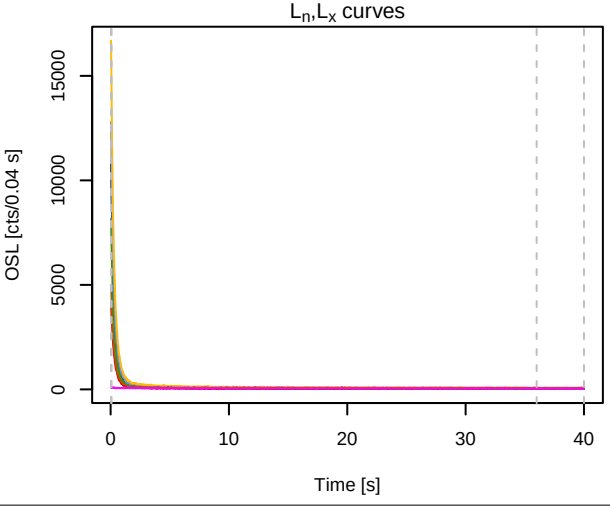

Test–dose response
1.00
1.10
1.20
1
2
3
4
5
6
7

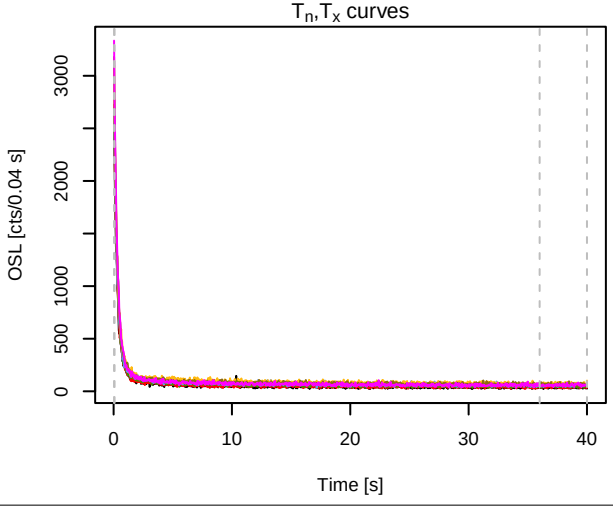
Rejection criteria
Recycling R.
Recuperation
Testdose Err.
Palaeodose Err.
− 0.2
0/1
+ 0.2

IRSL
0
10
20
30
40

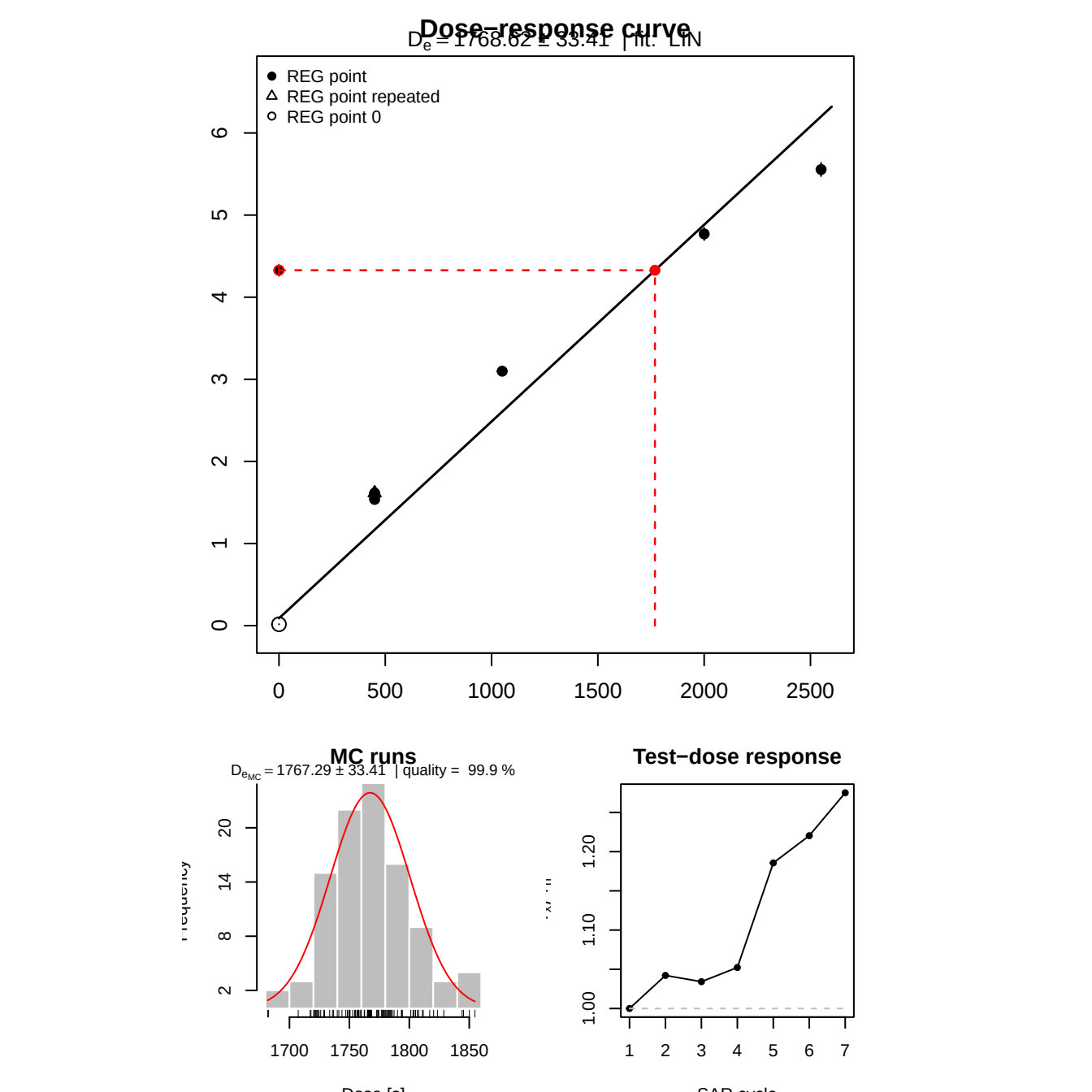








Natural (0) | R1 (450) | R2 (1050) | R3 (2000) | R4 (2550) | R5 (450) | R0 (0)


Dose–response curve
De = 1768.62 ± 33.41 | fit: LIN
REG point
REG point repeated
REG point 0
0
1
2
3
4
5
6
0
500
1000
1500
2000
2500
MC runs
DeMC = 1767.29 ± 33.41 | quality = 99.9 %
Frequency
2
8
14
20
1700
1750
1800
1850
Test–dose response
1.00
1.10
1.20
1
2
3
4
5
6
7

Rejection criteria
Recycling R.
Recuperation
Testdose Err.
Palaeodose Err.
− 0.2
0/1
+ 0.2
IRSL
0
10
20
30
40
0
10
20
30
40