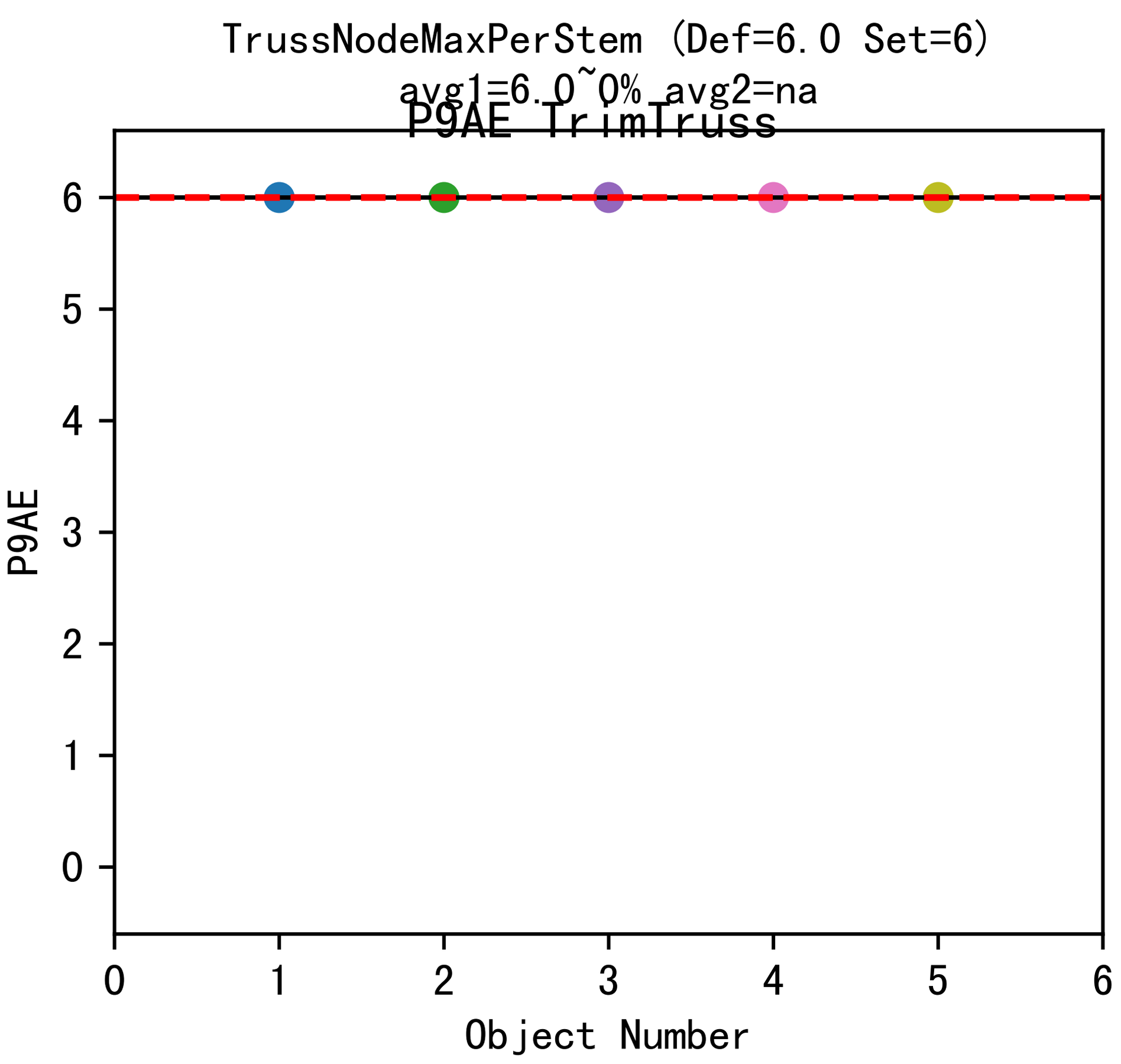
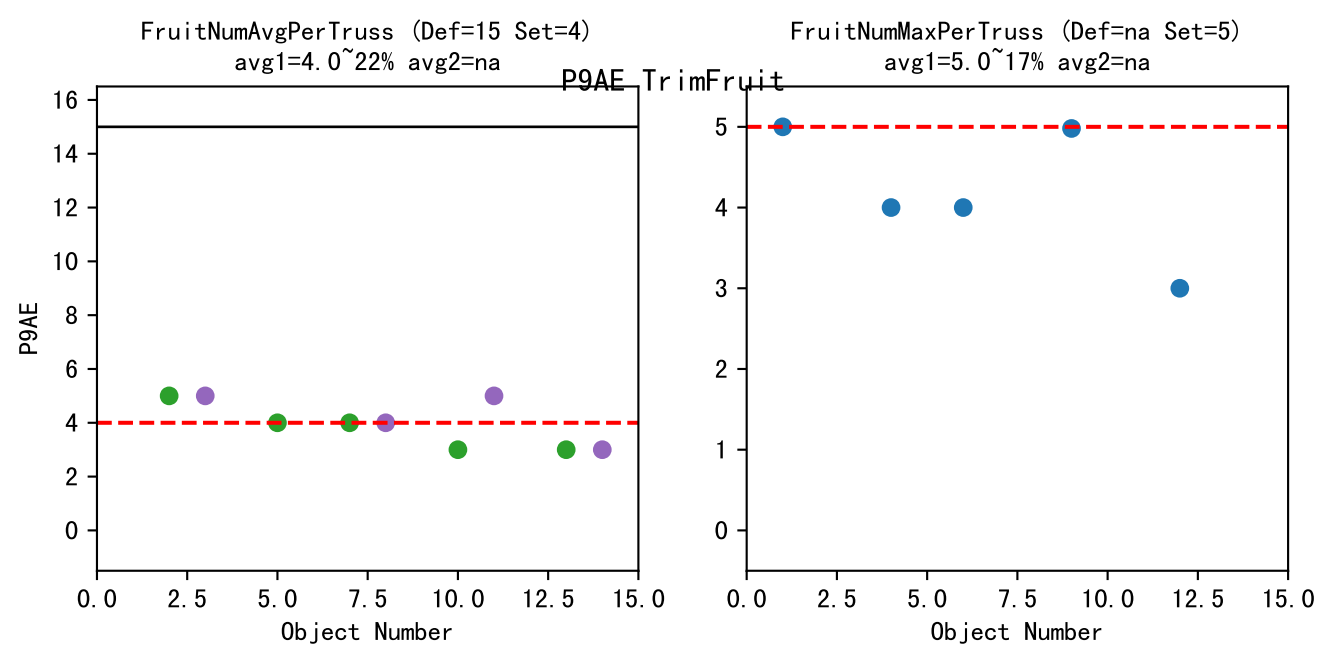
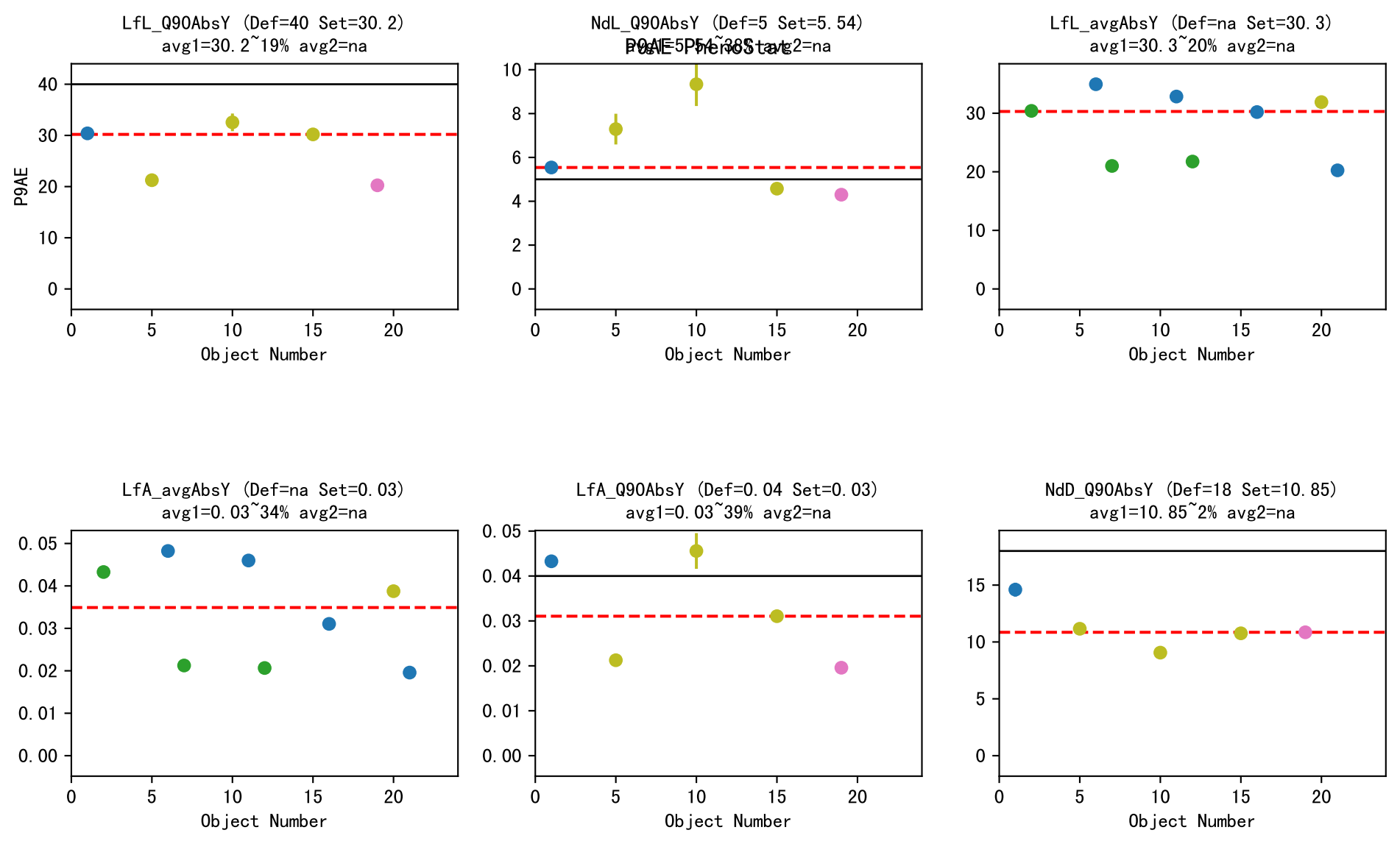
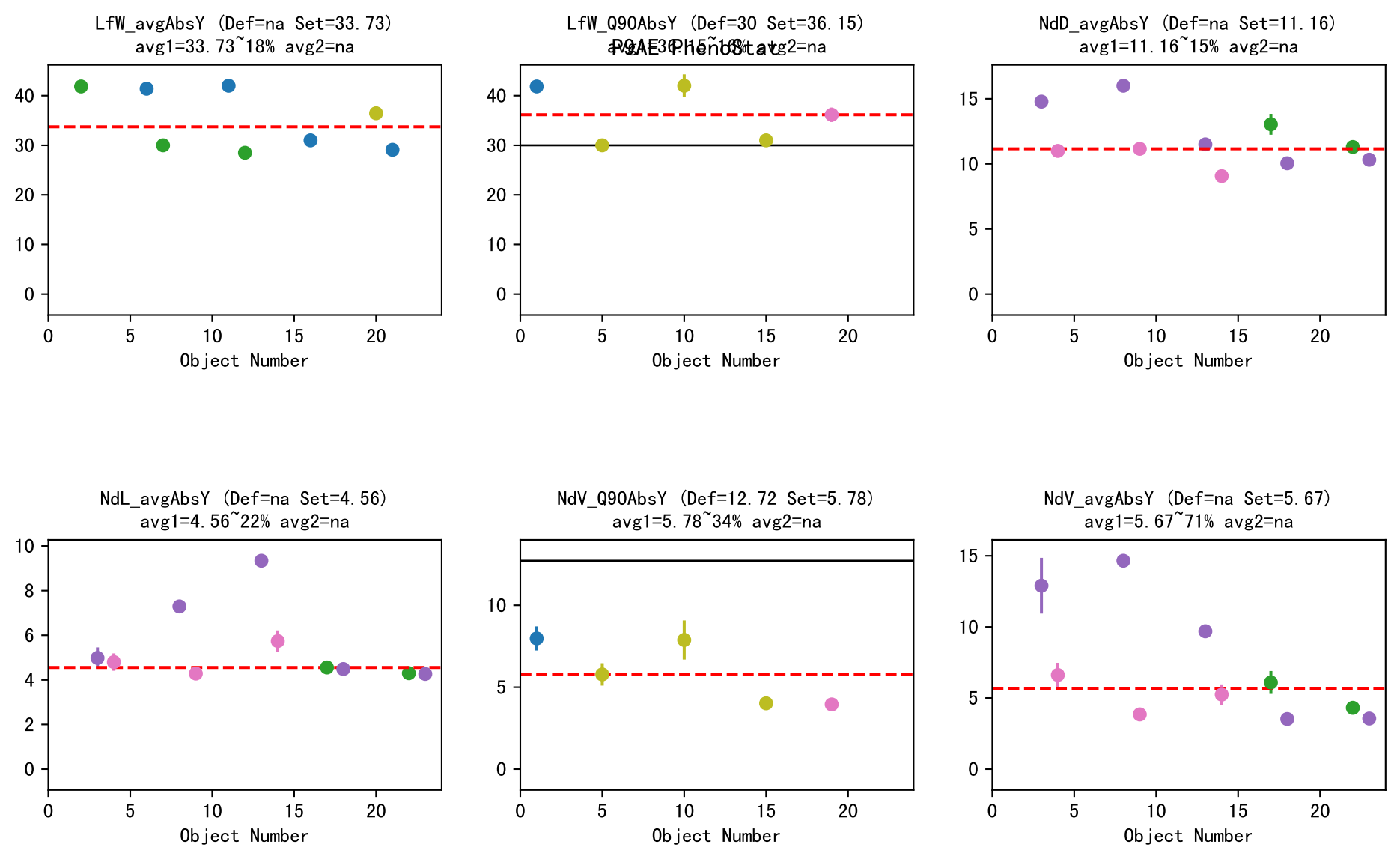
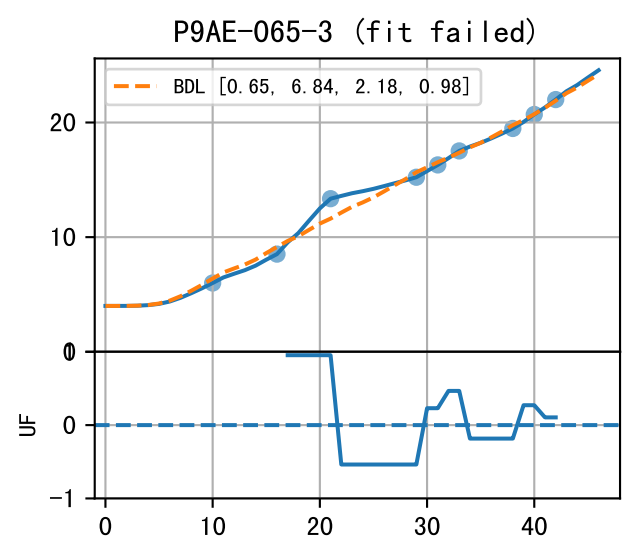
Phenotype Data Analysis Plots
PhenoData day range = 10 - 46
Analysis cutoff day = 46
NC11 P9
2025-05-18 (Day 48)

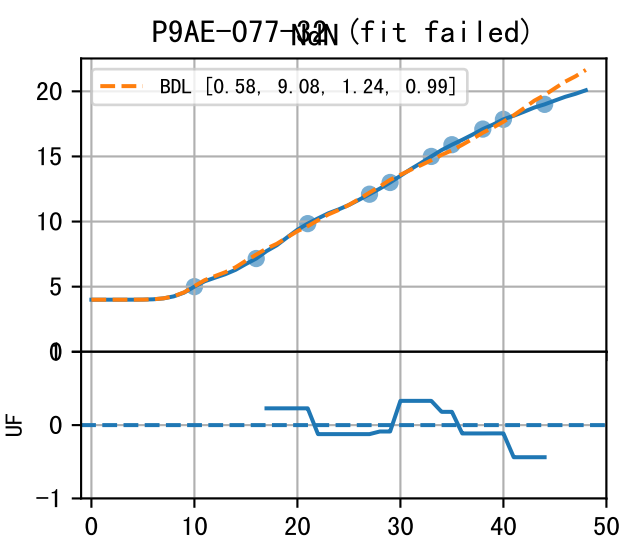

TrussNodeMaxPerStem (Def=6.0 Set=6)
avg1=6.0~0% avg2=na
P9AE TrimTruss
P9AE
Object Number
0
1
2
3
4
5
6

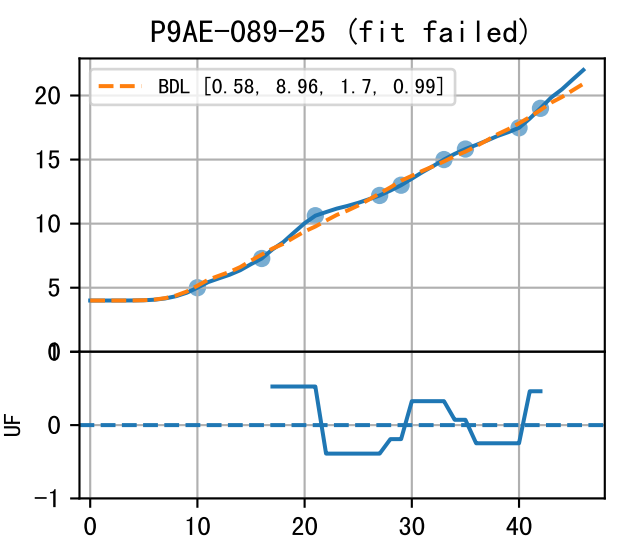

P9AE_TrimFruit
FruitNumAvgPerTruss (Def=15 Set=4)
avg1=4.0~22% avg2=na
FruitNumMaxPerTruss (Def=na Set=5)
avg1=5.0~17% avg2=na
P9AE
Object Number
Object Number

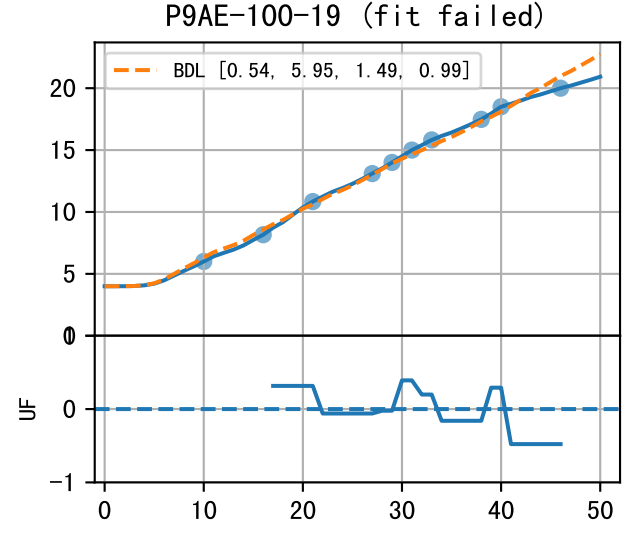

LfL_Q90AbsY (Def=40 Set=30.2)
avg1=30.2~19% avg2=na
P9AE
Object Number
NdL_Q90AbsY (Def=5 Set=5.54)
avg1=5.54~38% avg2=na
Object Number
LfL_avgAbsY (Def=na Set=30.3)
avg1=30.3~20% avg2=na
Object Number
LfA_avgAbsY (Def=na Set=0.03)
avg1=0.03~34% avg2=na
Object Number
LfA_Q90AbsY (Def=0.04 Set=0.03)
avg1=0.03~39% avg2=na
Object Number
NdD_Q90AbsY (Def=18 Set=10.85)
avg1=10.85~2% avg2=na
Object Number

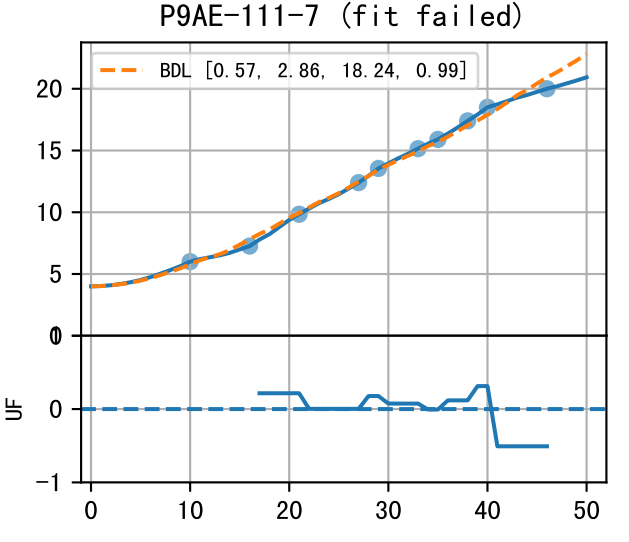

LfW_avgAbsY (Def=na Set=33.73)
avg1=33.73~18% avg2=na
LfW_Q90AbsY (Def=30 Set=36.15)
avg1=36.15~18% avg2=na
NdD_avgAbsY (Def=na Set=11.16)
avg1=11.16~15% avg2=na
NdL_avgAbsY (Def=na Set=4.56)
avg1=4.56~22% avg2=na
NdV_Q90AbsY (Def=12.72 Set=5.78)
avg1=5.78~34% avg2=na
NdV_avgAbsY (Def=na Set=5.67)
avg1=5.67~71% avg2=na
Object Number

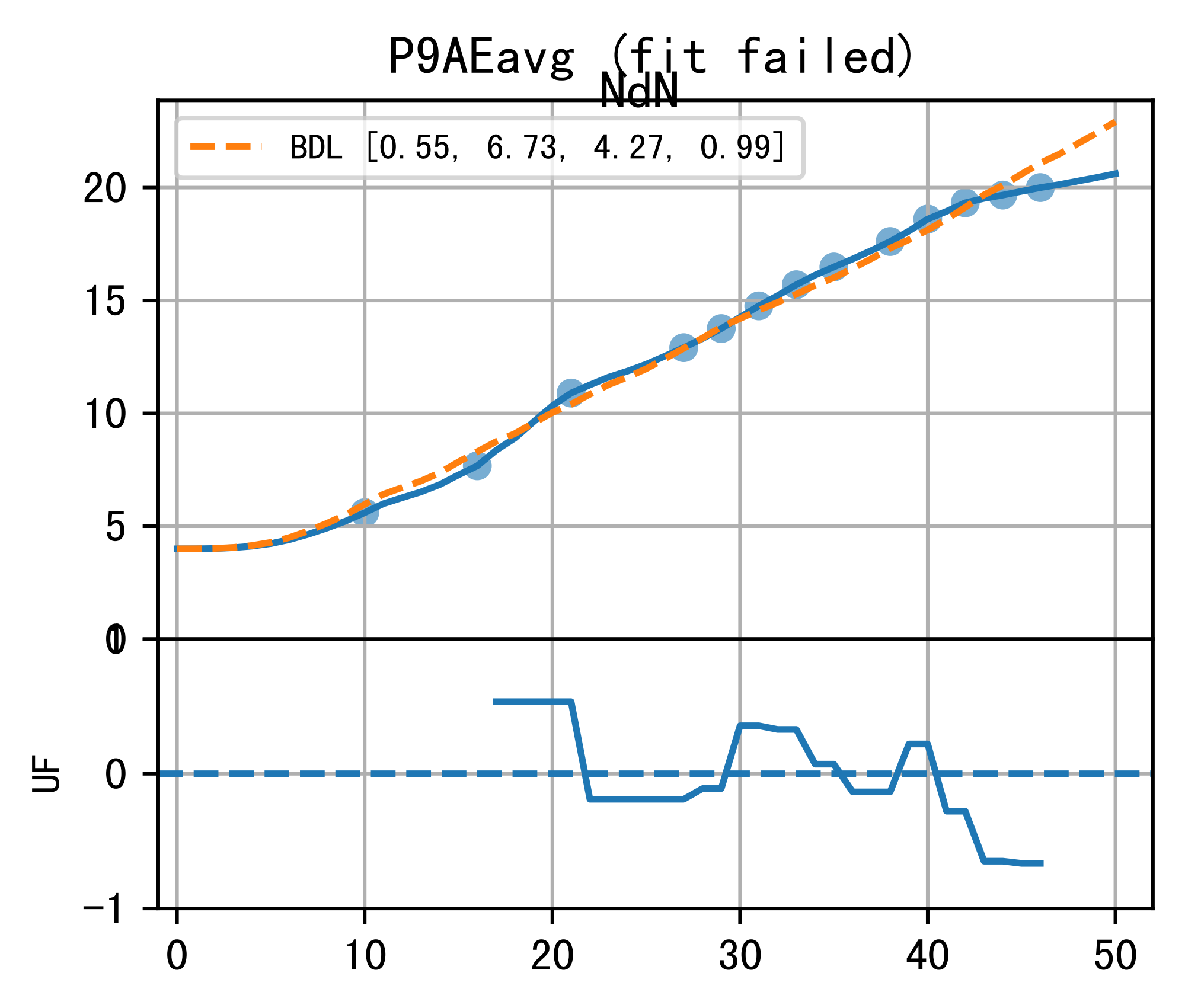

P9AE-065-3 (fit failed)
BDL [0.65, 6.84, 2.18, 0.98]
UF

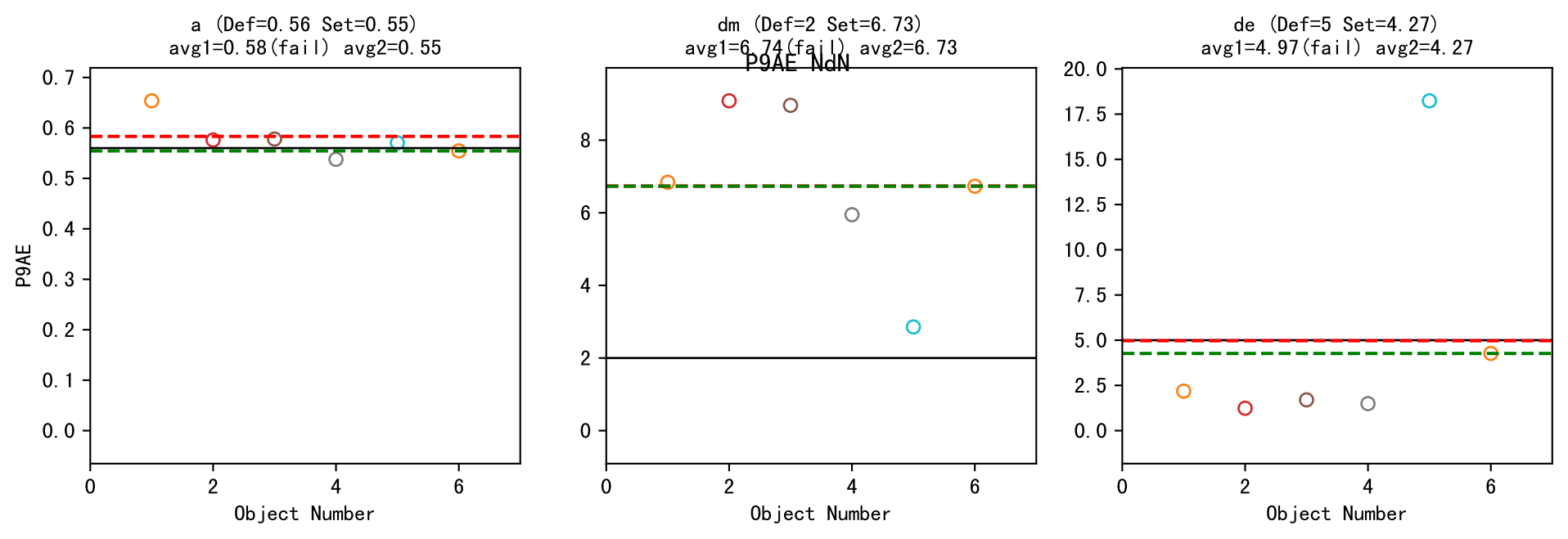

P9AE-077-32 (fit failed)
BDL [0.58, 9.08, 1.24, 0.99]
UF

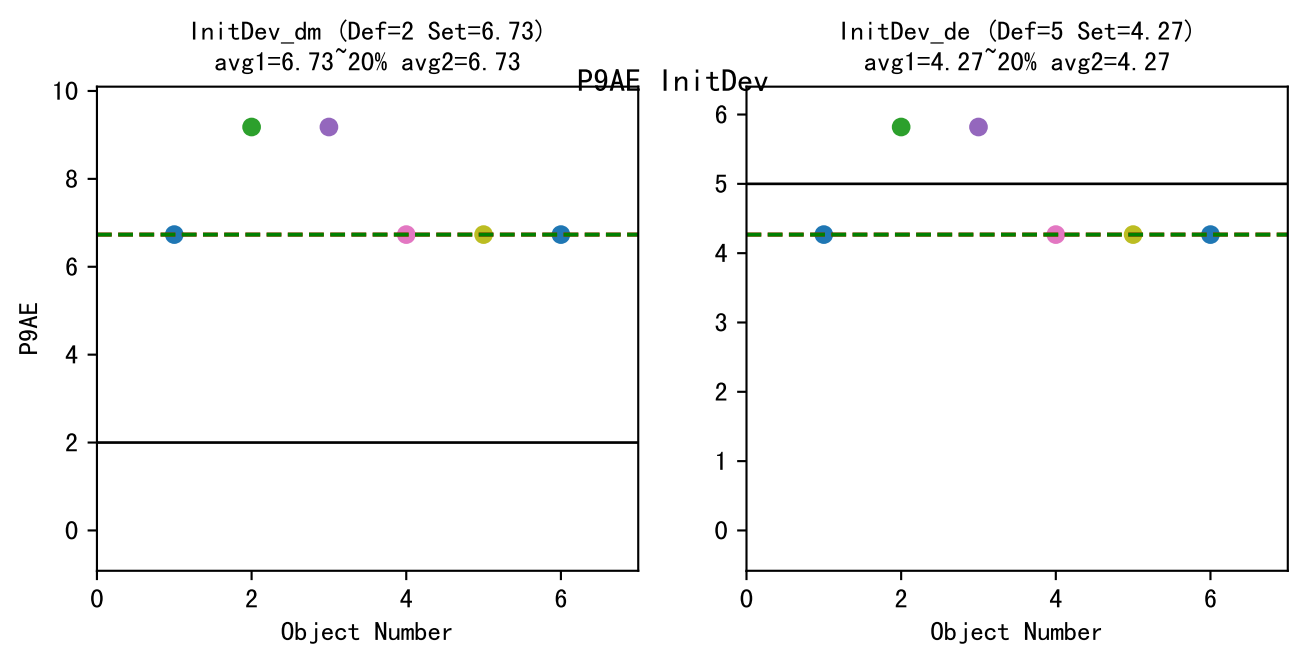

P9AE-089-25 (fit failed)
BDL [0.58, 8.96, 1.7, 0.99]
UF

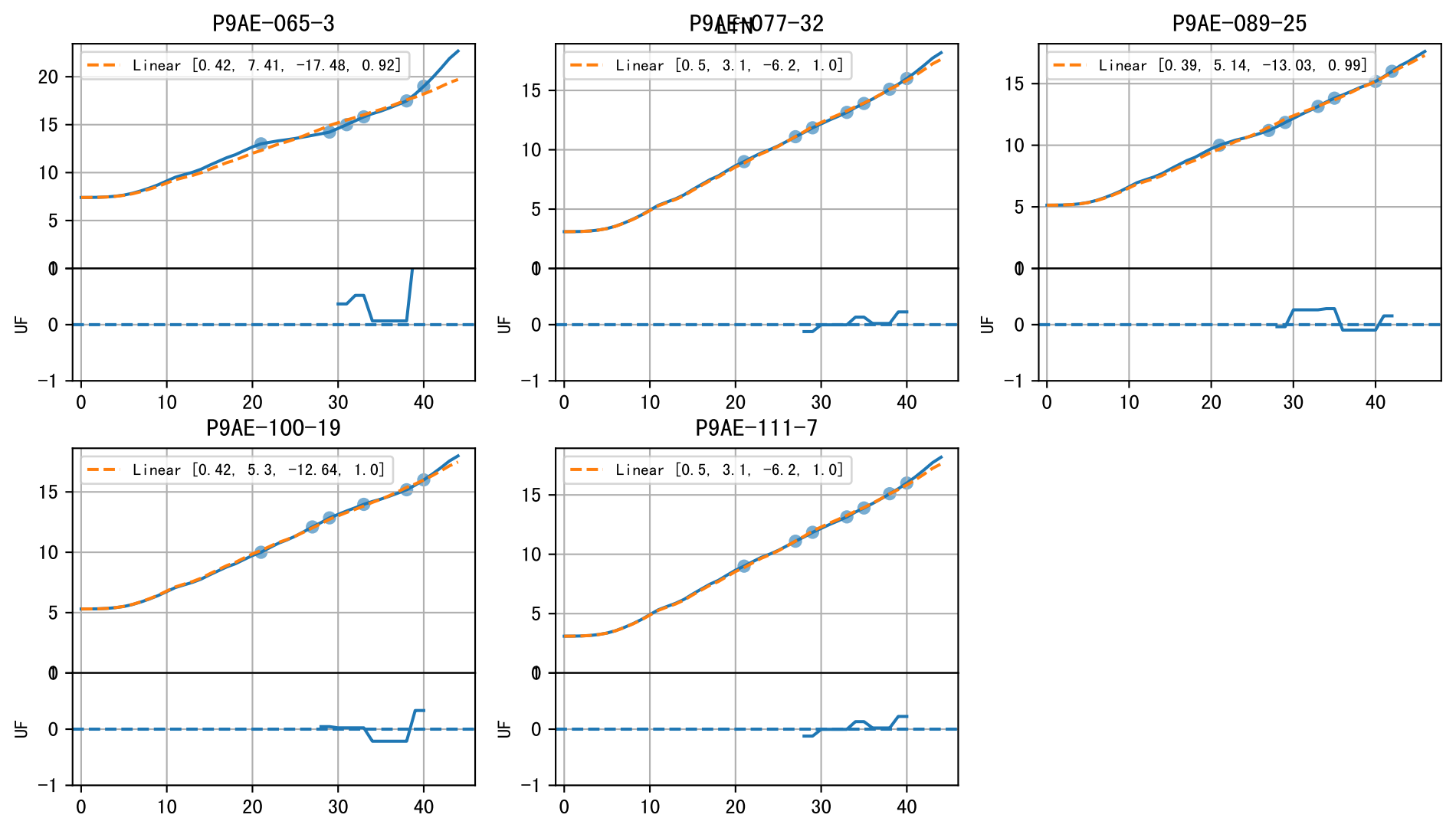

P9AE-100-19 (fit failed)
BDL [0.54, 5.95, 1.49, 0.99]
UF

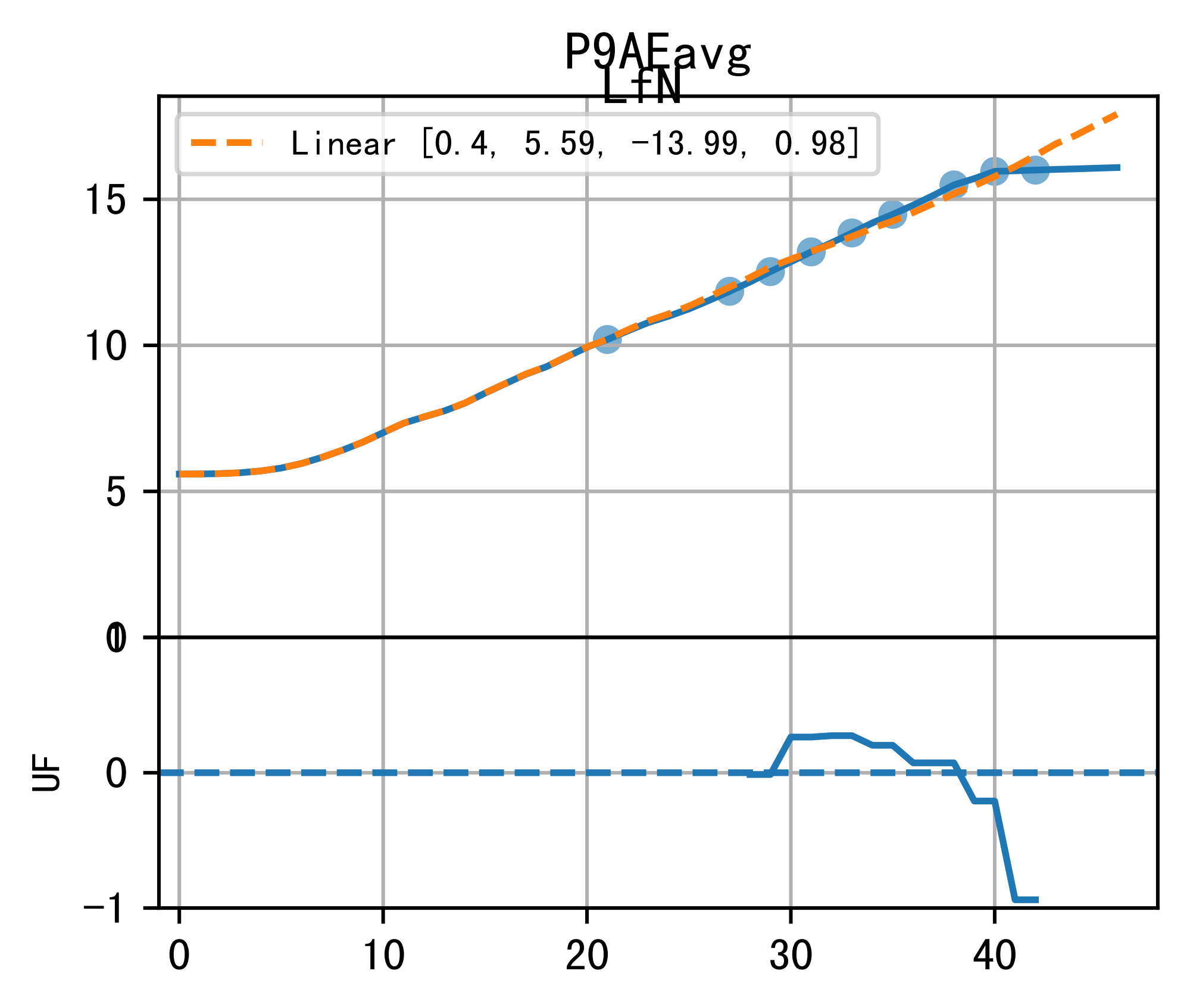

P9AE-111-7 (fit failed)
BDL [0.57, 2.86, 18.24, 0.99]
UF

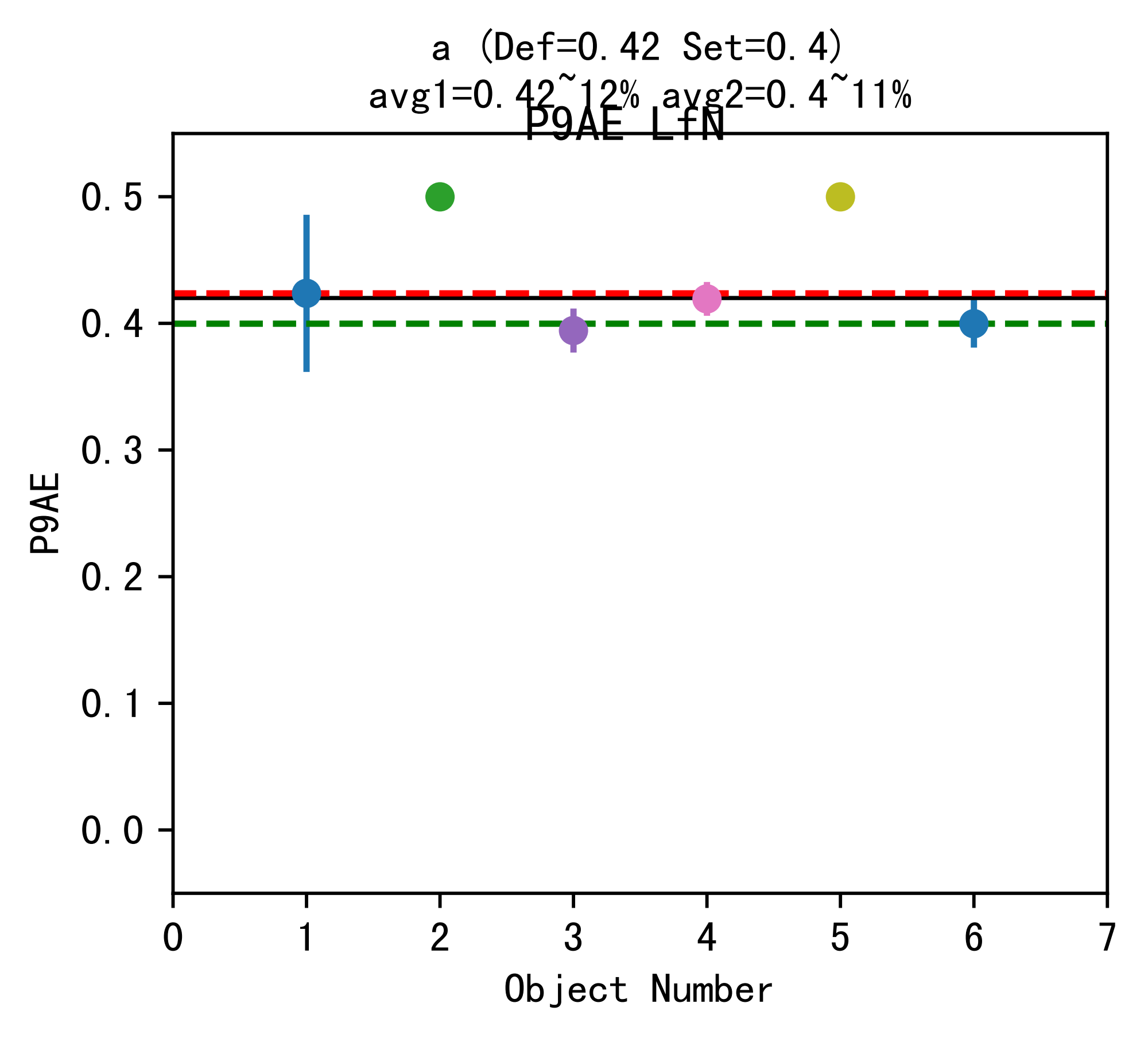

P9AEavg (fit failed)
NdN
BDL [0.55, 6.73, 4.27, 0.99]
20
15
10
5
0
0
UF
0
−1
0
10
20
30
40
50

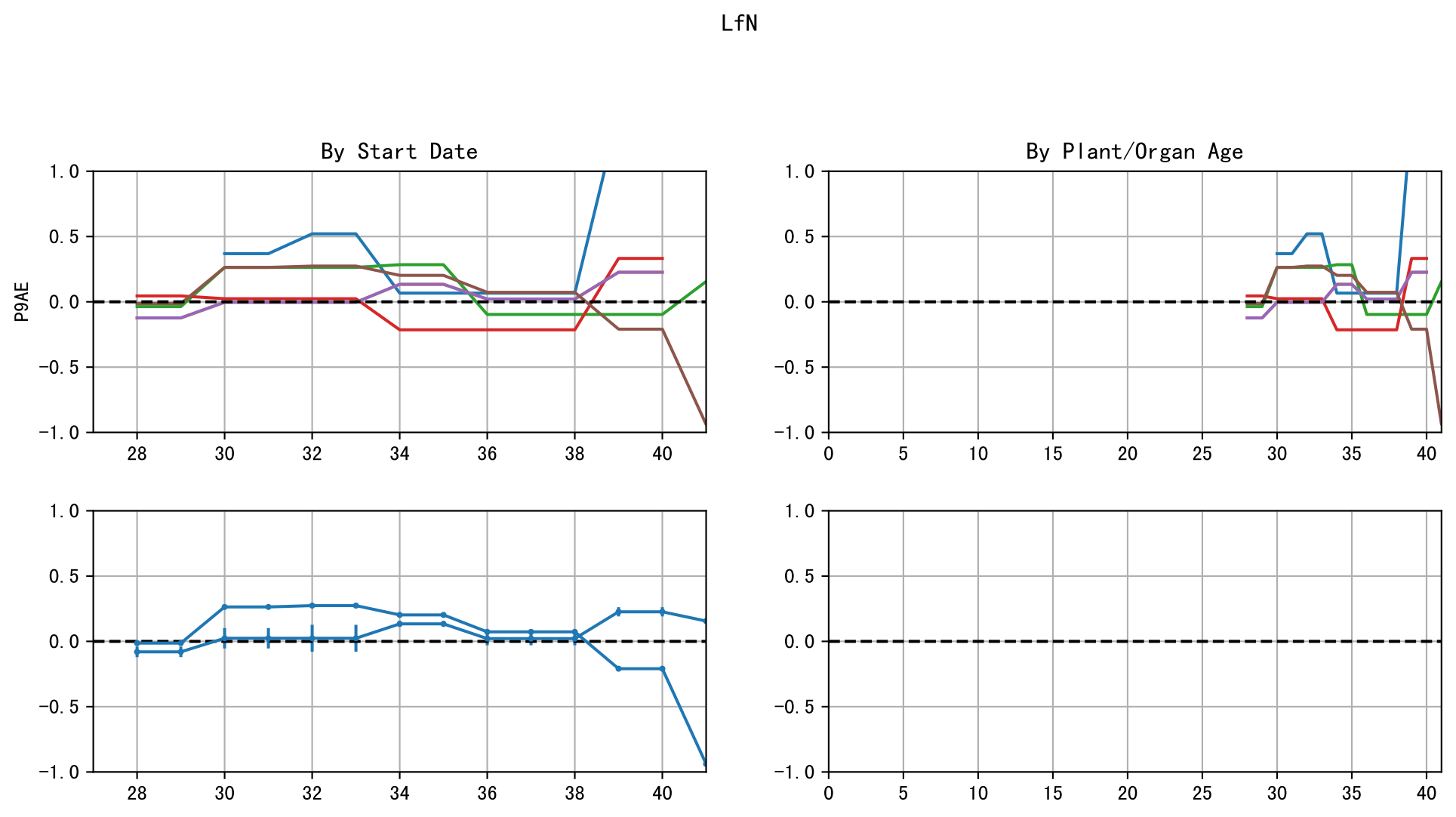

a (Def=0.56 Set=0.55)
avg1=0.58(fail) avg2=0.55
P9AE
Object Number
dm (Def=2 Set=6.73)
avg1=6.74(fail) avg2=6.73
P9AE NdN
Object Number
de (Def=5 Set=4.27)
avg1=4.97(fail) avg2=4.27
Object Number

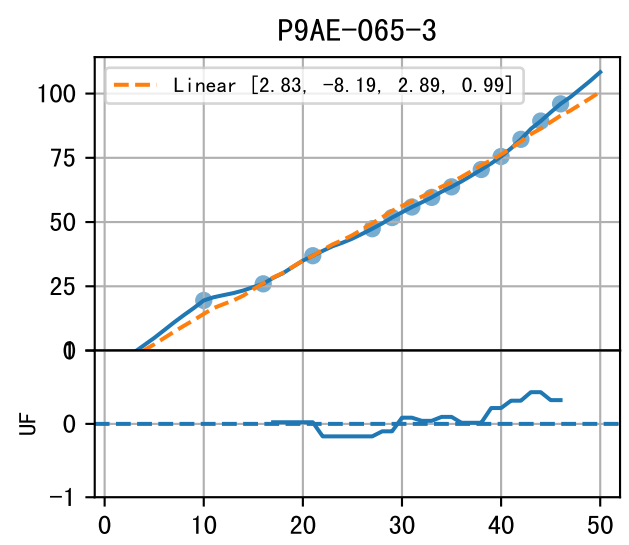

InitDev_dm (Def=2 Set=6.73)
avg1=6.73~20% avg2=6.73
P9AE InitDev
InitDev_de (Def=5 Set=4.27)
avg1=4.27~20% avg2=4.27
P9AE
Object Number
Object Number

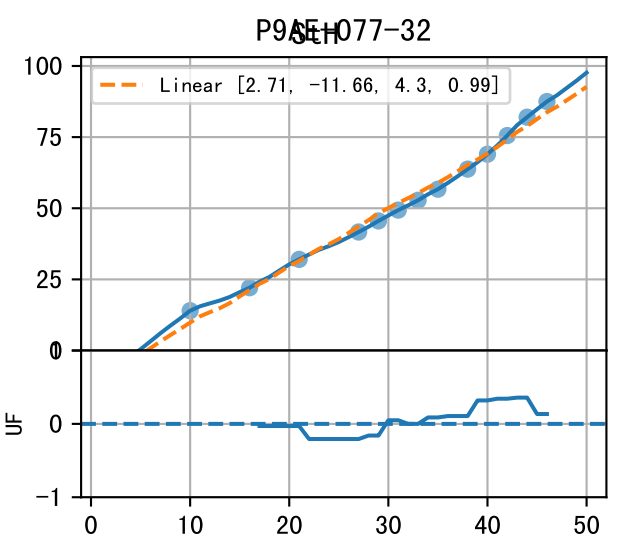

P9AE-065-3
Linear [0.42, 7.41, -17.48, 0.92]
P9AE-077-32
Linear [0.5, 3.1, -6.2, 1.0]
P9AE-089-25
Linear [0.39, 5.14, -13.03, 0.99]
P9AE-100-19
Linear [0.42, 5.3, -12.64, 1.0]
P9AE-111-7
Linear [0.5, 3.1, -6.2, 1.0]
UF

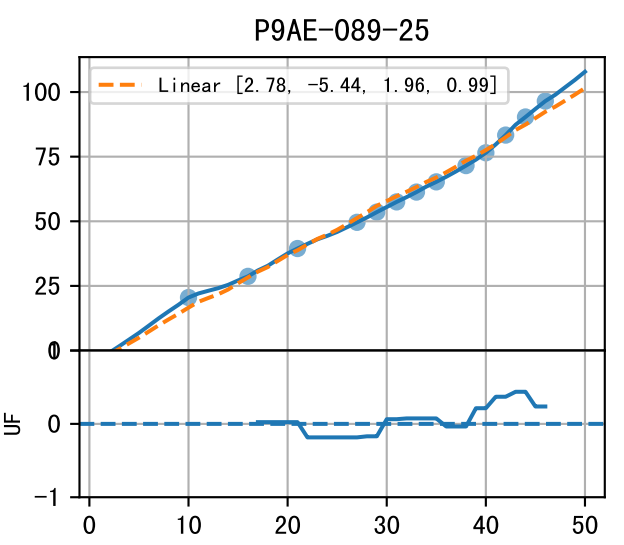

P9AEavg
LfN
Linear [0.4, 5.59, -13.99, 0.98]
15
10
5
0
0
-1
UF
0
10
20
30
40

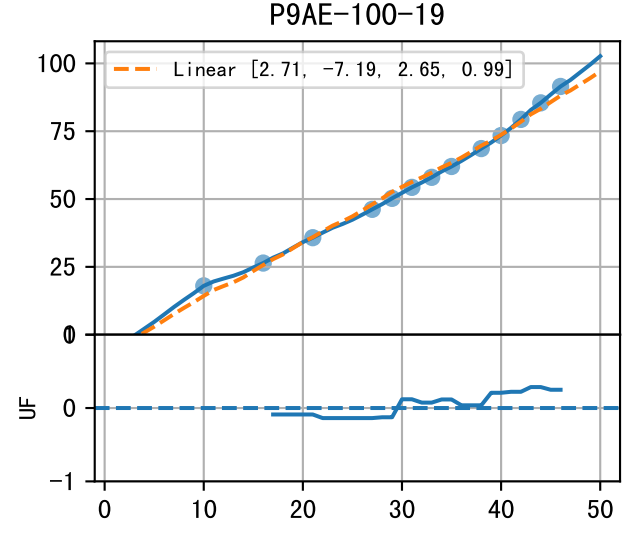

a (Def=0.42 Set=0.4)
avg1=0.42~12% avg2=0.4~11%
P9AE LfN
0.5
0.4
0.3
0.2
0.1
0.0
P9AE
0
1
2
3
4
5
6
7
Object Number

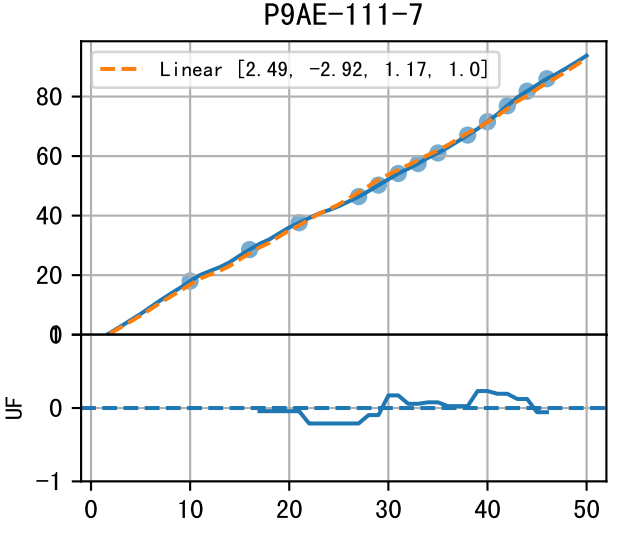

LfN
By Start Date
By Plant/Organ Age
P9AE
1.0
0.5
0.0
−0.5
−1.0
28
30
32
34
36
38
40
0
5
10
15
20
25
30
35
40

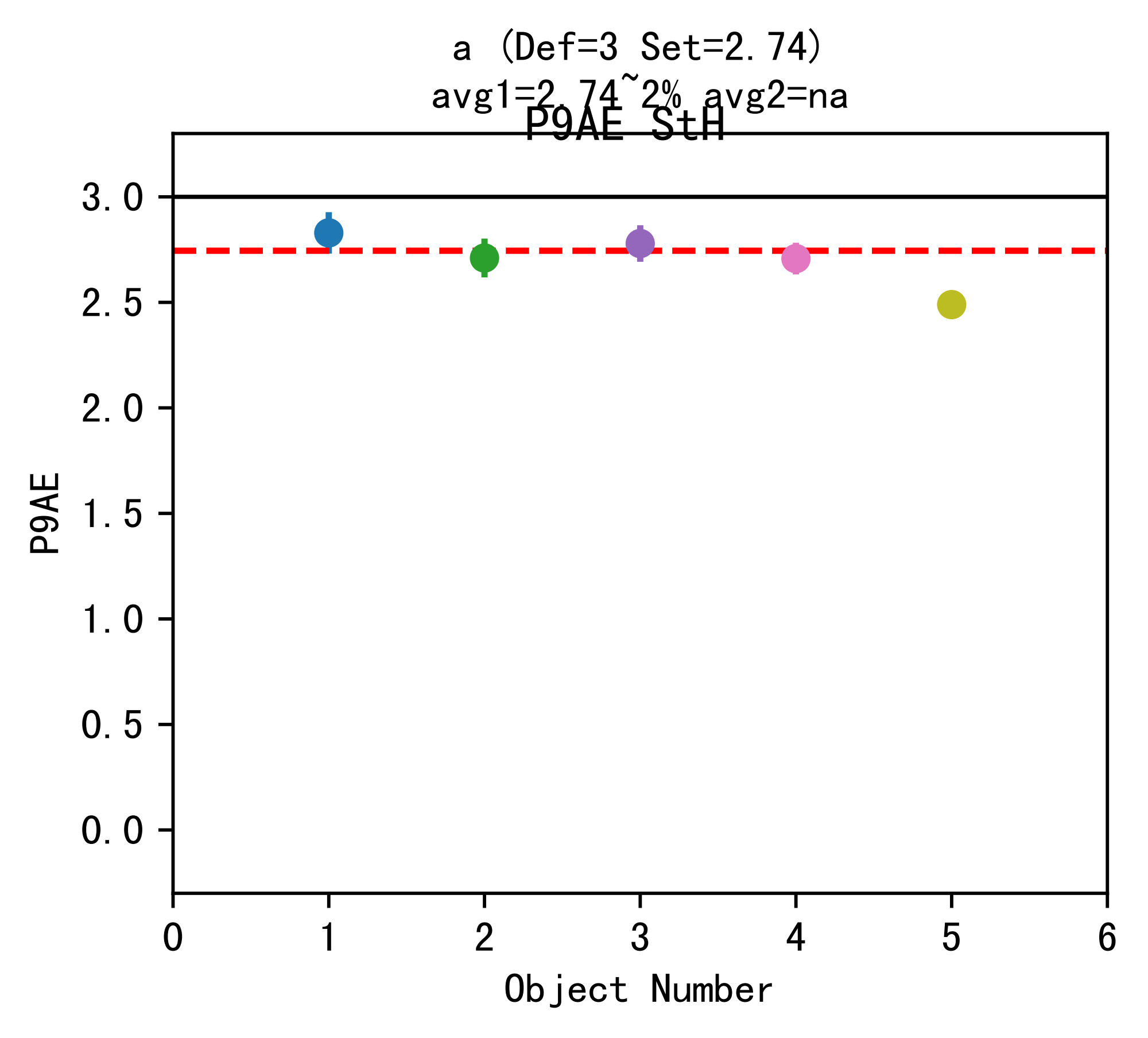

P9AE-065-3
Linear [2.83, -8.19, 2.89, 0.99]
UF

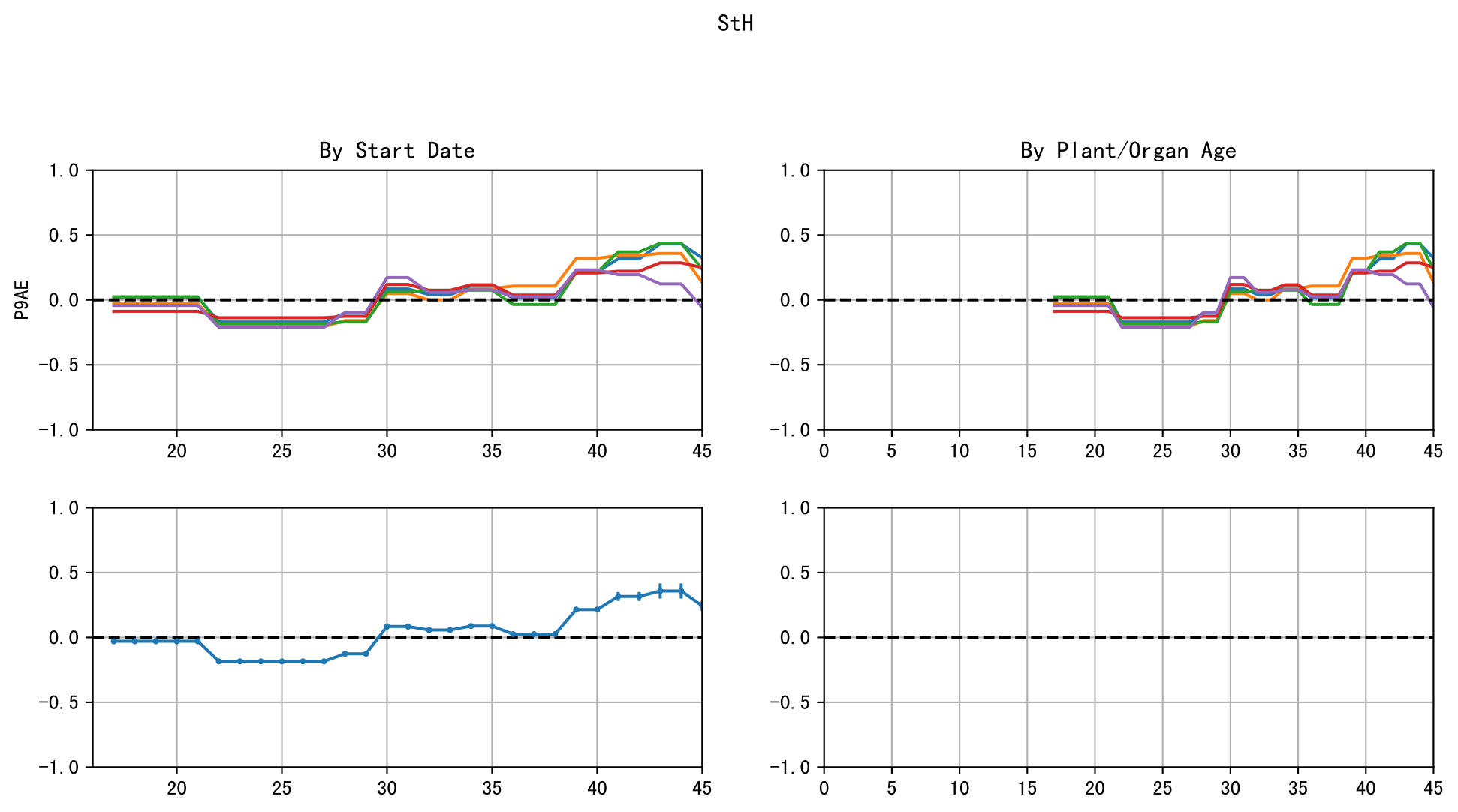

P9AE-077-32
Linear [2.71, -11.66, 4.3, 0.99]
UF

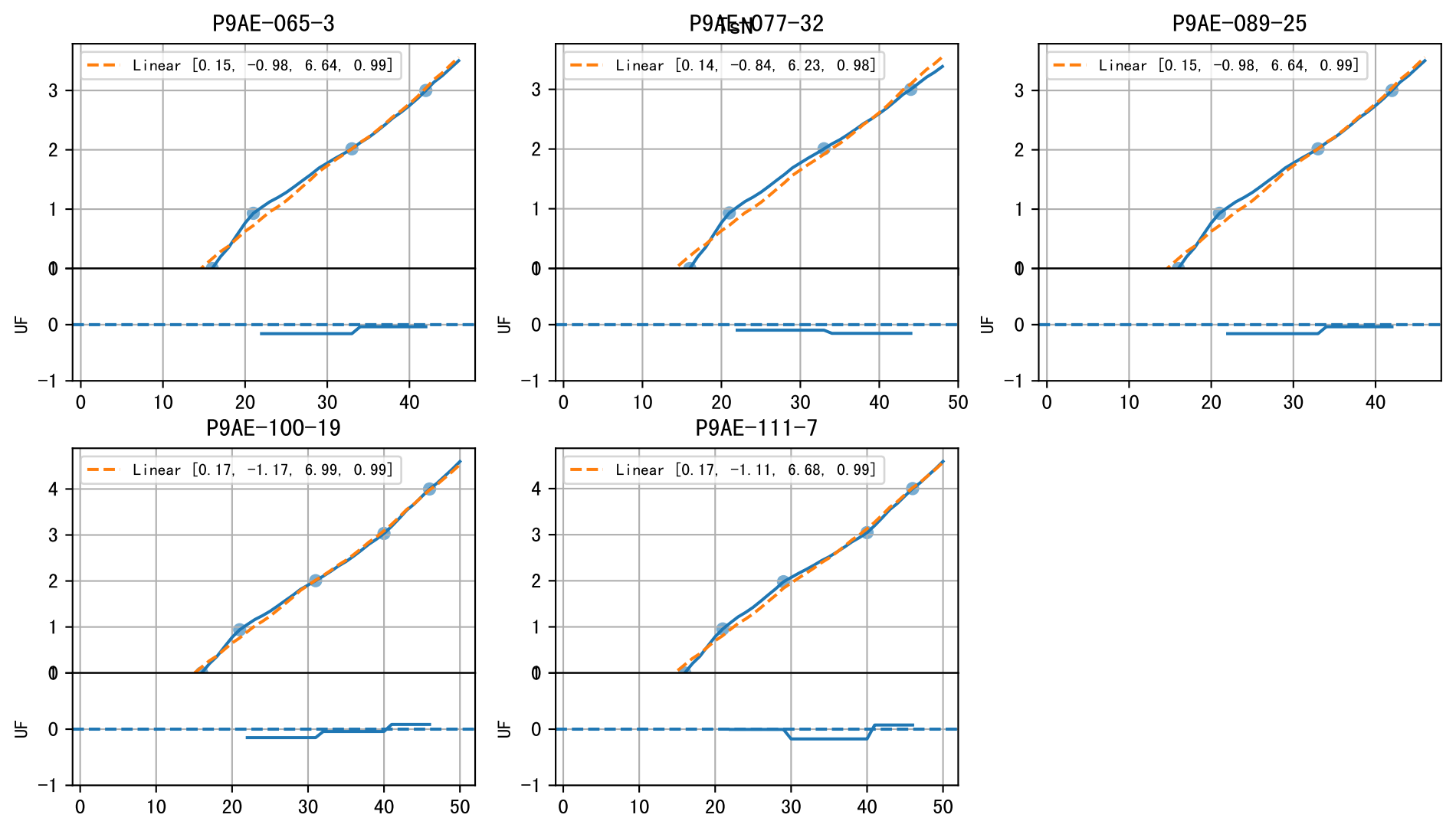

P9AE-089-25
Linear [2.78, -5.44, 1.96, 0.99]
UF

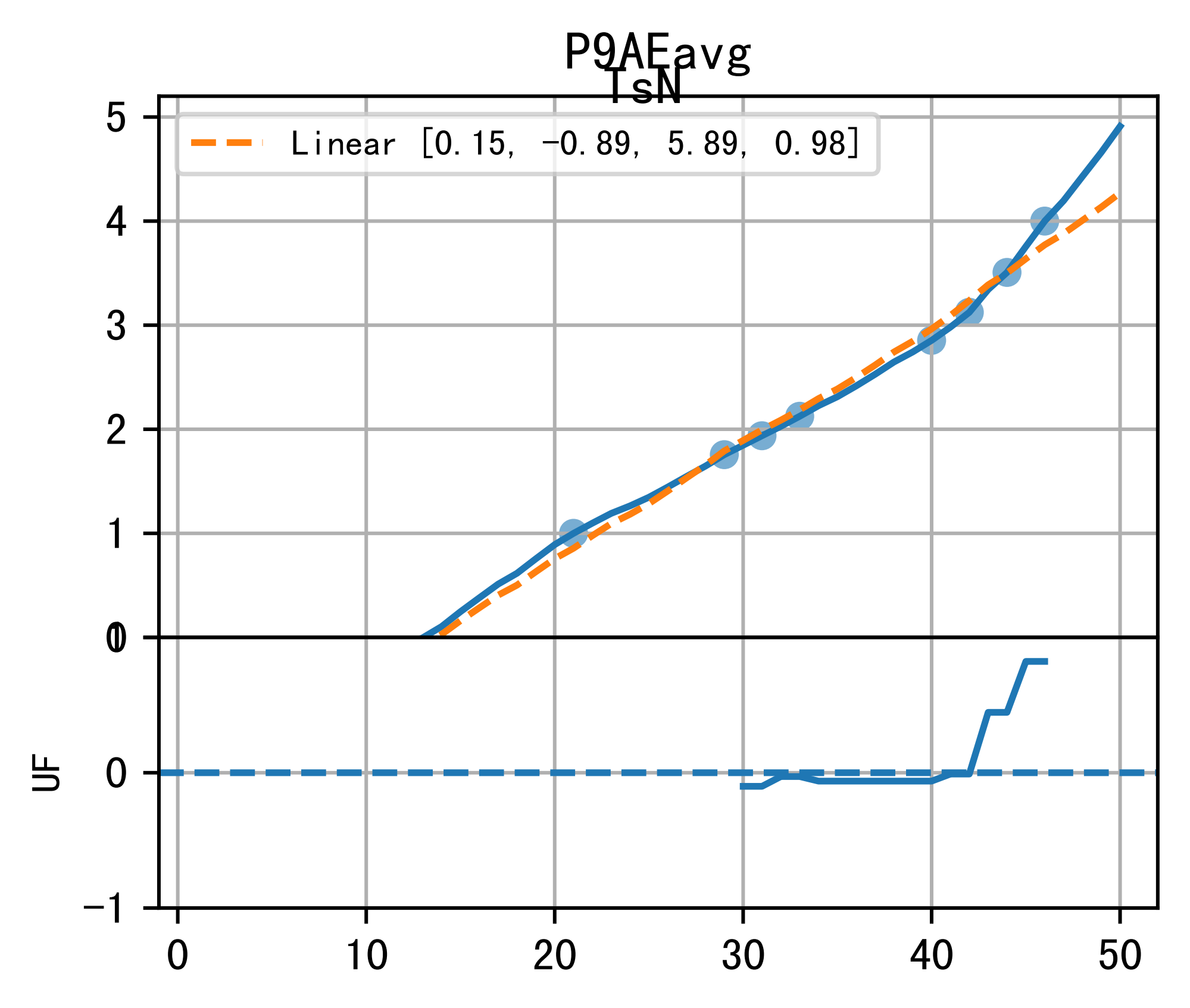

P9AE-100-19
Linear [2.71, -7.19, 2.65, 0.99]
UF

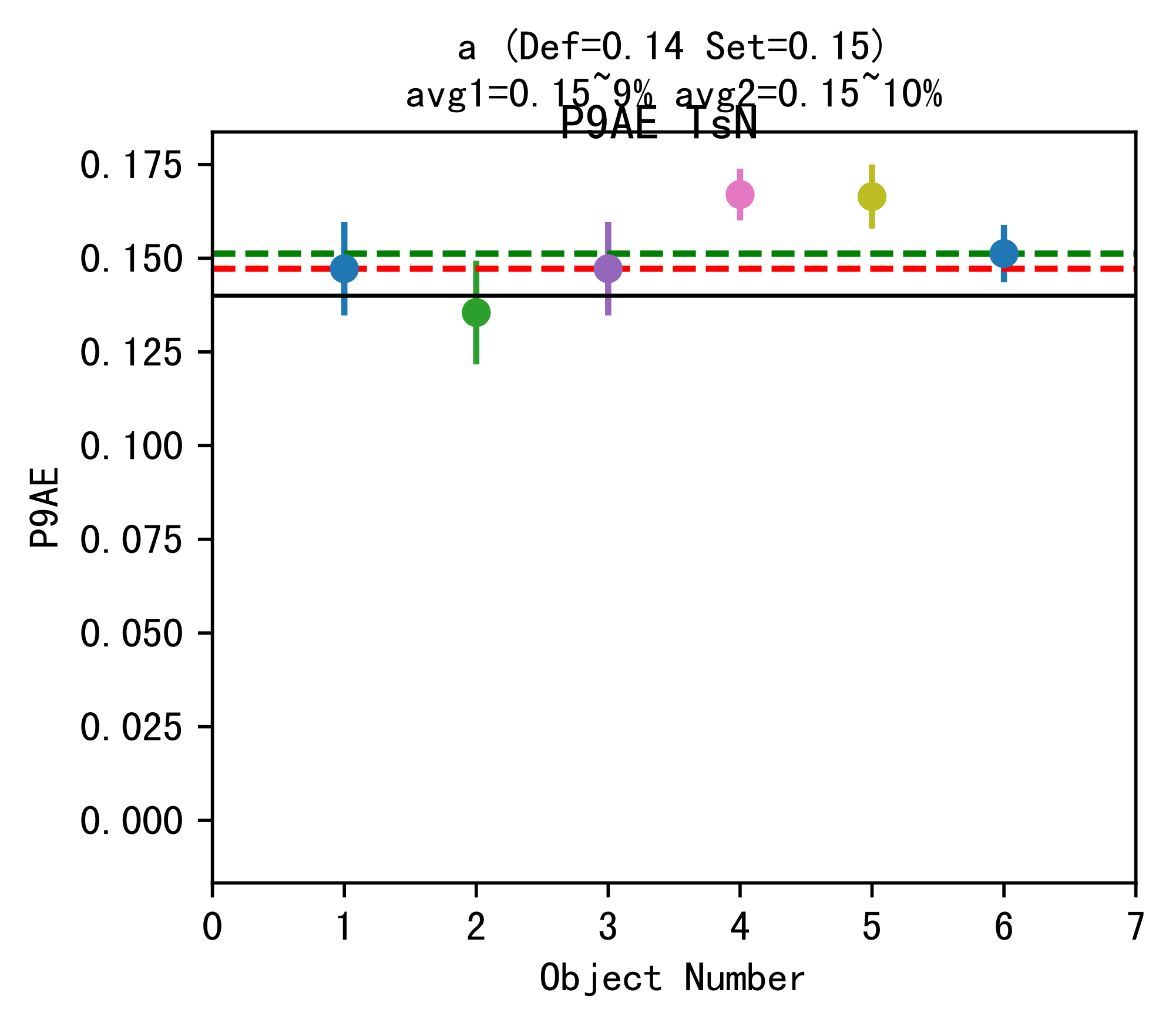

P9AE-111-7
Linear [2.49, -2.92, 1.17, 1.0]
UF

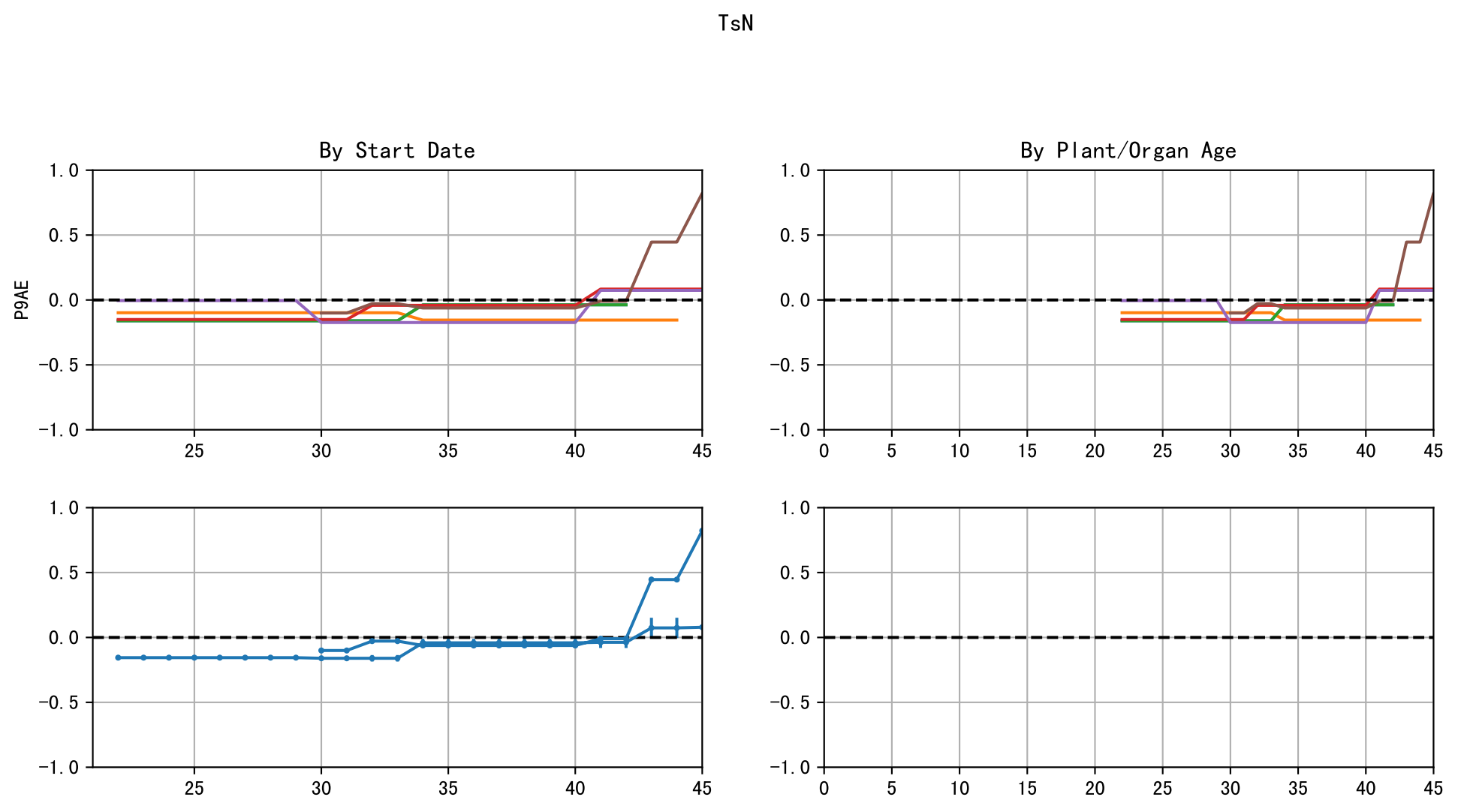

a (Def=3 Set=2.74)
avg1=2.74~2% avg2=na
P9AE StH
3.0
2.5
2.0
1.5
1.0
0.5
0.0
P9AE
0
1
2
3
4
5
6
Object Number

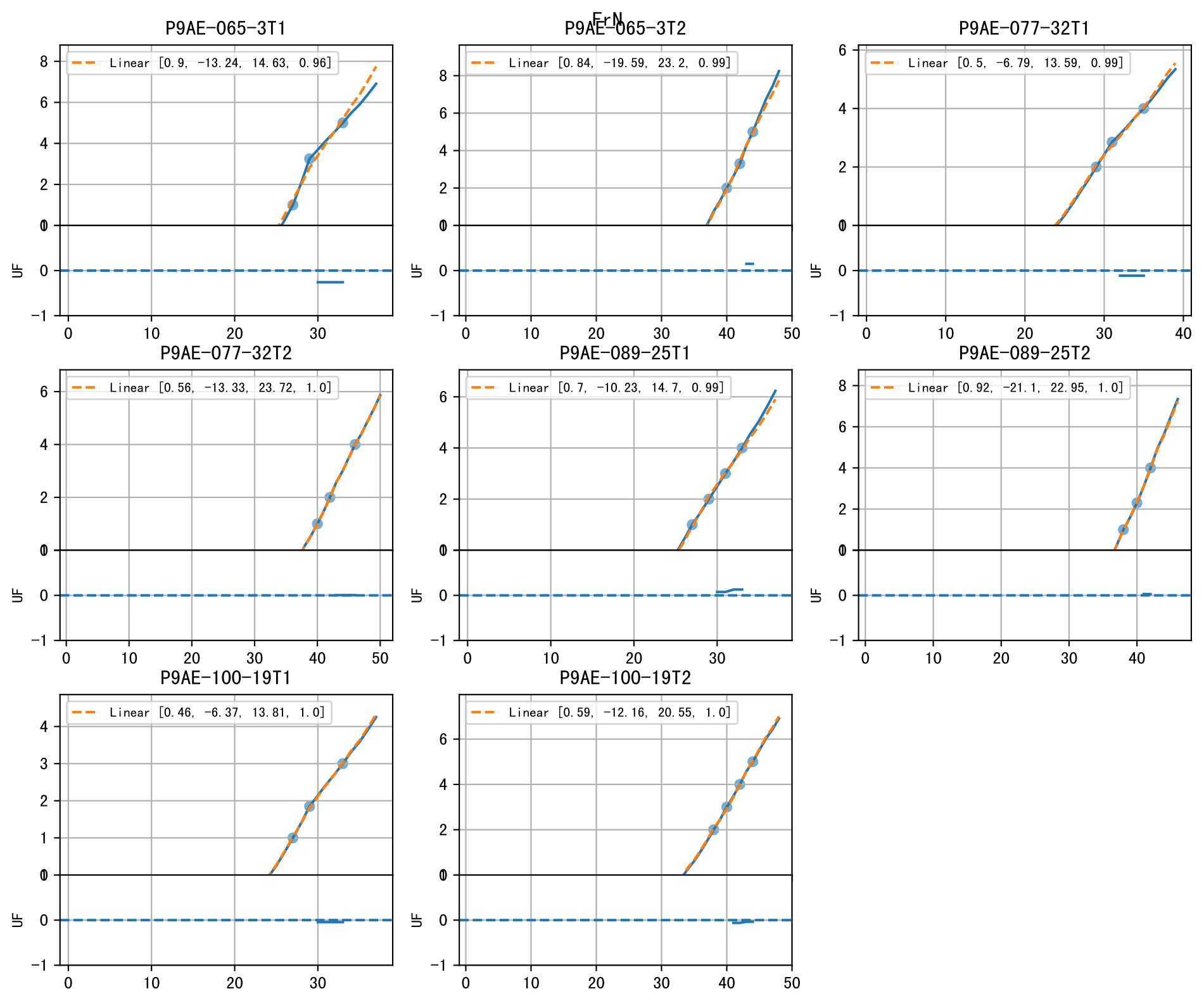

StH
By Start Date
By Plant/Organ Age
P9AE
1.0
0.5
0.0
−0.5
−1.0
20
25
30
35
40
45
0
5
10
15

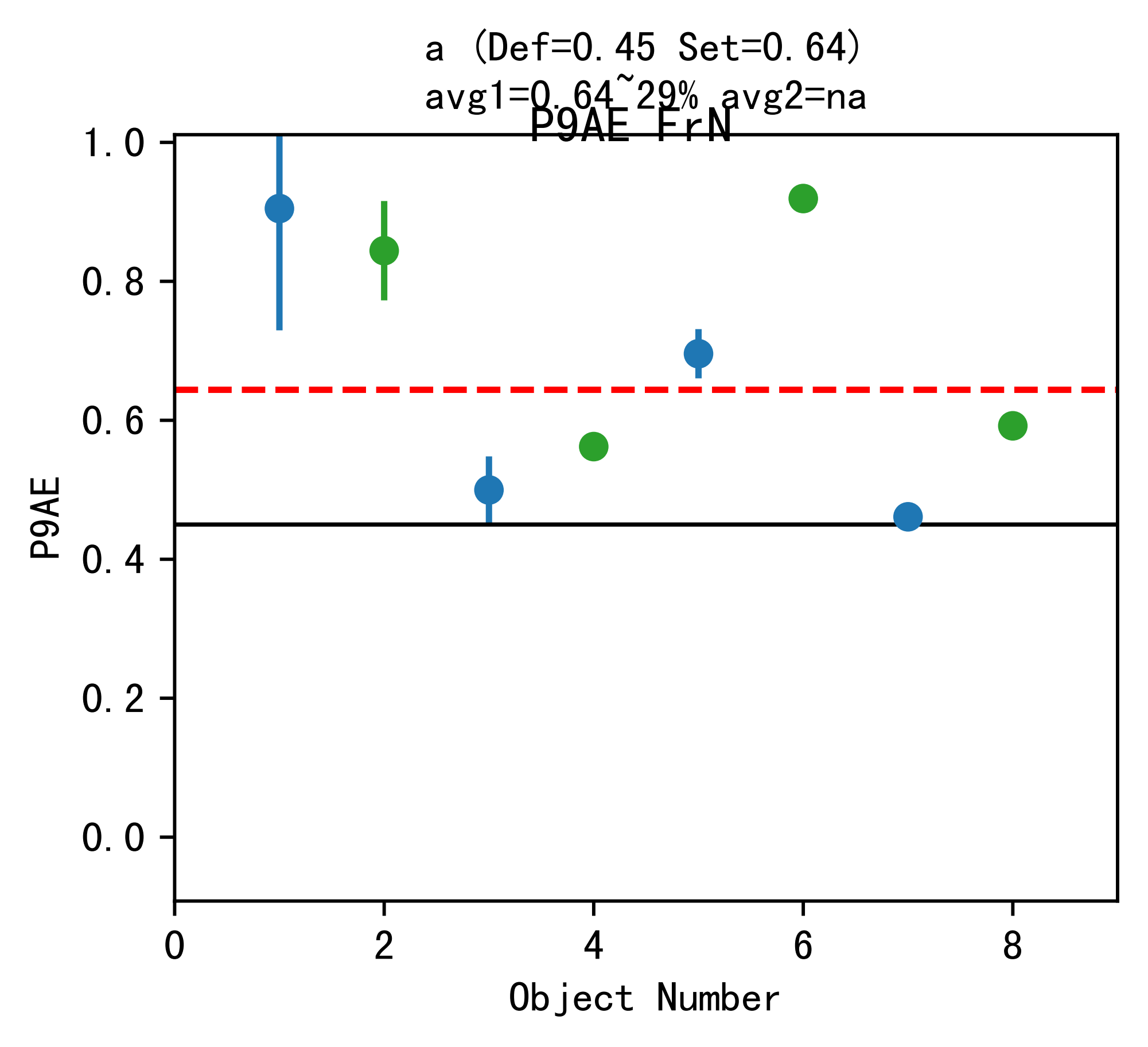

P9AE-065-3
Linear [0.15, -0.98, 6.64, 0.99]
P9AE-077-32
Linear [0.14, -0.84, 6.23, 0.98]
P9AE-089-25
Linear [0.15, -0.98, 6.64, 0.99]
P9AE-100-19
Linear [0.17, -1.17, 6.99, 0.99]
P9AE-111-7
Linear [0.17, -1.11, 6.68, 0.99]
TSN
UF

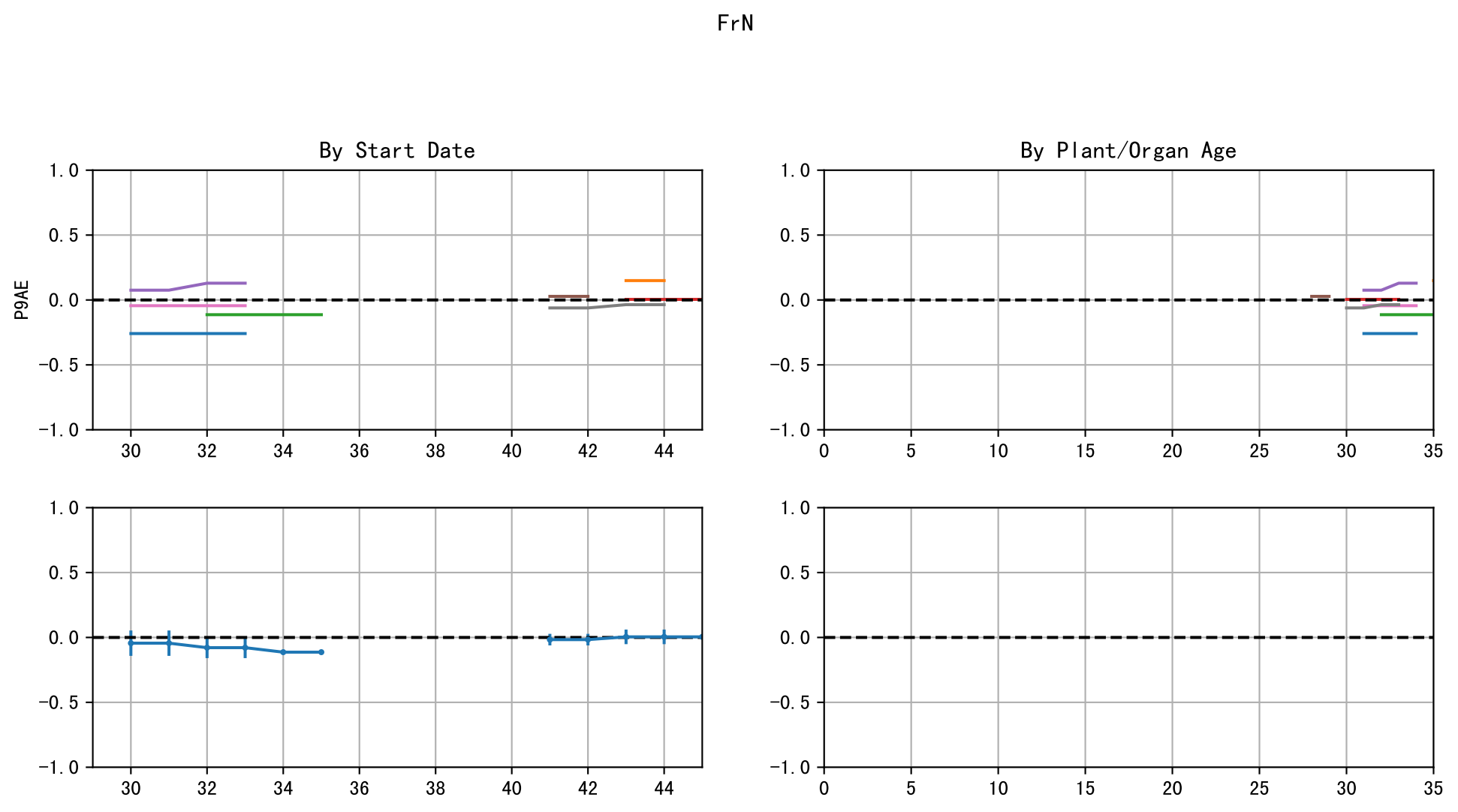

P9AEavg
TsN
Linear [0.15, -0.89, 5.89, 0.98]
5
4
3
2
1
0
0
-1
UF
0
10
20
30
40
50

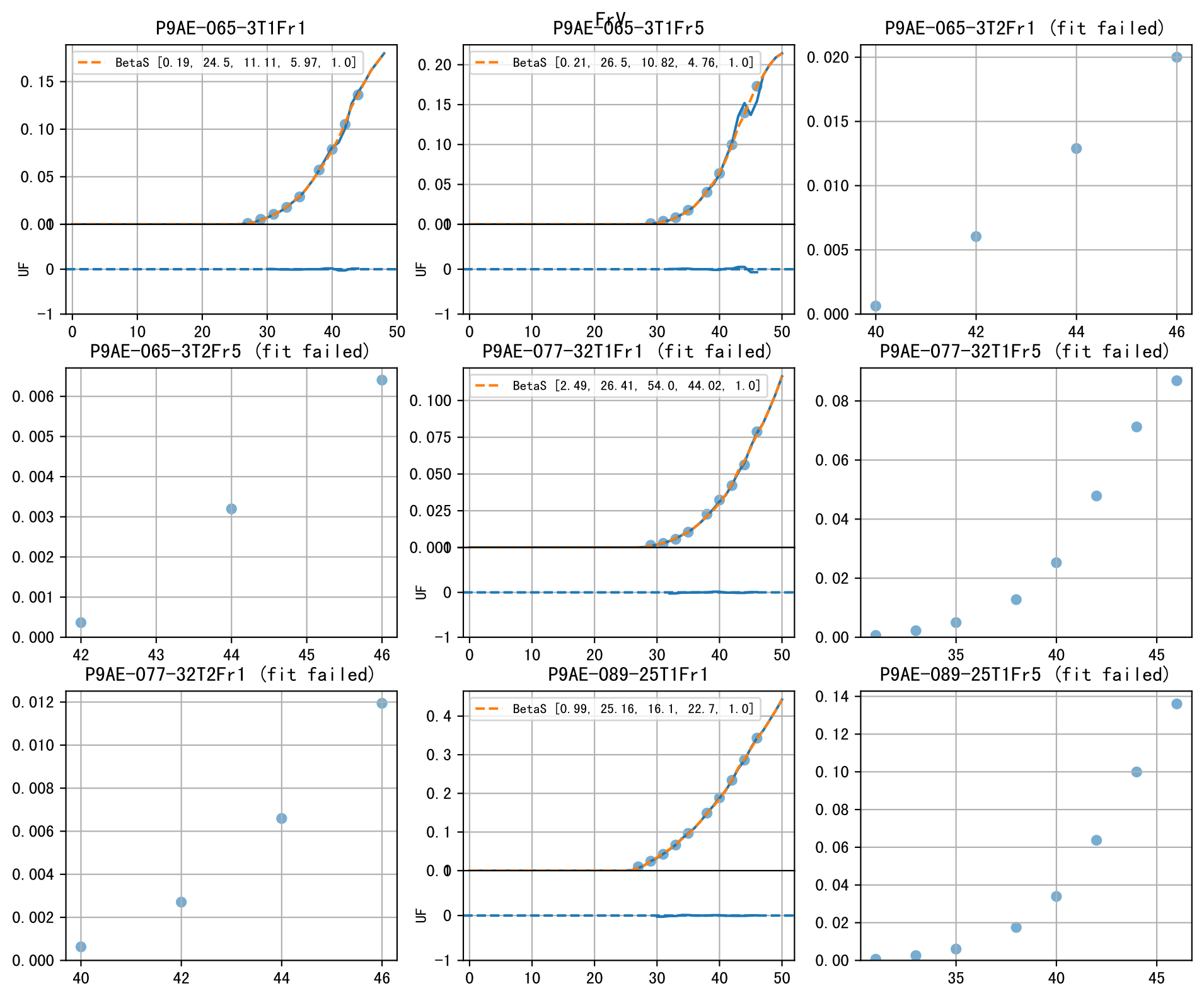

a (Def=0.14 Set=0.15)
avg1=0.15~9% avg2=0.15~10%
P9AE TsN
0.175
0.150
0.125
0.100
0.075
0.050
0.025
0.000
P9AE
0
1
2
3
4
5
6
7
Object Number

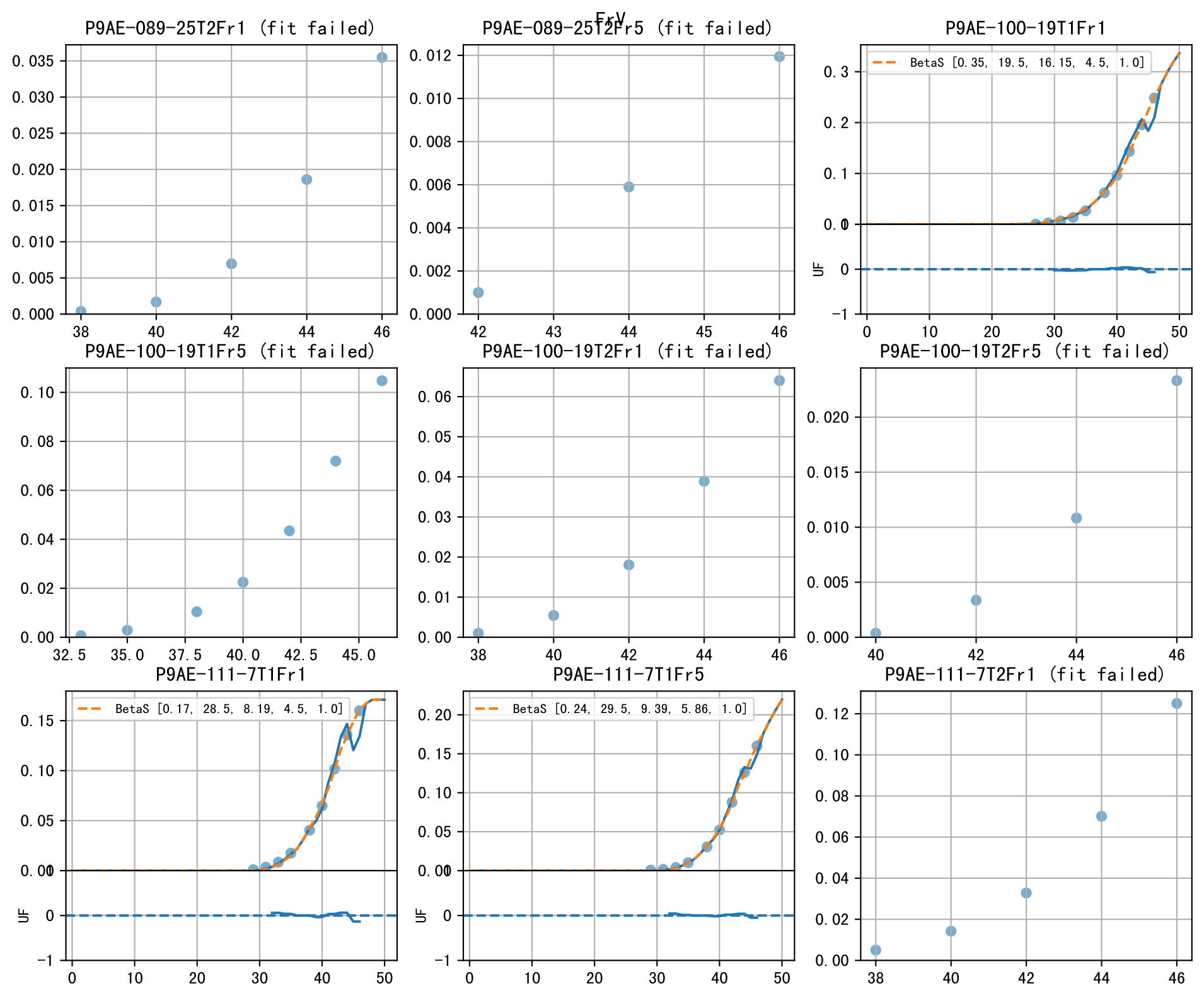

TsN
By Start Date
By Plant/Organ Age
P9AE
1.0
0.5
0.0
−0.5
−1.0
0
5
10
15
20
25
30
35
40
45

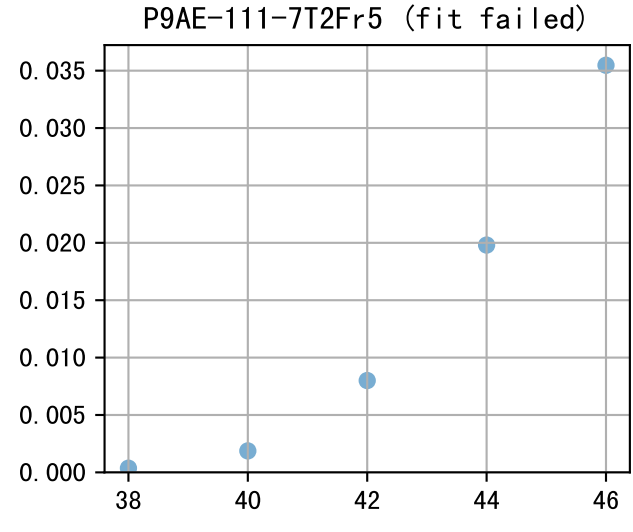

FrN
P9AE-065-3T1
Linear [0.9, -13.24, 14.63, 0.96]
P9AE-065-3T2
Linear [0.84, -19.59, 23.2, 0.99]
P9AE-077-32T1
Linear [0.5, -6.79, 13.59, 0.99]
P9AE-077-32T2
Linear [0.56, -13.33, 23.72, 1.0]
P9AE-089-25T1
Linear [0.7, -10.23, 14.7, 0.99]
P9AE-089-25T2
Linear [0.92, -21.1, 22.95, 1.0]
P9AE-100-19T1
Linear [0.46, -6.37, 13.81, 1.0]
P9AE-100-19T2
Linear [0.59, -12.16, 20.55, 1.0]
UF


a (Def=0.45 Set=0.64)
avg1=0.64~29% avg2=na
P9AE FrN
1.0
0.8
0.6
0.4
0.2
0.0
P9AE
0
2
4
6
8
Object Number

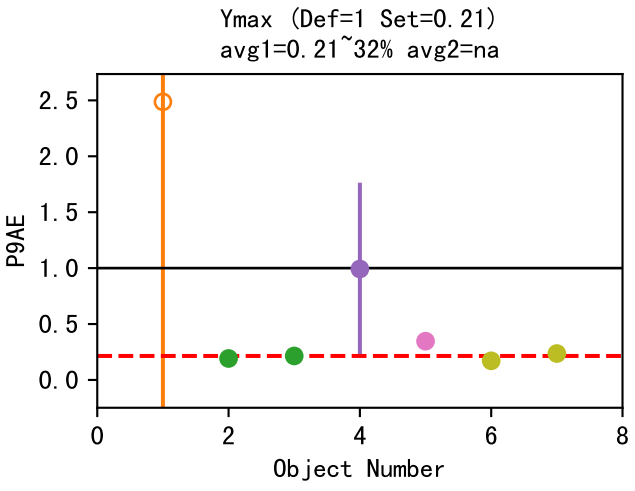

FrN
By Start Date
By Plant/Organ Age
P9AE
1.0
0.5
0.0
−0.5
−1.0
30
32
34
36
38
40
42
44
0
5
10
15
20
25
30
35

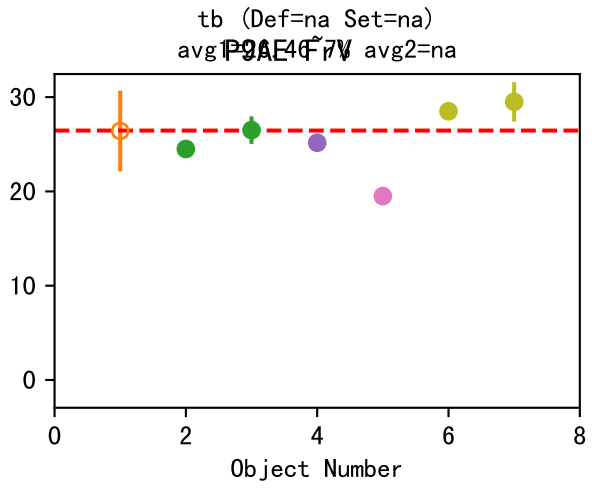

FrV
P9AE-065-3T1Fr1
BetaS [0.19, 24.5, 11.11, 5.97, 1.0]
UF
P9AE-065-3T1Fr5
BetaS [0.21, 26.5, 10.82, 4.76, 1.0]
UF
P9AE-065-3T2Fr1 (fit failed)
P9AE-065-3T2Fr5 (fit failed)
P9AE-077-32T1Fr1 (fit failed)
BetaS [2.49, 26.41, 54.0, 44.02, 1.0]
UF
P9AE-077-32T1Fr5 (fit failed)
P9AE-077-32T2Fr1 (fit failed)
P9AE-089-25T1Fr1
BetaS [0.99, 25.16, 16.1, 22.7, 1.0]
UF
P9AE-089-25T1Fr5 (fit failed)

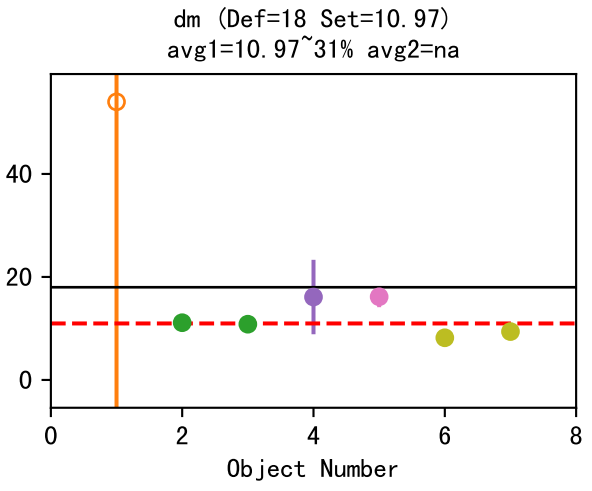

FrV
P9AE-089-25T2Fr1 (fit failed)
P9AE-089-25T2Fr5 (fit failed)
P9AE-100-19T1Fr1
BetaS [0.35, 19.5, 16.15, 4.5, 1.0]
UF
P9AE-100-19T1Fr5 (fit failed)
P9AE-100-19T2Fr1 (fit failed)
P9AE-100-19T2Fr5 (fit failed)
P9AE-111-7T1Fr1
BetaS [0.17, 28.5, 8.19, 4.5, 1.0]
P9AE-111-7T1Fr5
BetaS [0.24, 29.5, 9.39, 5.86, 1.0]
P9AE-111-7T2Fr1 (fit failed)

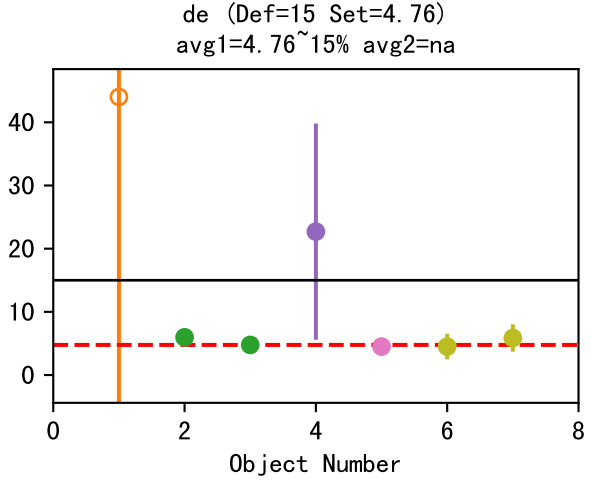

P9AE-111-7T2Fr5 (fit failed)
0.035
0.030
0.025
0.020
0.015
0.010
0.005
0.000
38
40
42
44
46

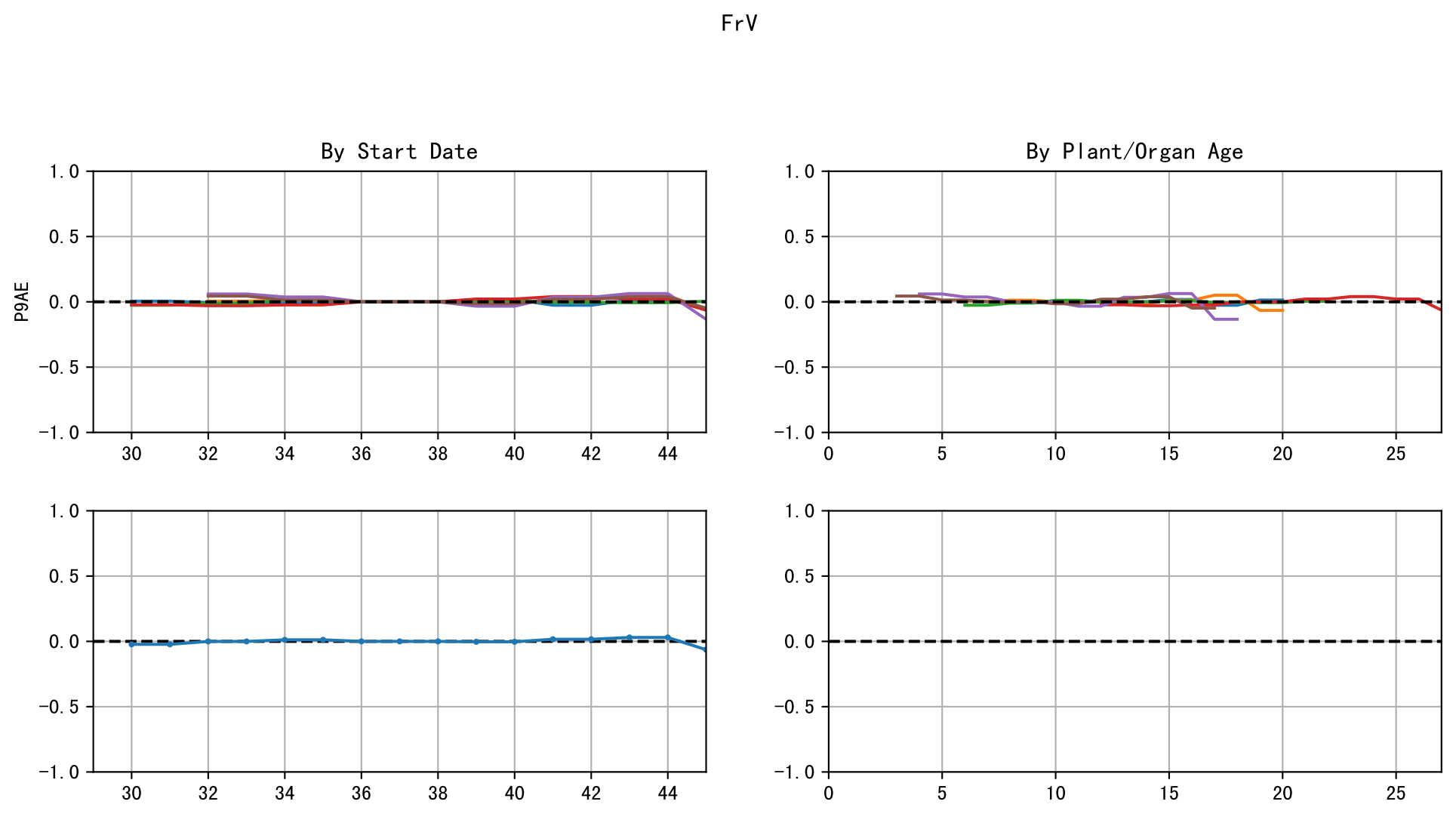
FrV

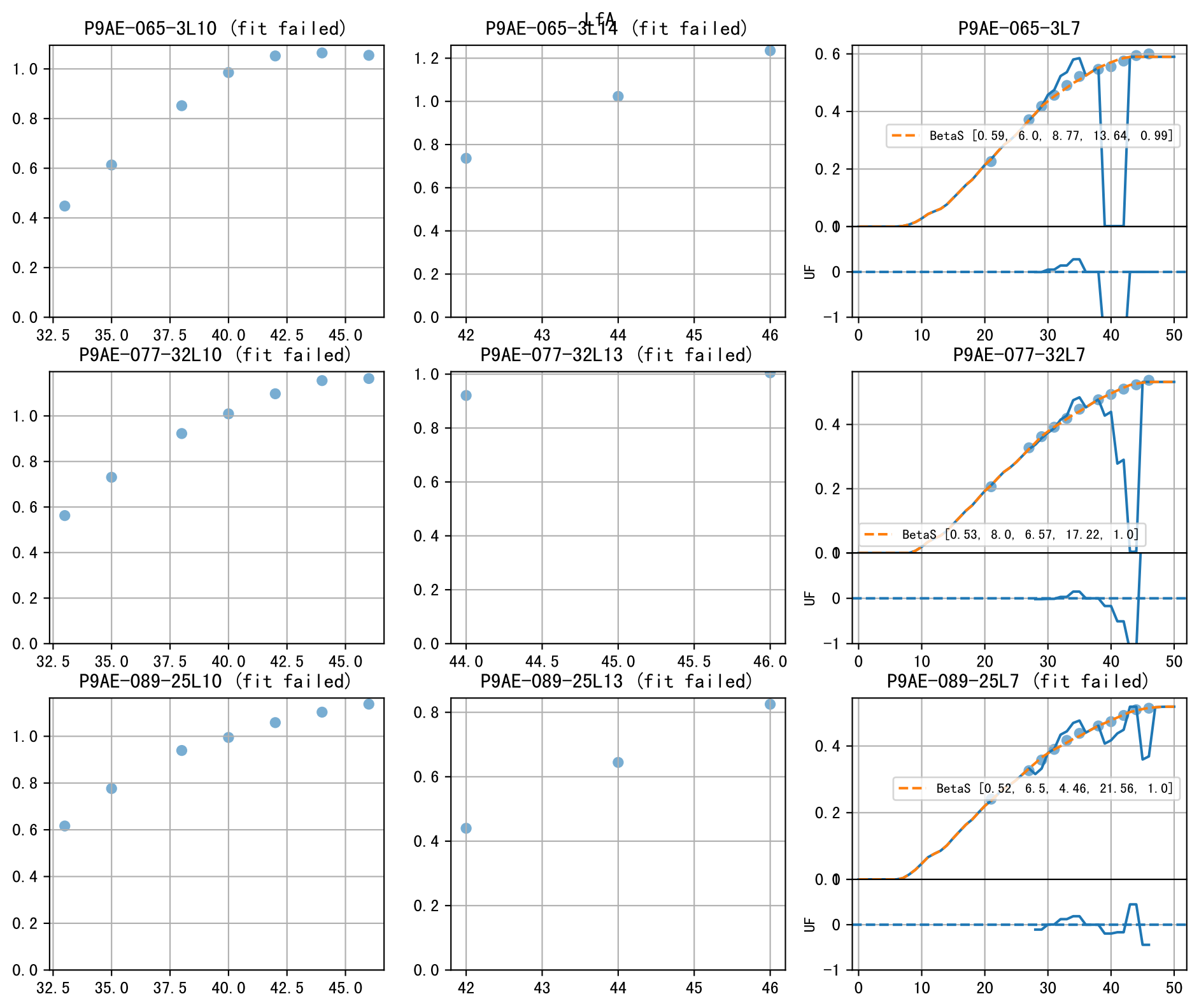

Ymax (Def=1 Set=0.21)
avg1=0.21~32% avg2=na
P9AE
Object Number

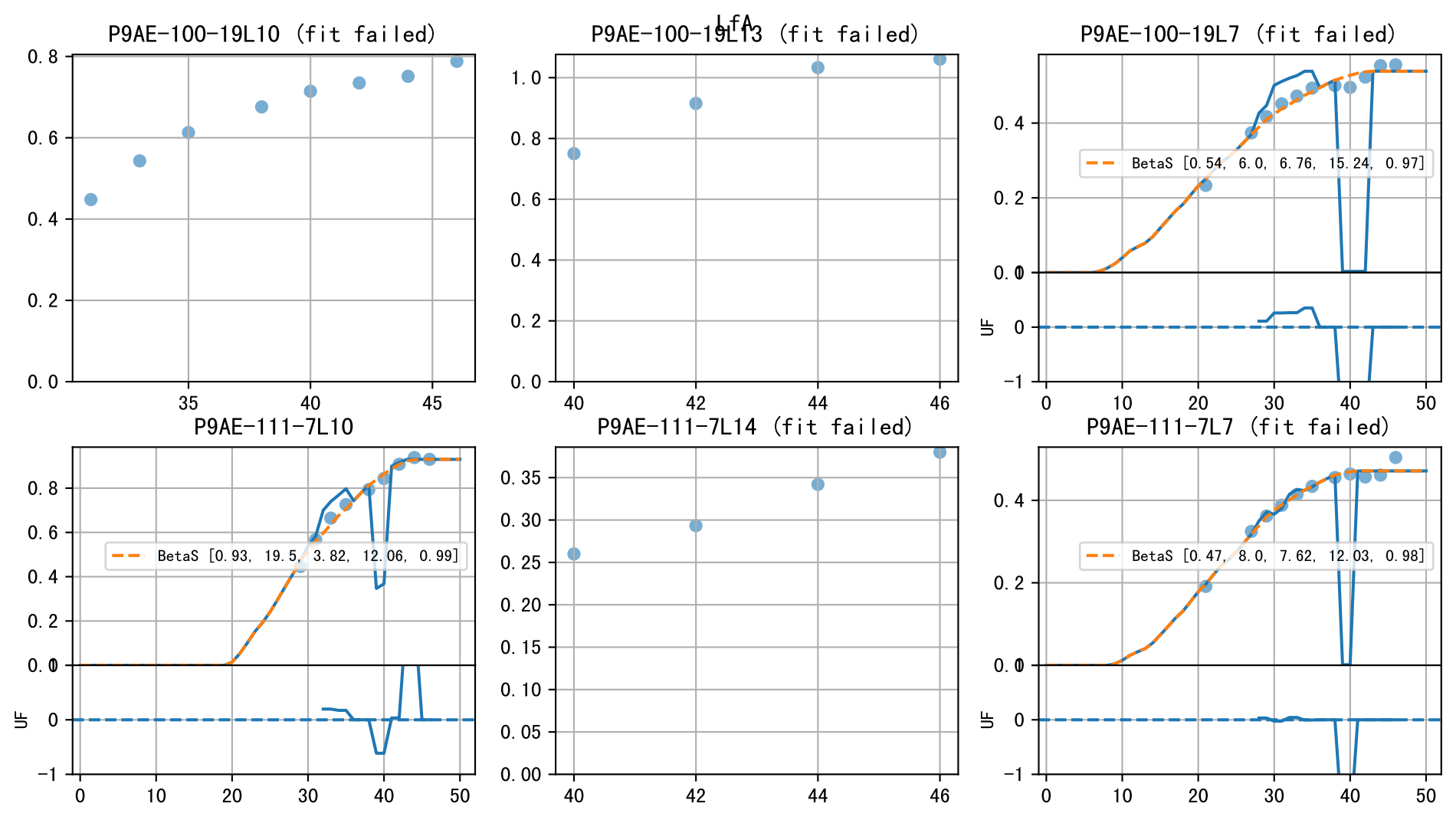

tb (Def=na Set=na)
avg1=na avg2=na
Object Number

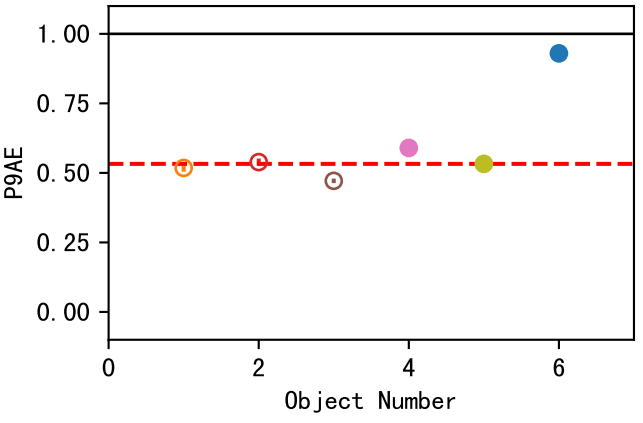

dm (Def=18 Set=10.97)
avg1=10.97~31% avg2=na
Object Number

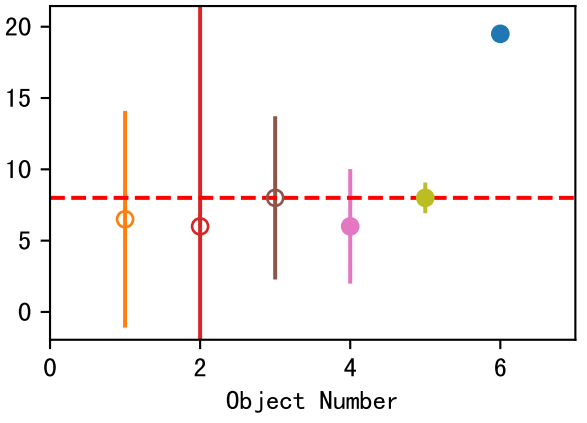

de (Def=15 Set=4.76)
avg1=4.76~15% avg2=na
Object Number

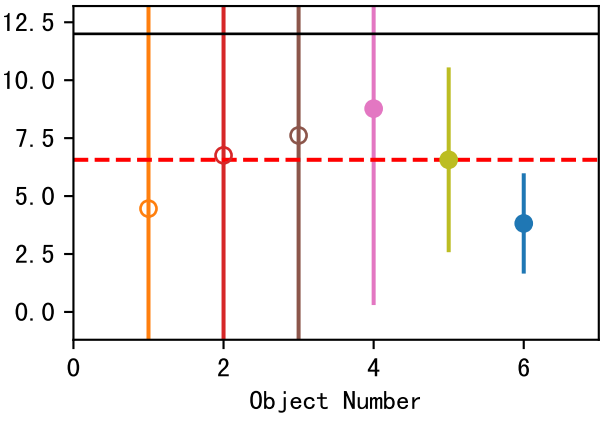

FrV
By Start Date
By Plant/Organ Age
P9AE
1.0
0.5
0.0
−0.5
−1.0
30
32
34
36
38
40
42
44
0
5
10
15
20
25

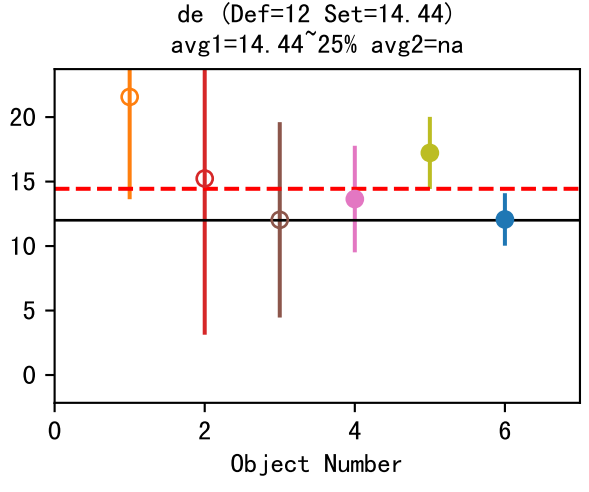

LfA
P9AE-065-3L10 (fit failed)
P9AE-065-3L14 (fit failed)
P9AE-065-3L7
BetaS [0.59, 6.0, 8.77, 13.64, 0.99]
UF
P9AE-077-32L10 (fit failed)
P9AE-077-32L13 (fit failed)
P9AE-077-32L7
BetaS [0.53, 8.0, 6.57, 17.22, 1.0]
UF
P9AE-089-25L10 (fit failed)
P9AE-089-25L13 (fit failed)
P9AE-089-25L7 (fit failed)
BetaS [0.52, 6.5, 4.46, 21.56, 1.0]
UF

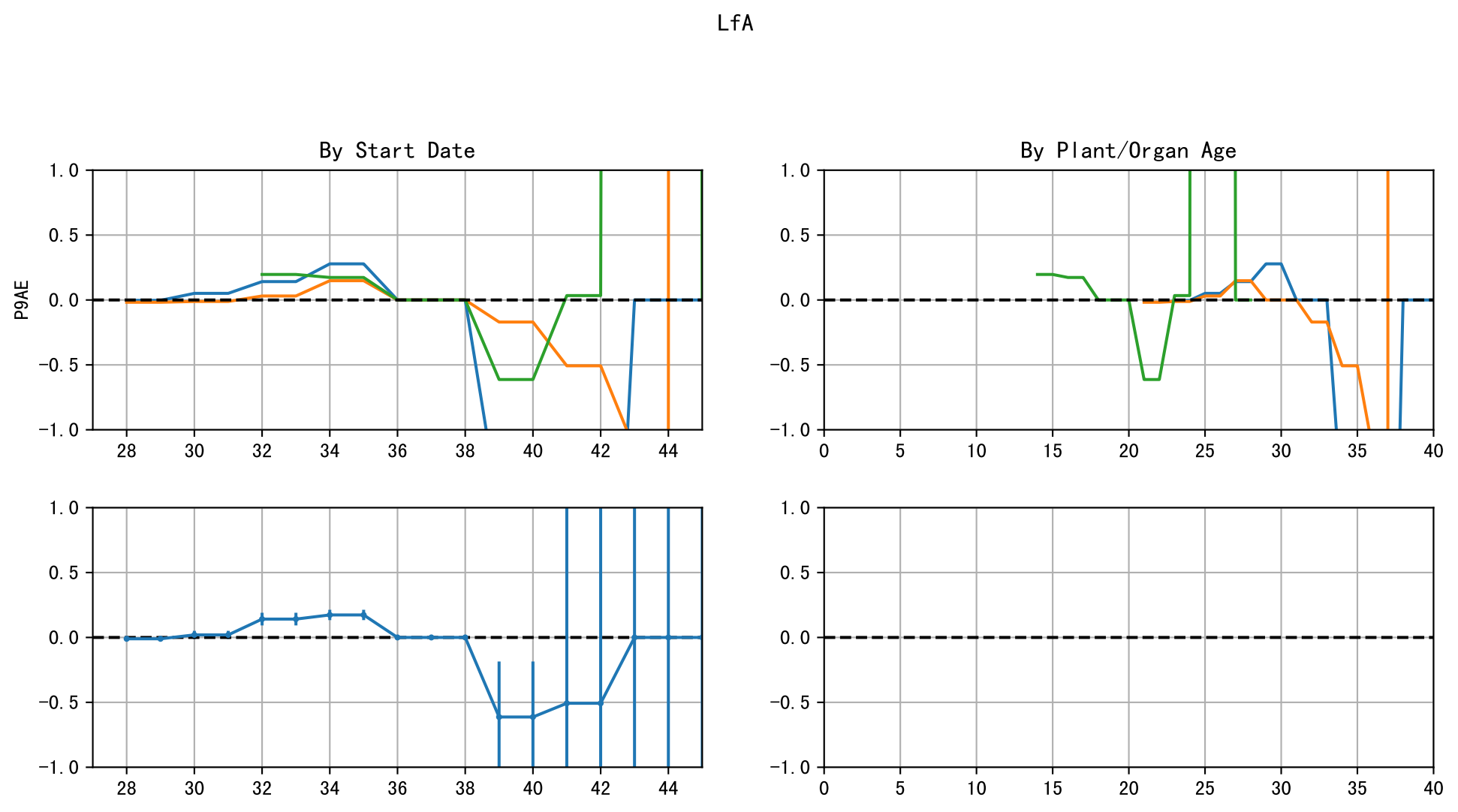

LfA
P9AE-100-19L10 (fit failed)
P9AE-100-19L13 (fit failed)
P9AE-100-19L7 (fit failed)
BetaS [0.54, 6.0, 6.76, 15.24, 0.97]
P9AE-111-7L10
BetaS [0.93, 19.5, 3.82, 12.06, 0.99]
P9AE-111-7L14 (fit failed)
P9AE-111-7L7 (fit failed)
BetaS [0.47, 8.0, 7.62, 12.03, 0.98]
UF

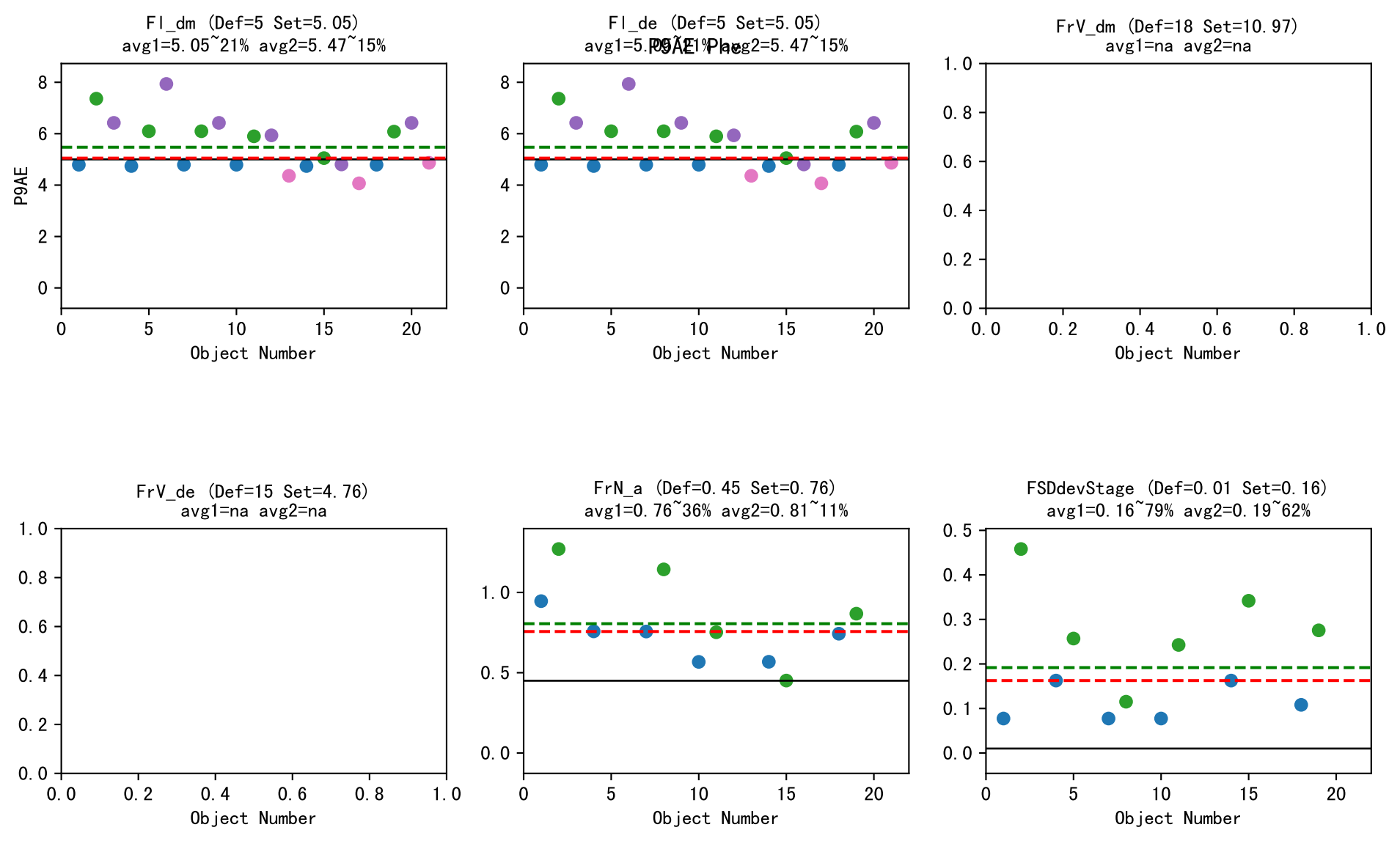

Ymax (Def=1 Set=0.53)
avg1=0.53~8% avg2=na
P9AE
1.00
0.75
0.50
0.25
0.00
0
2
4
6
Object Number

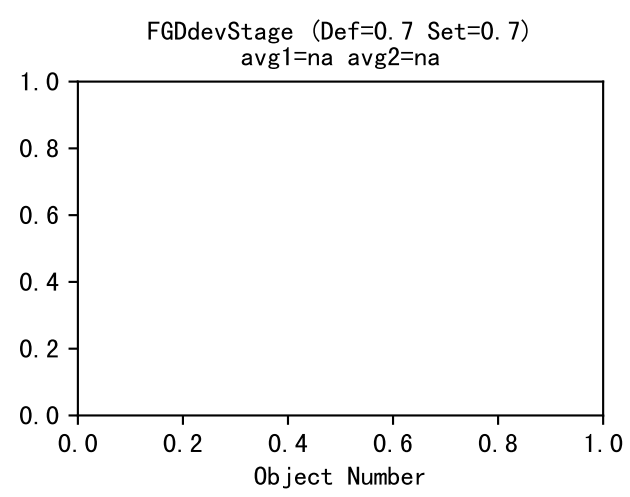

tb (Def=na Set=na)
avg1=9.0~14% avg2=na
20
15
10
5
0
0
2
4
6
Object Number

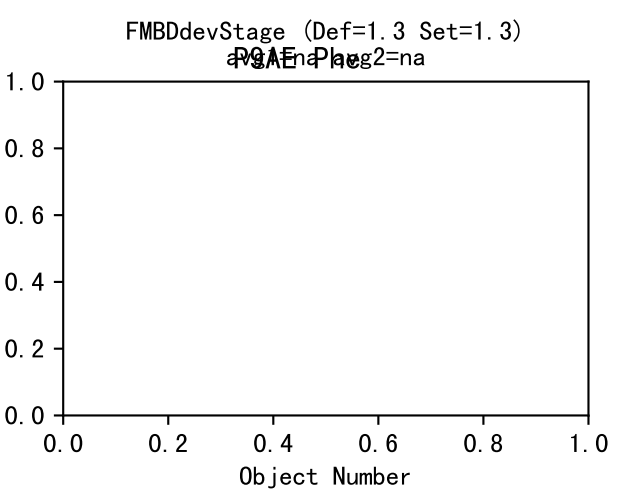

dm (Def=12 Set=12)
avg1=6.57~38% avg2=na
12.5
10.0
7.5
5.0
2.5
0.0
0
2
4
6
Object Number

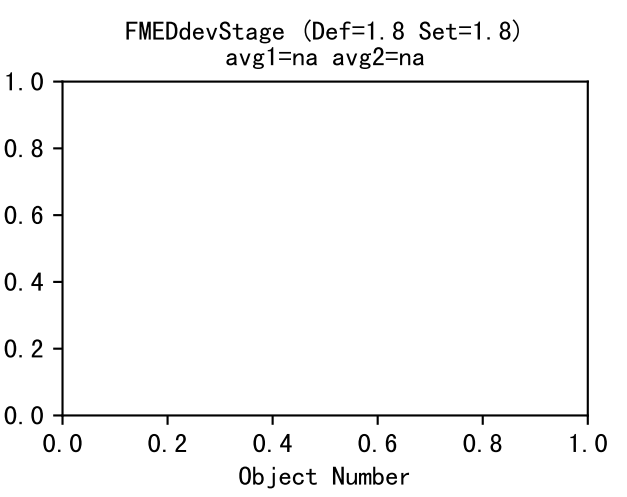

de (Def=12 Set=14.44)
avg1=14.44~25% avg2=na
20
15
10
5
0
0
2
4
6
Object Number

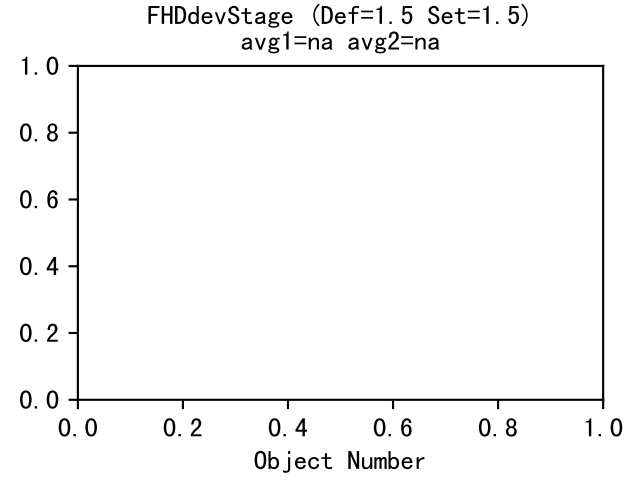

LfA
By Start Date
By Plant/Organ Age
P9AE
1.0
0.5
0.0
−0.5
−1.0
28
30
32
34
36
38
40
42
44
0
5
10
15
20
25
30
35
40

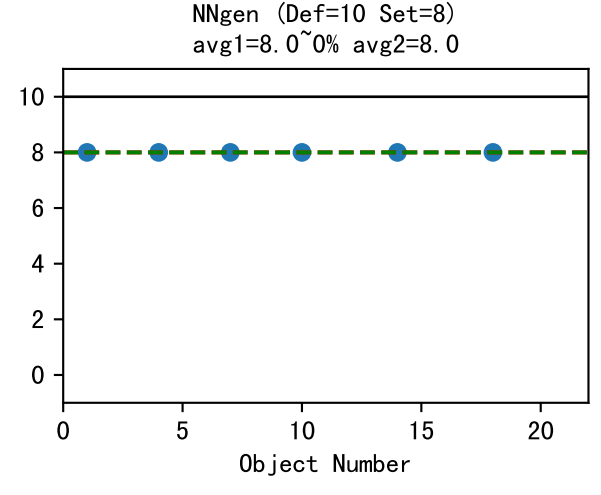

Fl_dm (Def=5 Set=5.05)
avg1=5.05~21% avg2=5.47~15%
P9AE
Object Number
Fl_de (Def=5 Set=5.05)
avg1=5.05~21% avg2=5.47~15%
P9AE Plane
Object Number
FrV_dm (Def=18 Set=10.97)
avg1=na avg2=na
Object Number
FrV_de (Def=15 Set=4.76)
avg1=na avg2=na
Object Number
FrN_a (Def=0.45 Set=0.76)
avg1=0.76~36% avg2=0.81~11%
Object Number
FSDdevStage (Def=0.01 Set=0.16)
avg1=0.16~79% avg2=0.19~62%
Object Number

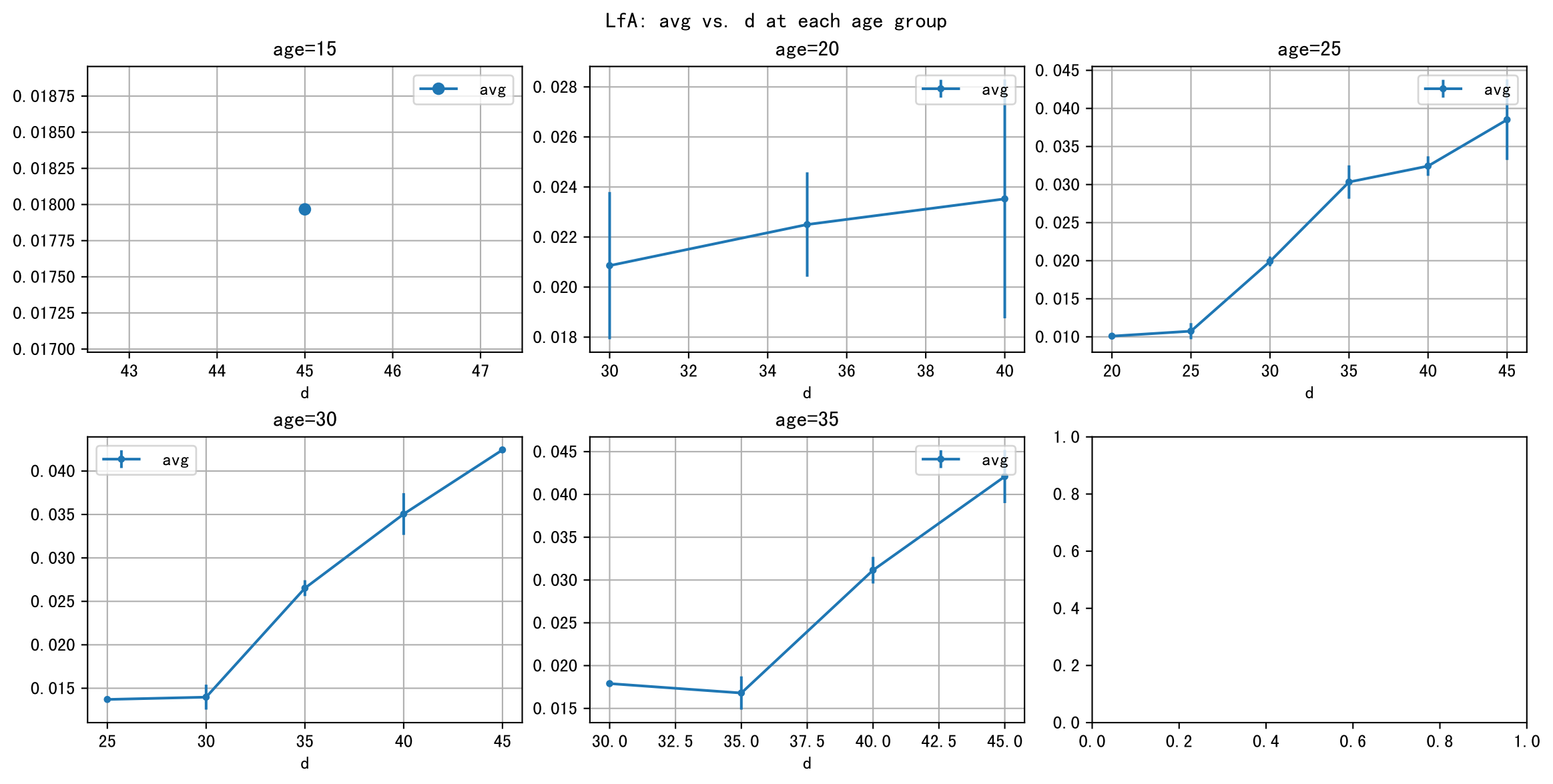

FGDdevStage (Def=0.7 Set=0.7)
avg1=na avg2=na
1.0
0.8
0.6
0.4
0.2
0.0
0.0
0.2
0.4
0.6
0.8
1.0
Object Number

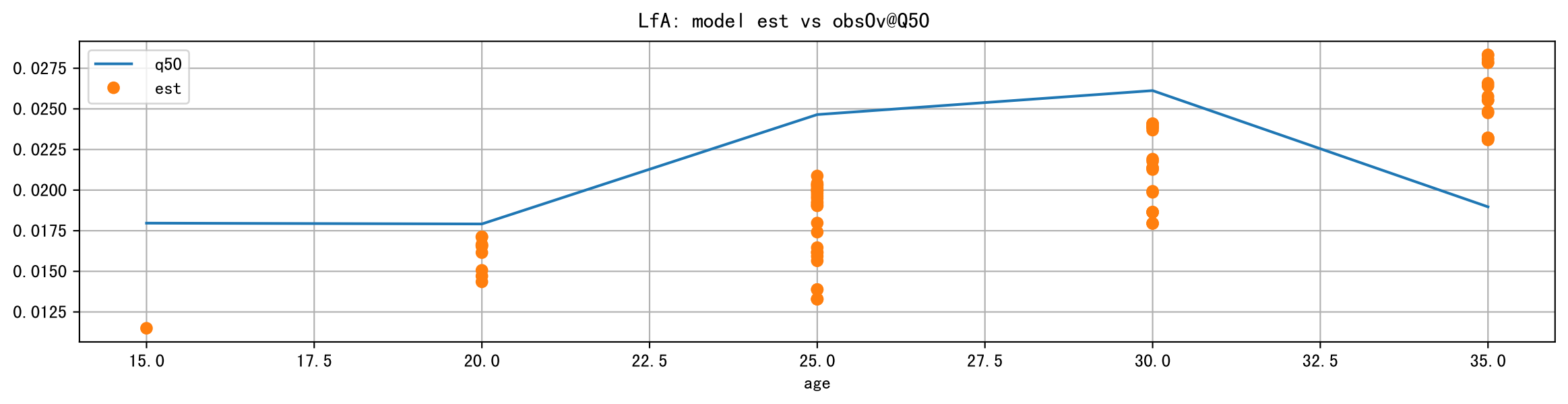

FMBDdevStage (Def=1.3 Set=1.3)
avg1=na avg2=na
1.0
0.8
0.6
0.4
0.2
0.0
0.0
0.2
0.4
0.6
0.8
1.0
Object Number

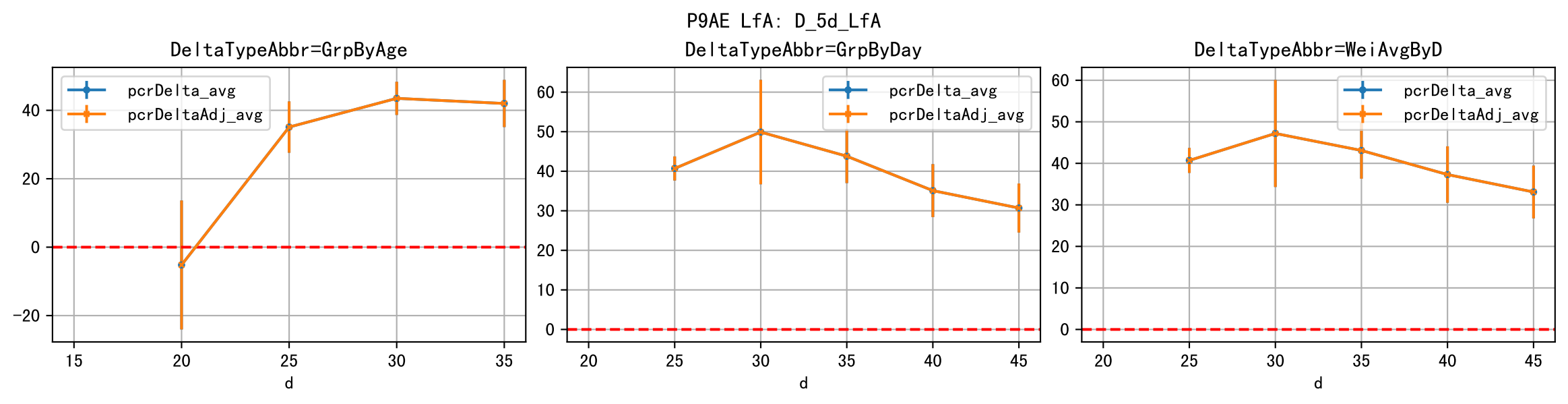

FMEDdevStage (Def=1.8 Set=1.8)
avg1=na avg2=na
1.0
0.8
0.6
0.4
0.2
0.0
0.0
0.2
0.4
0.6
0.8
1.0
Object Number

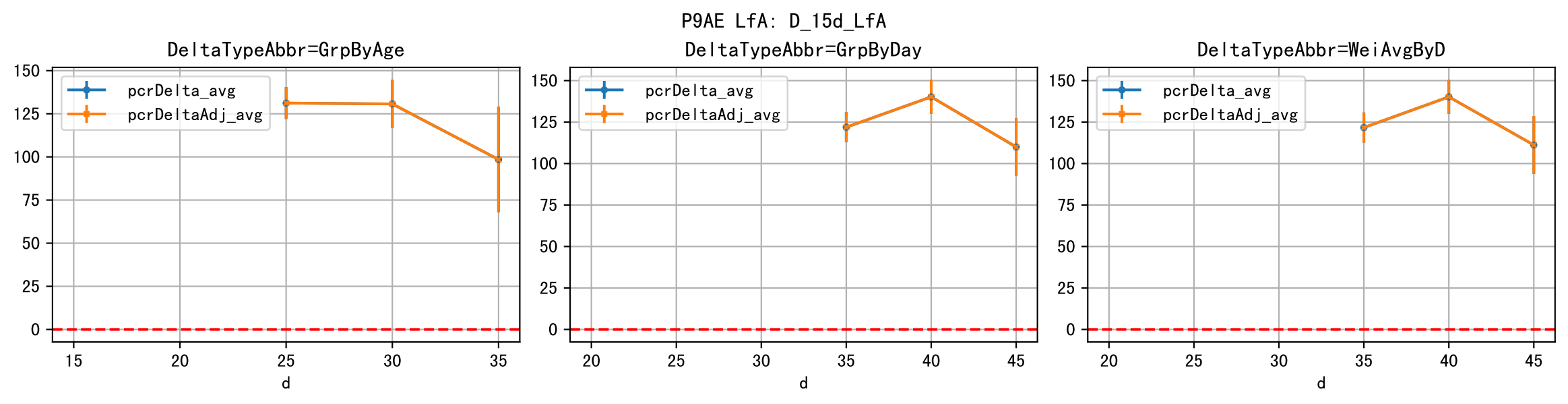

FHDdevStage (Def=1.5 Set=1.5)
avg1=na avg2=na
1.0
0.8
0.6
0.4
0.2
0.0
0.0
0.2
0.4
0.6
0.8
1.0
Object Number

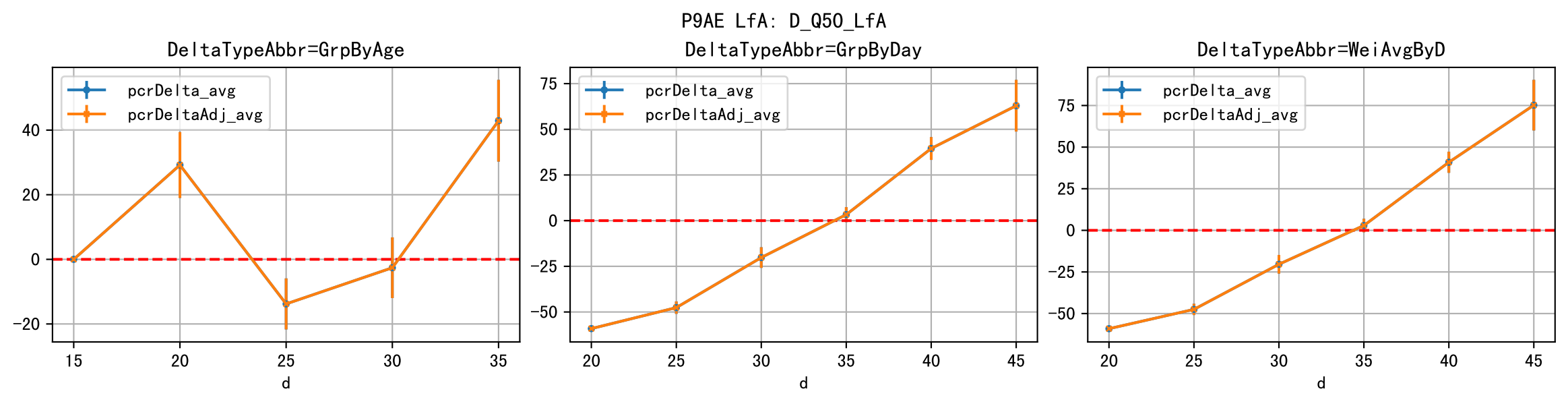

NNgen (Def=10 Set=8)
avg1=8.0~0% avg2=8.0
10
8
6
4
2
0
0
5
10
15
20
Object Number

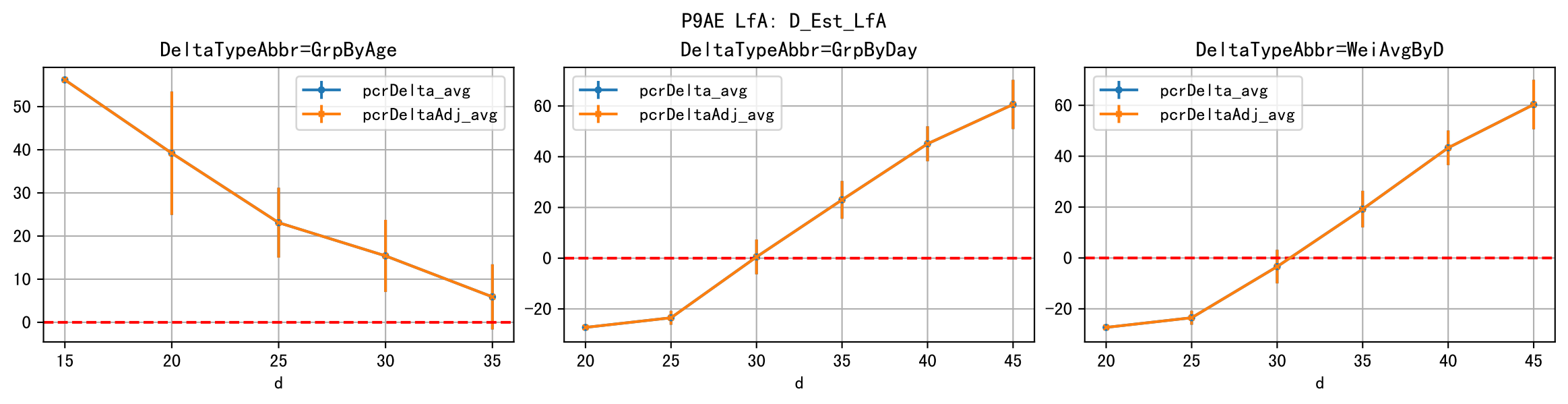

LfA: avg vs. d at each age group
age=15
avg
0.01875
0.01850
0.01825
0.01800
0.01775
0.01750
0.01725
0.01700
43
44
45
46
47
d
age=20
avg
0.028
0.026
0.024
0.022
0.020
0.018
30
32
34
36
38
40
d
age=25
avg
0.045
0.040
0.035
0.030
0.025
0.020
0.015
0.010
20
25
30
35
40
45
d
age=30
avg
0.040
0.035
0.030
0.025
0.020
0.015
25
30
35
40
45
d
age=35
avg
0.045
0.040
0.035
0.030
0.025
0.020
0.015
30.0
32.5
35.0
37.5
40.0
42.5
45.0
d
1.0
0.8
0.6
0.4
0.2
0.0
0.0
0.2
0.4
0.6
0.8
1.0

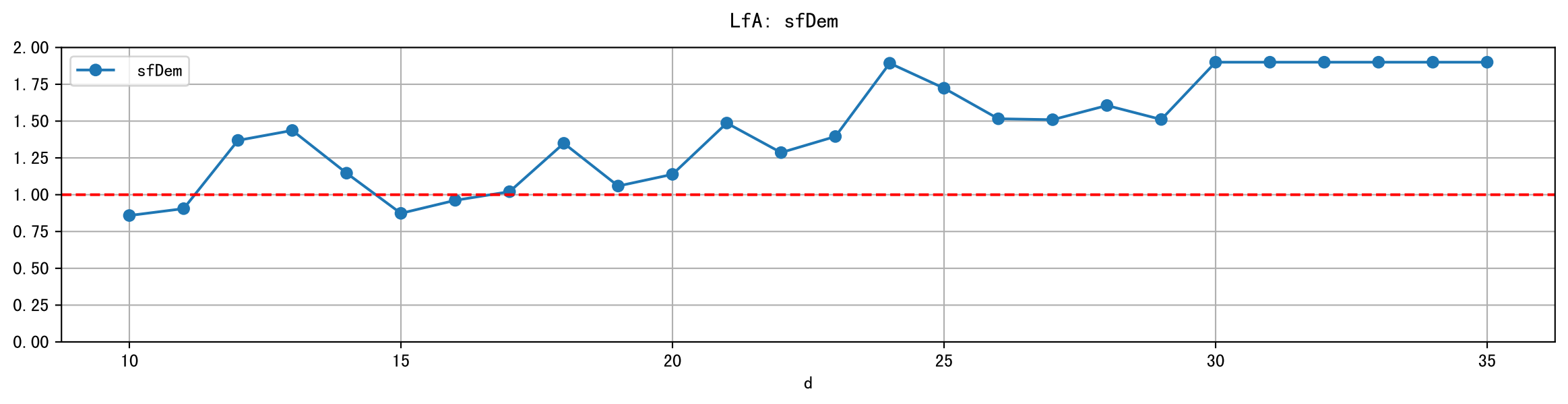

LfA: model est vs obs0v@Q50
q50
est
0.0275
0.0250
0.0225
0.0200
0.0175
0.0150
0.0125
15.0
17.5
20.0
22.5
25.0
27.5
30.0
32.5
35.0
age


P9AE LfA: D_5d_LfA
DeltaTypeAbbr=GrpByAge
DeltaTypeAbbr=GrpByDay
DeltaTypeAbbr=WeiAvgByD
pcrDelta_avg
pcrDeltaAdj_avg
d

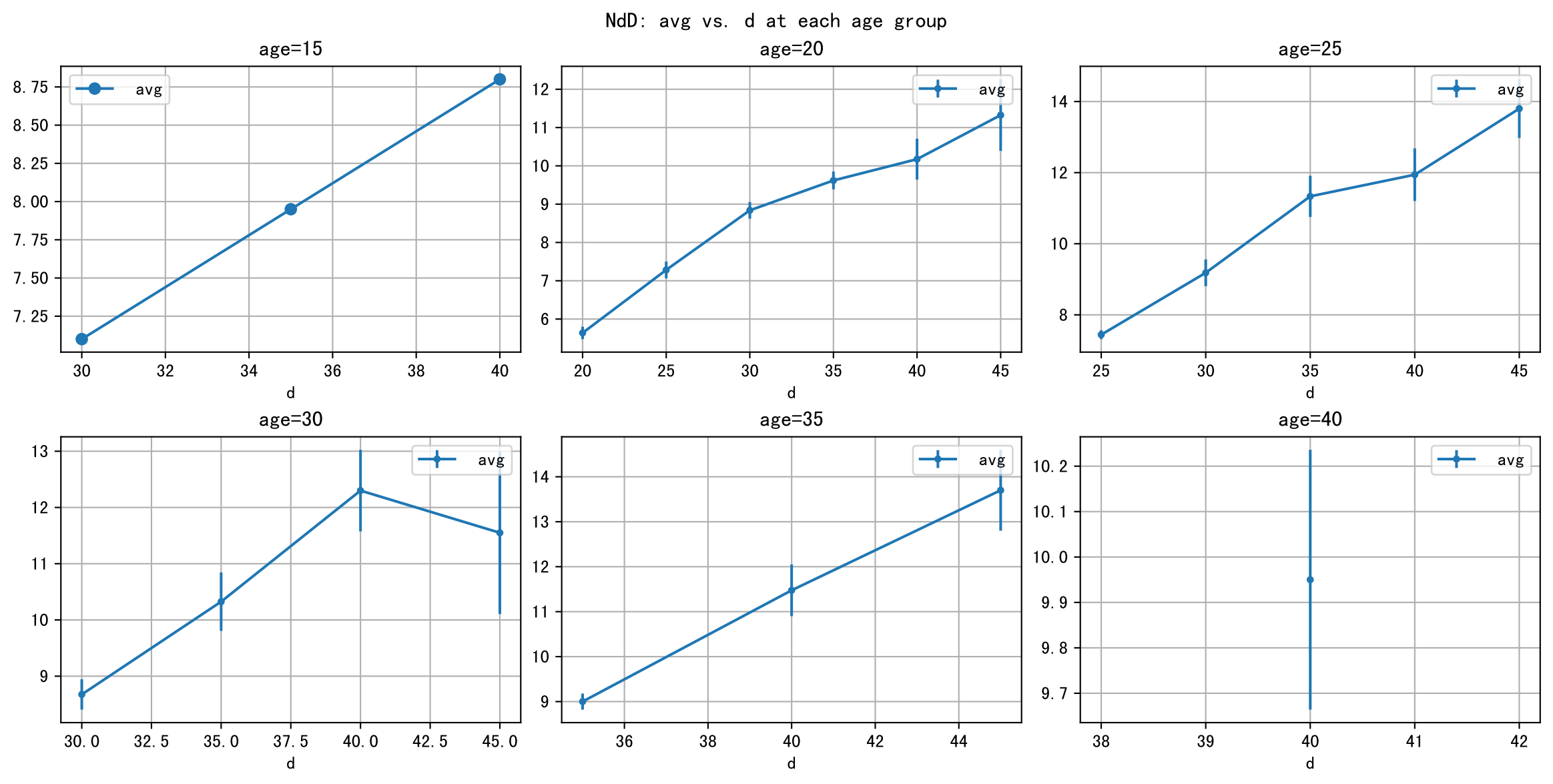

P9AE LfA: D_15d_LfA
DeltaTypeAbbr=GrpByAge
DeltaTypeAbbr=GrpByDay
DeltaTypeAbbr=WeiAvgByD
pcrDelta_avg
pcrDeltaAdj_avg
150
125
100
75
50
25
0
15
20
25
30
35
40
45
d

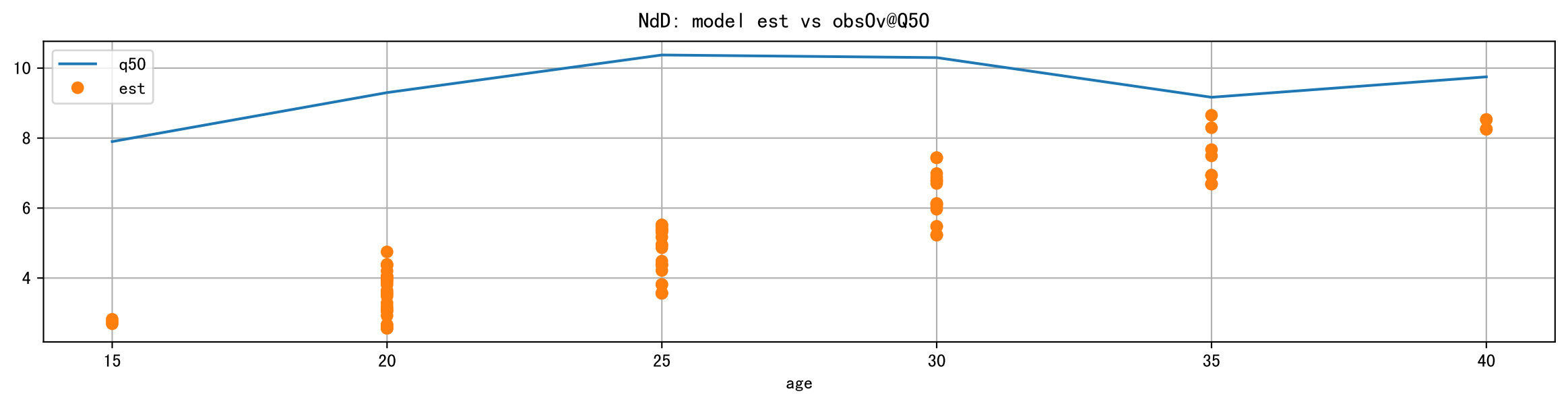

P9AE LfA: D_Q50_LfA
DeltaTypeAbbr=GrpByAge
DeltaTypeAbbr=GrpByDay
DeltaTypeAbbr=WeiAvgByD
pcrDelta_avg
pcrDeltaAdj_avg
d

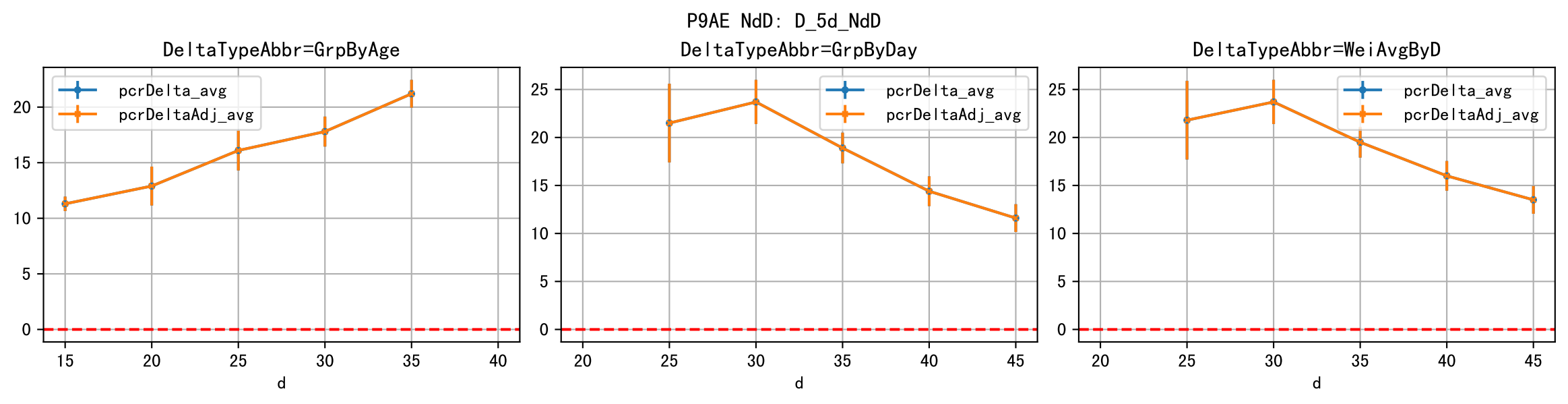

P9AE LfA: D_Est_LfA
DeltaTypeAbbr=GrpByAge
DeltaTypeAbbr=GrpByDay
DeltaTypeAbbr=WeiAvgByD
pcrDelta_avg
pcrDeltaAdj_avg
d

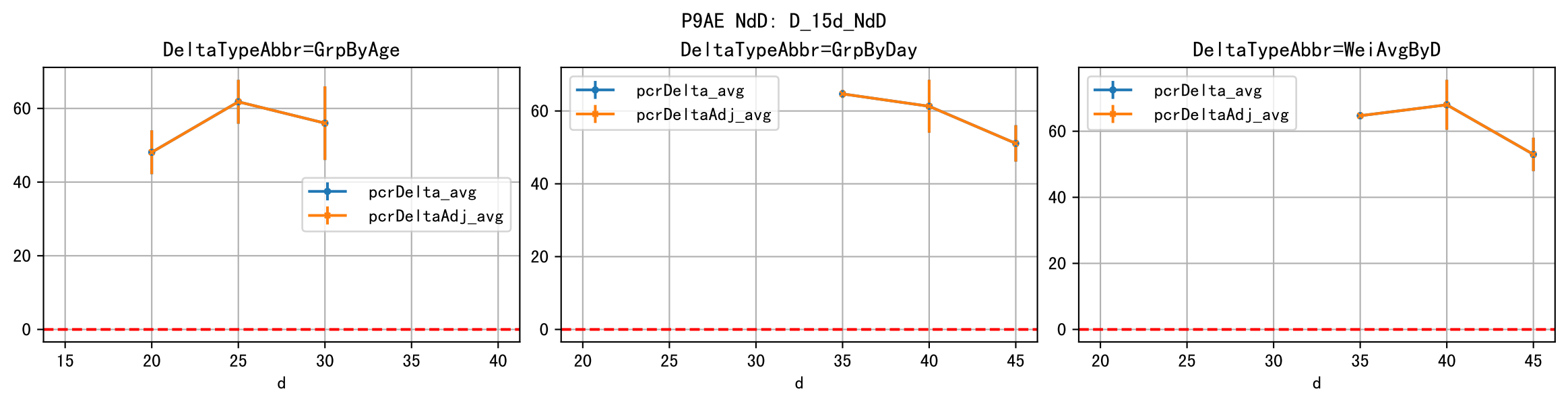

LfA: sfDem
sfDem
2.00
1.75
1.50
1.25
1.00
0.75
0.50
0.25
0.00
10
15
20
25
30
35
d

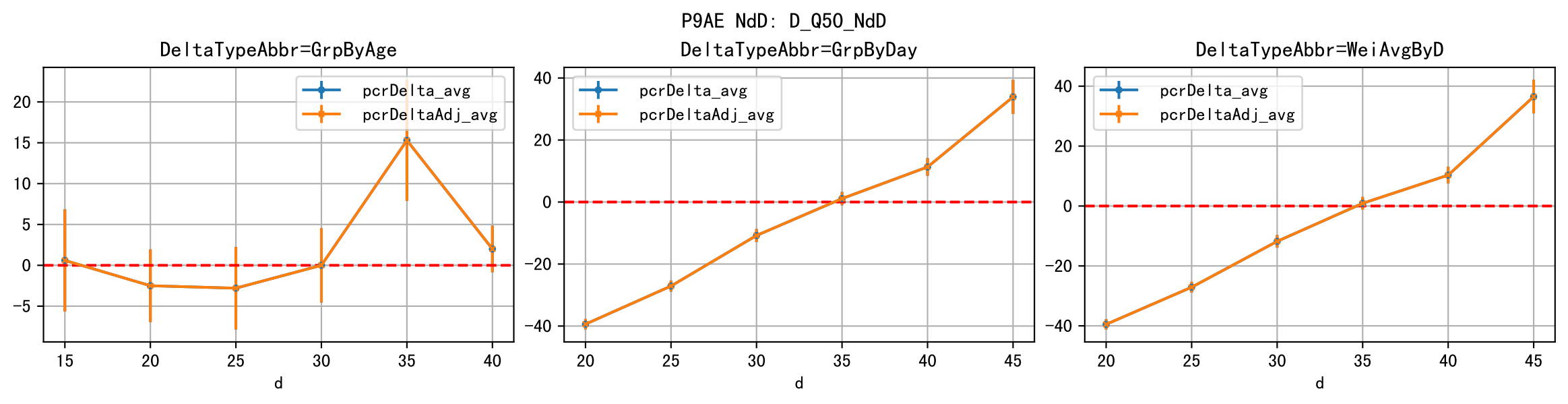

d
20
22
24
26
28
30
32
34
36
38
40
42
44
40
20
0
−20
−40

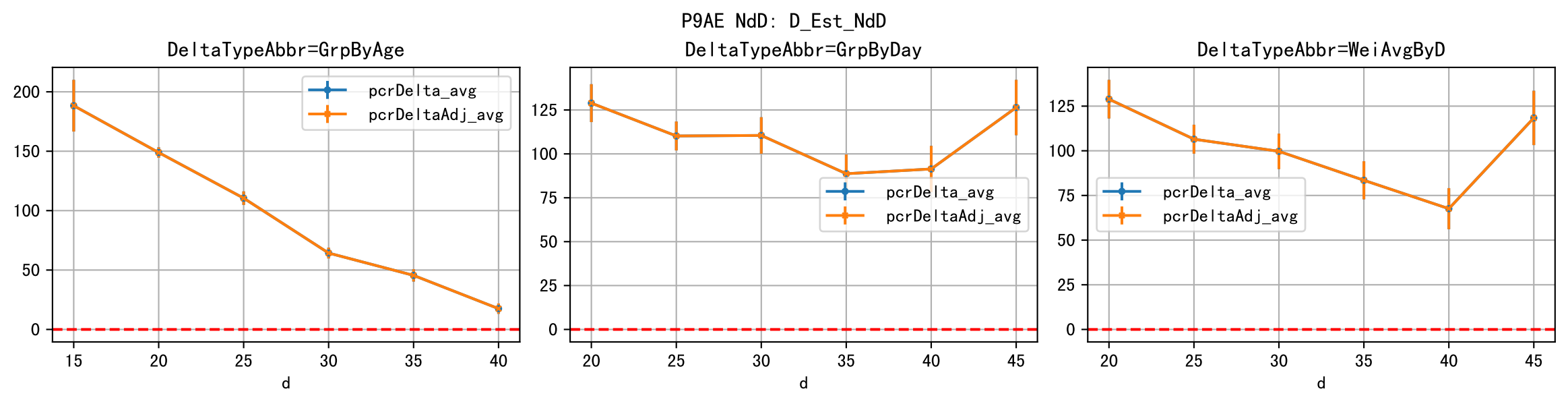

NdD: avg vs. d at each age group
age=15
age=20
age=25
age=30
age=35
age=40
avg
d

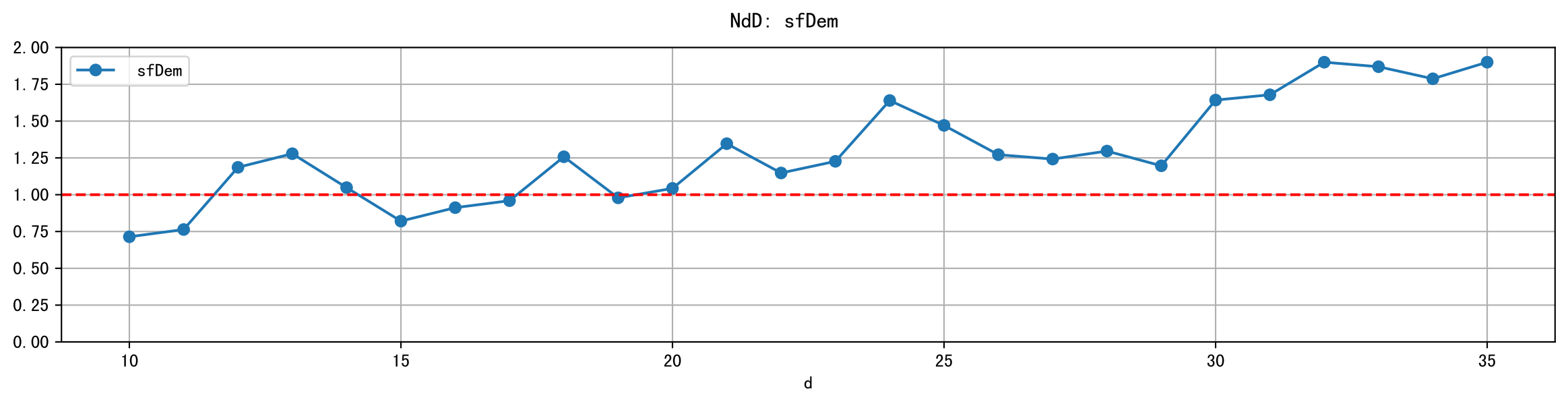

NdD: model est vs obsOv@Q50
q50
est
10
8
6
4
15
20
25
30
35
40
age

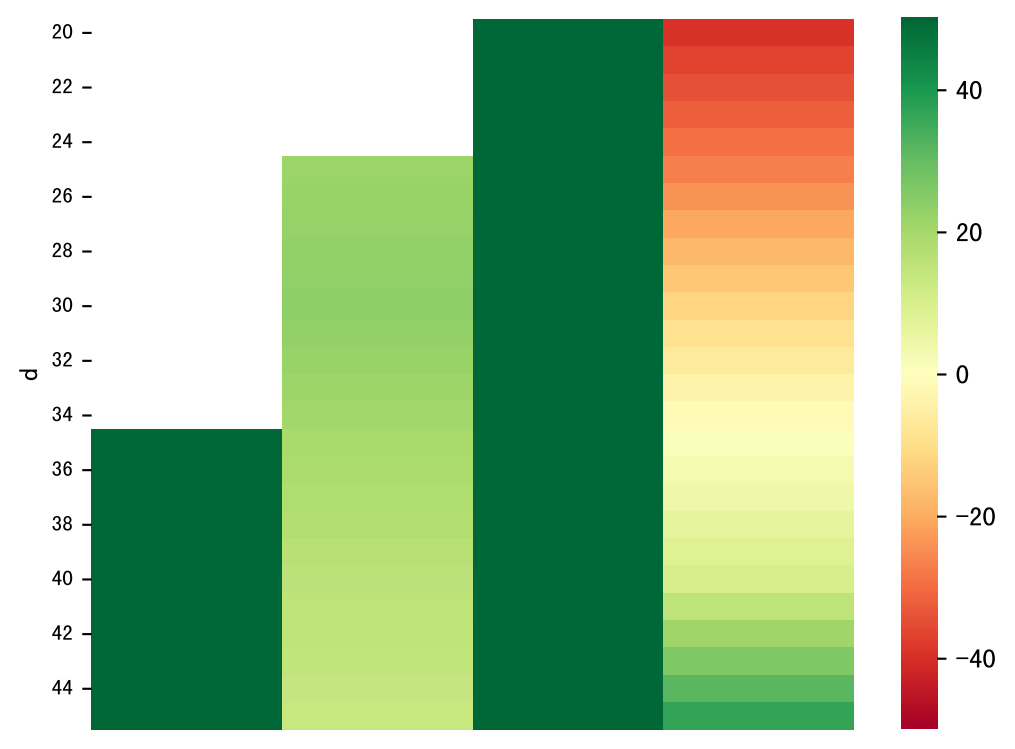

P9AE NdD: D_5d_NdD
DeltaTypeAbbr=GrpByAge
DeltaTypeAbbr=GrpByDay
DeltaTypeAbbr=WeiAvgByD
pcrDelta_avg
pcrDeltaAdj_avg
d

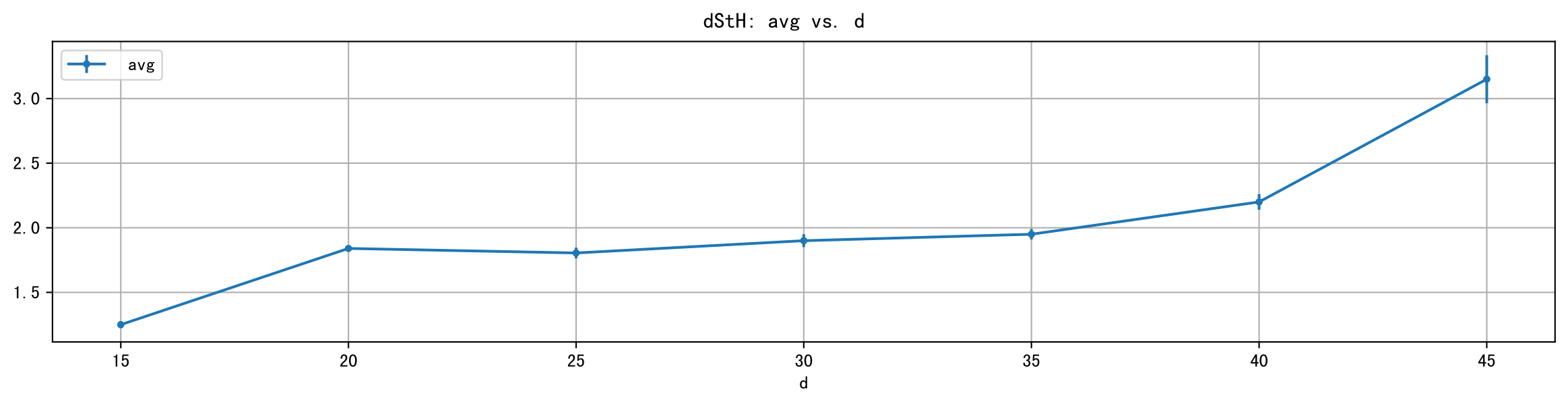

P9AE NdD: D_15d_NdD
DeltaTypeAbbr=GrpByAge
DeltaTypeAbbr=GrpByDay
DeltaTypeAbbr=WeiAvgByD
pcrDelta_avg
pcrDeltaAdj_avg
d

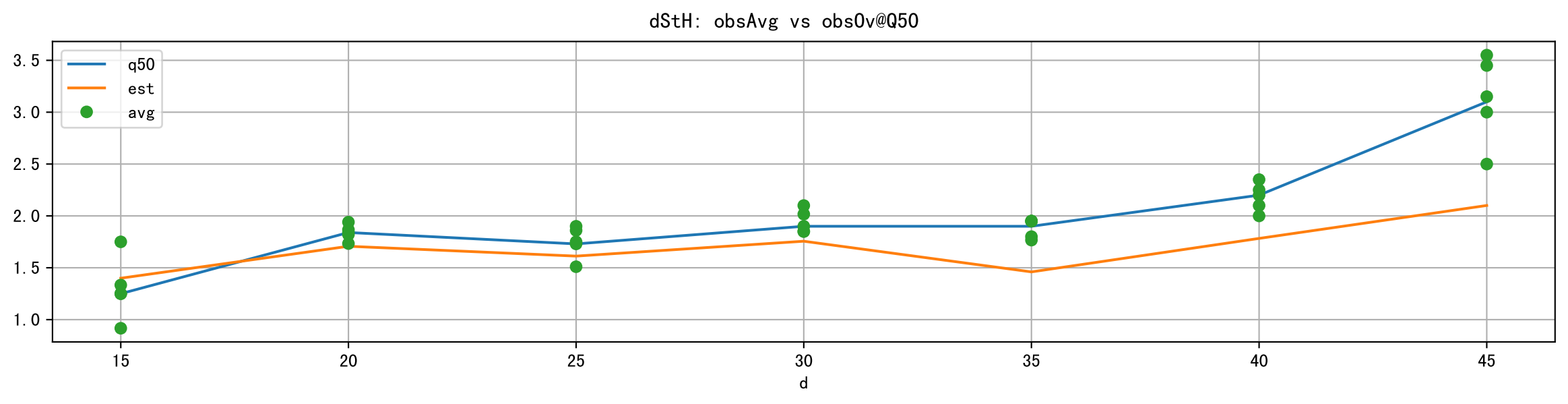

P9AE NdD: D_Q50_NdD
DeltaTypeAbbr=GrpByAge
DeltaTypeAbbr=GrpByDay
DeltaTypeAbbr=WeiAvgByD
pcrDelta_avg
pcrDeltaAdj_avg
d

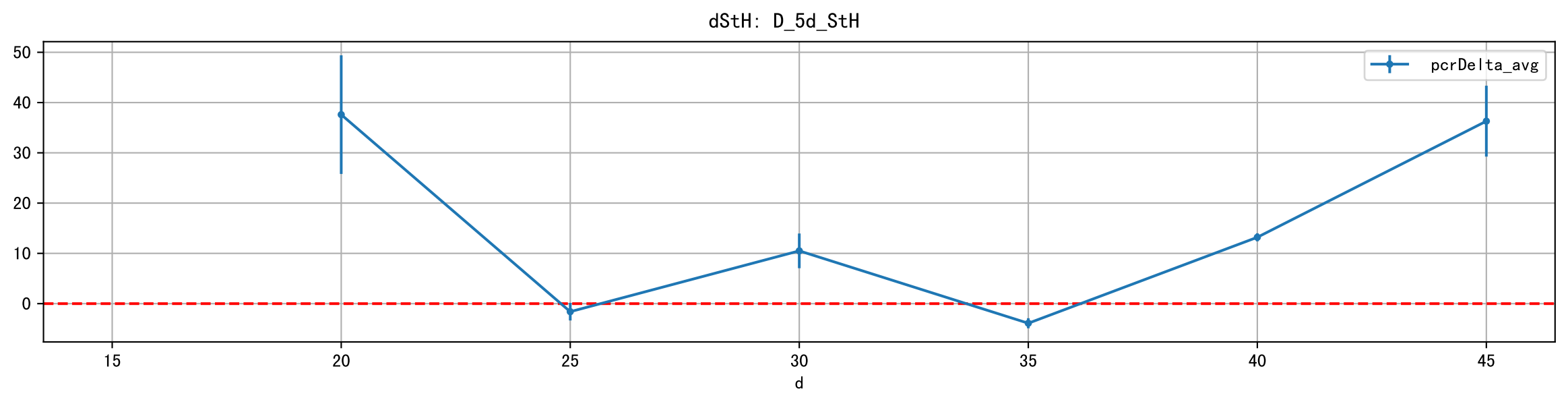

P9AE NdD: D_Est_NdD
DeltaTypeAbbr=GrpByAge
DeltaTypeAbbr=GrpByDay
DeltaTypeAbbr=WeiAvgByD
pcrDelta_avg
pcrDeltaAdj_avg
d

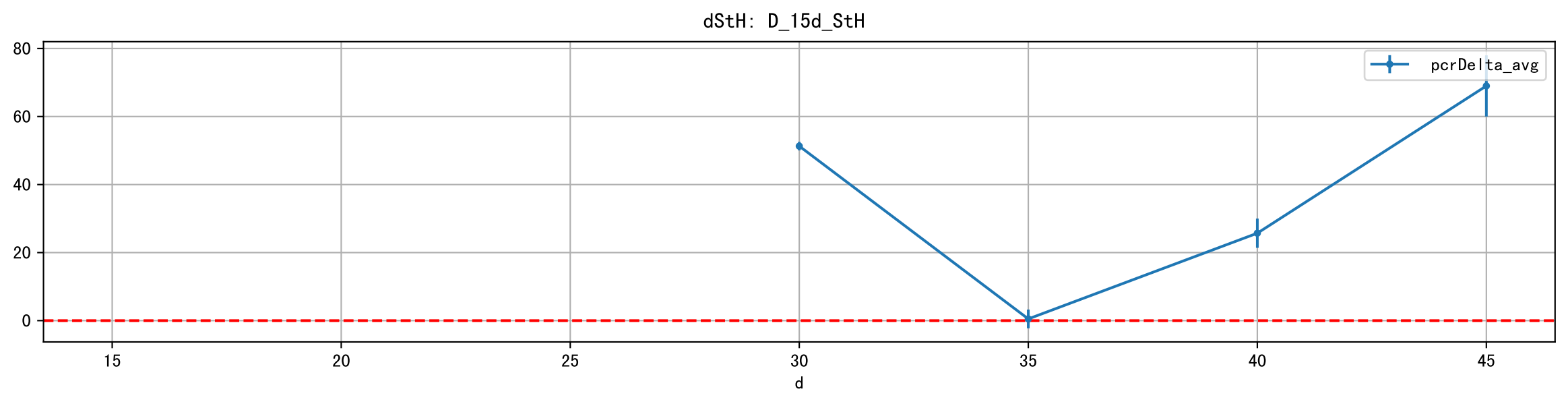

NdD: sfDem
sfDem
2.00
1.75
1.50
1.25
1.00
0.75
0.50
0.25
0.00
10
15
20
25
30
35
d

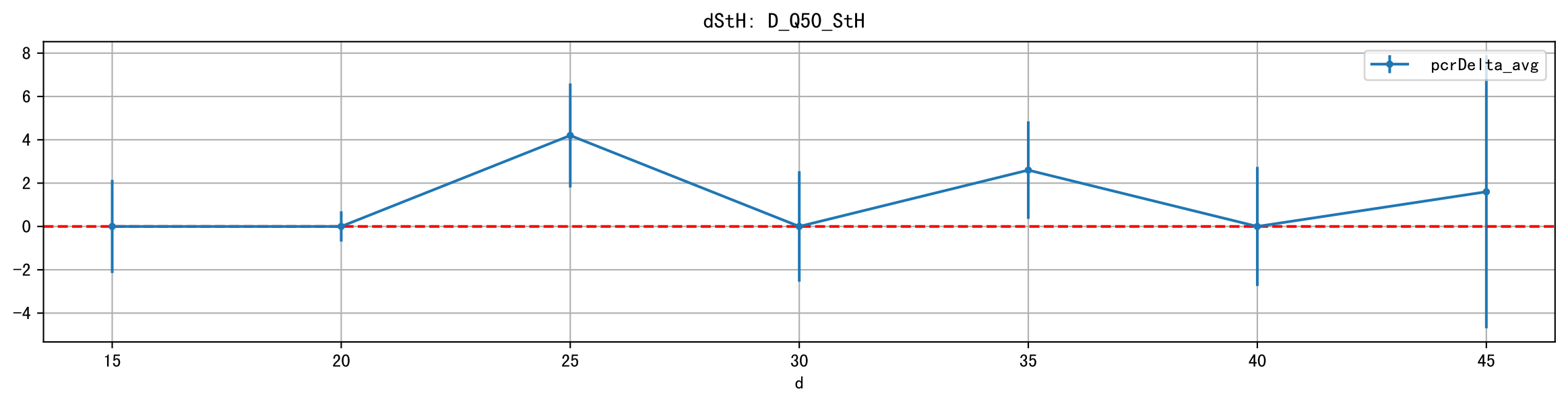

d
20
22
24
26
28
30
32
34
36
38
40
42
44
40
20
0
−20
−40

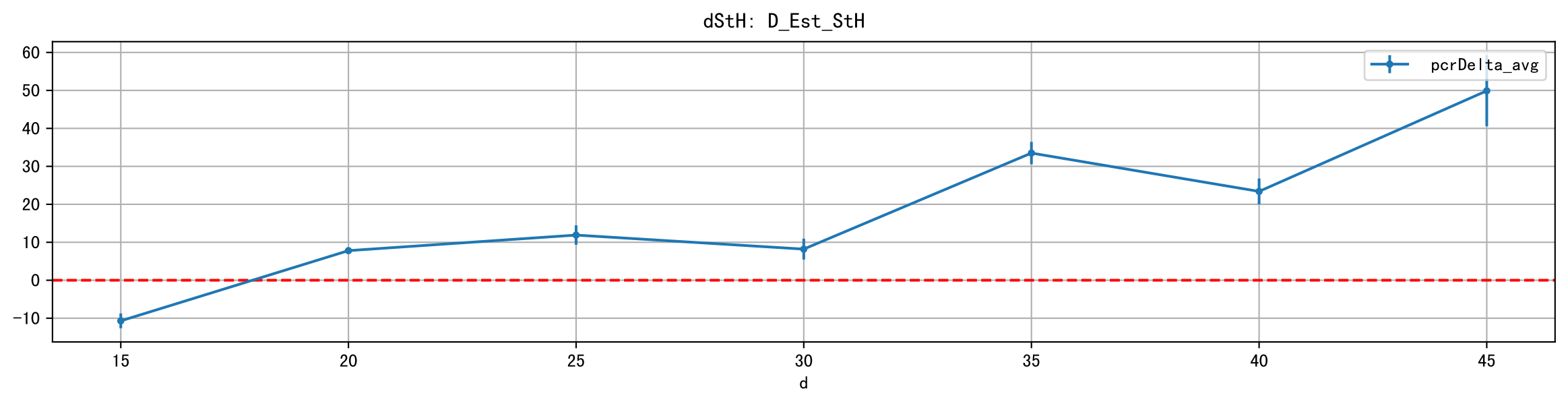

dStH: avg vs. d
avg
3.0
2.5
2.0
1.5
15
20
25
30
35
40
45
d

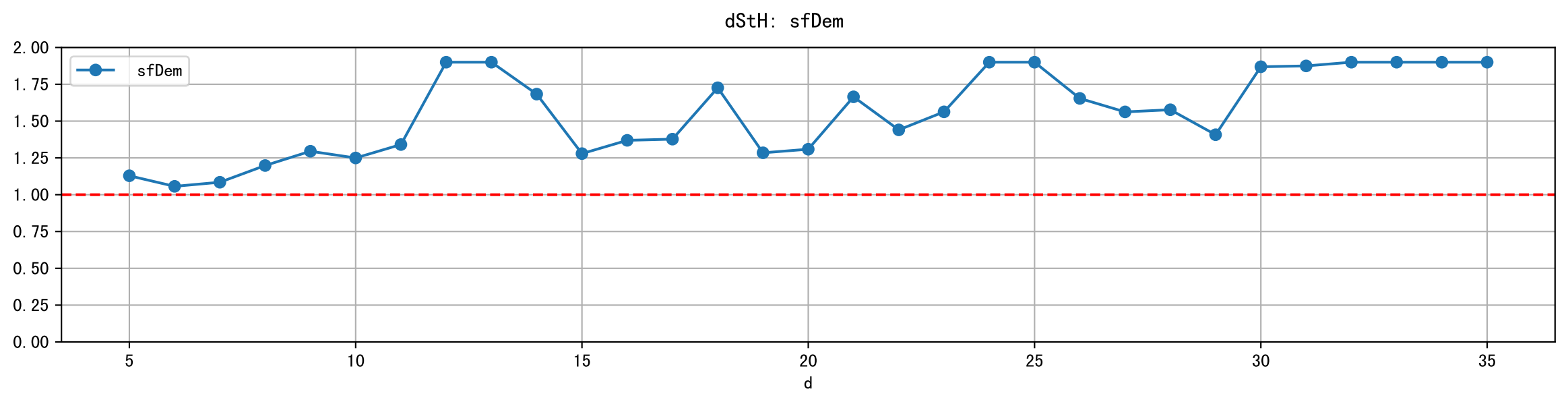

dStH: obsAvg vs obsOv@Q50
q50
est
avg
3.5
3.0
2.5
2.0
1.5
1.0
15
20
25
30
35
40
45
d

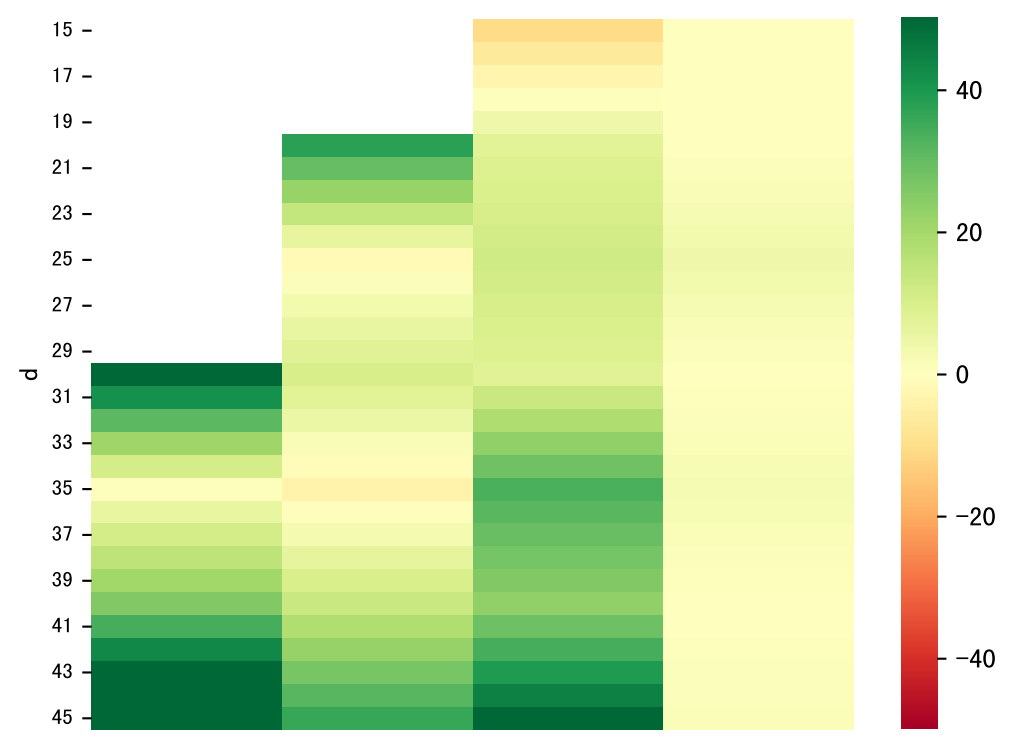

dStH: D_5d_StH
pcrDelta_avg
50
40
30
20
10
0
15
20
25
30
35
40
45
d

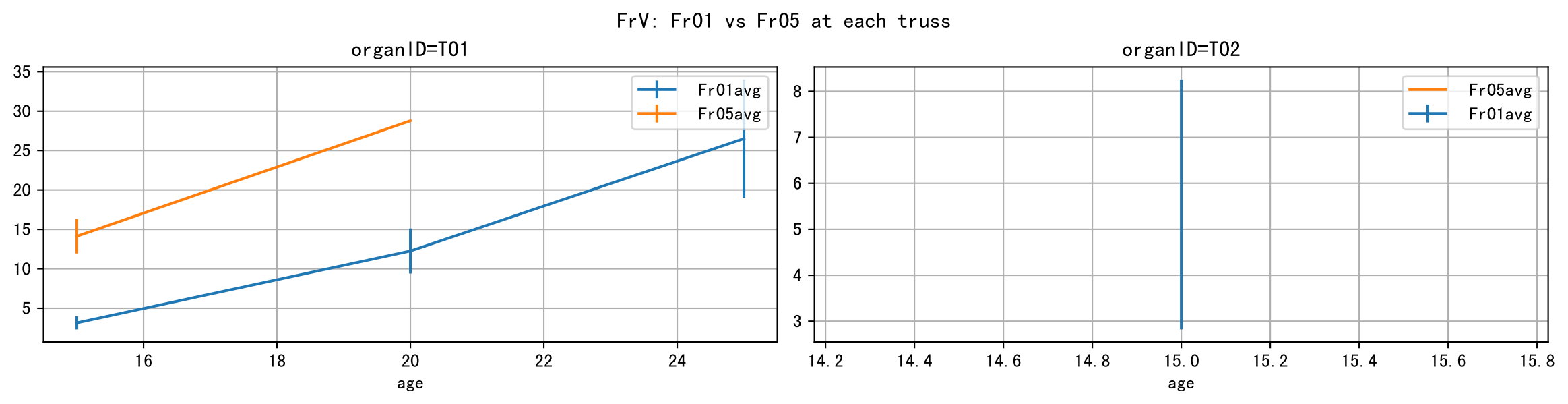

dStH: D_15d_StH
pcrDelta_avg
80
60
40
20
0
15
20
25
30
35
40
45
d

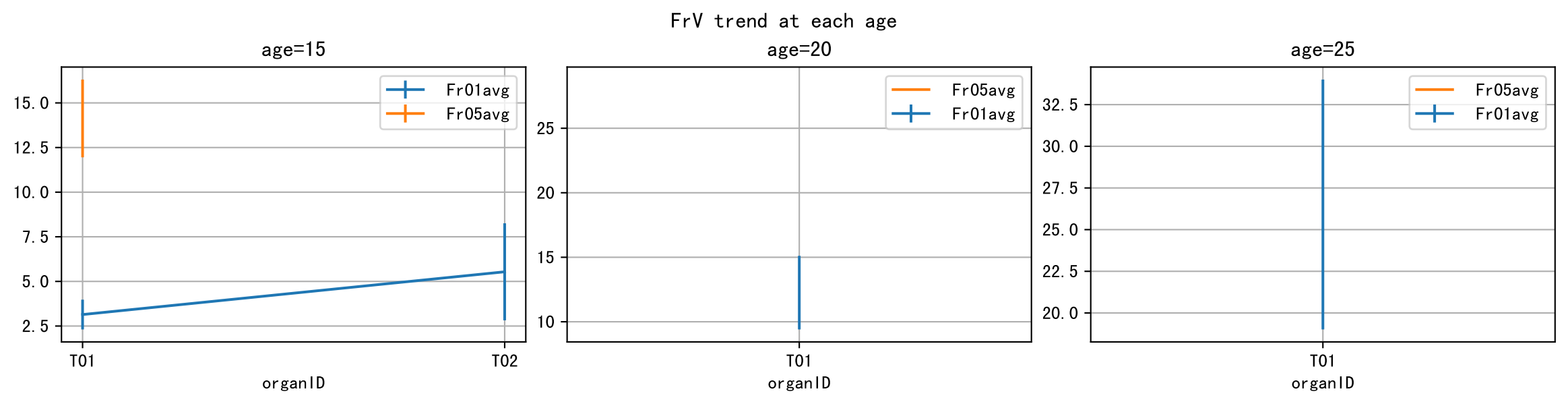

dStH: D_Q50_StH
pcrDelta_avg
8
6
4
2
0
−2
−4
15
20
25
30
35
40
45
d

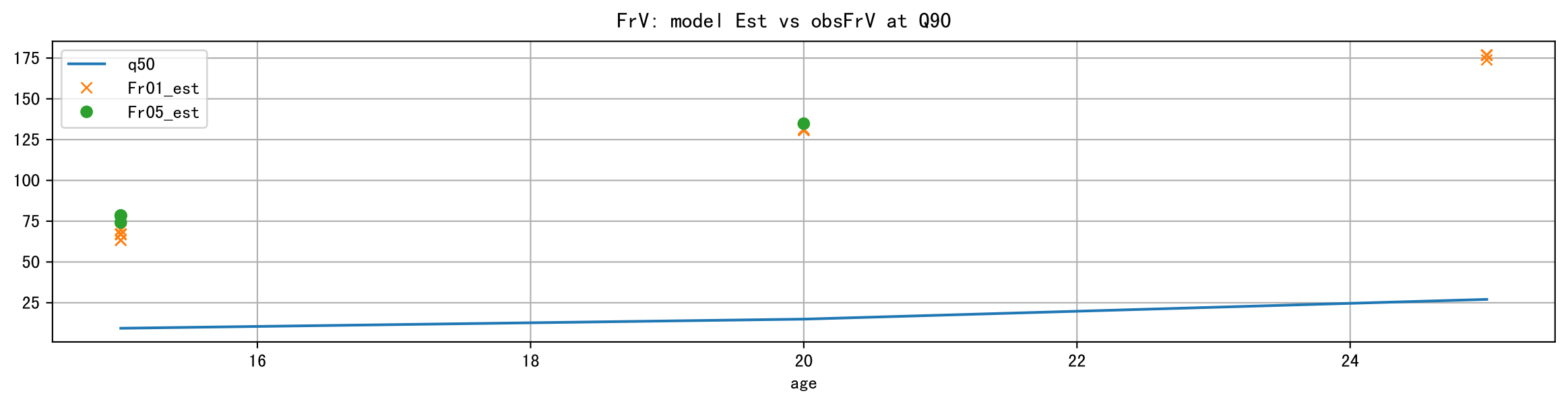

dStH: D_Est_StH
pcrDelta_avg
60
50
40
30
20
10
0
−10
15
20
25
30
35
40
45
d

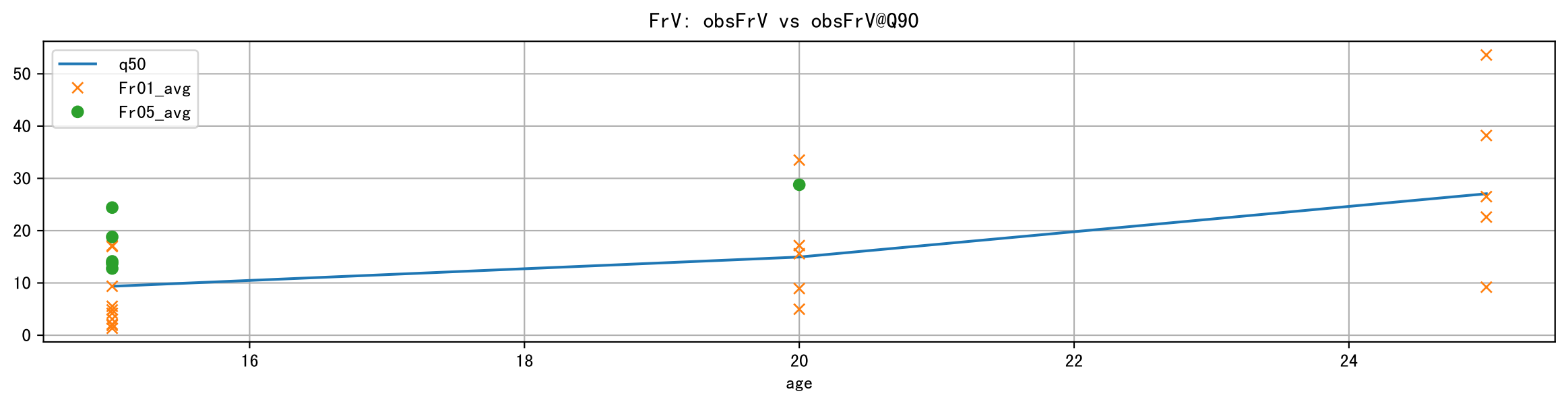

dStH: sfDem
sfDem
2.00
1.75
1.50
1.25
1.00
0.75
0.50
0.25
0.00
5
10
15
20
25
30
35
d

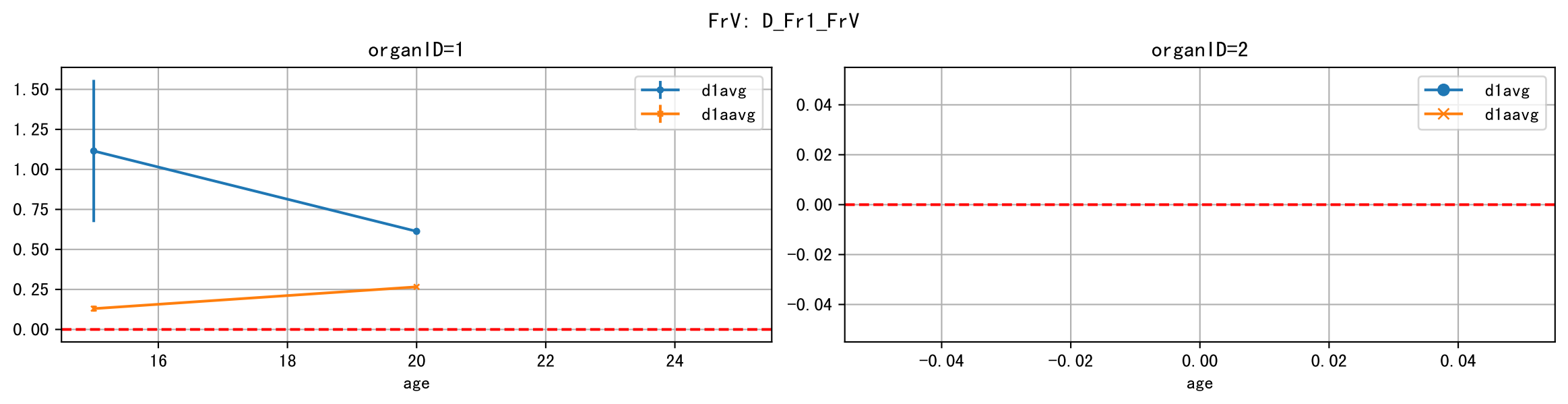

d
15
17
19
21
23
25
27
29
31
33
35
37
39
41
43
45
40
20
0
−20
−40

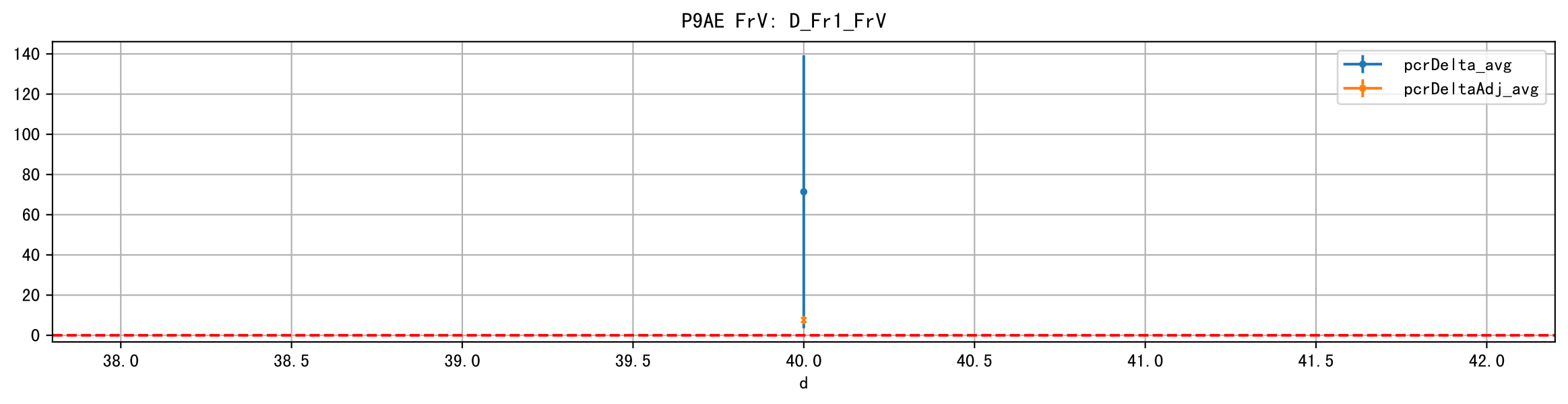

FrV: Fr01 vs Fr05 at each truss
organID=T01
organID=T02
Fr01avg
Fr05avg
Fr05avg
Fr01avg
age
age
35
30
25
20
15
10
5
8
7
6
5
4
3
16
18
20
22
24
14.2
14.4
14.6
14.8
15.0
15.2
15.4
15.6
15.8

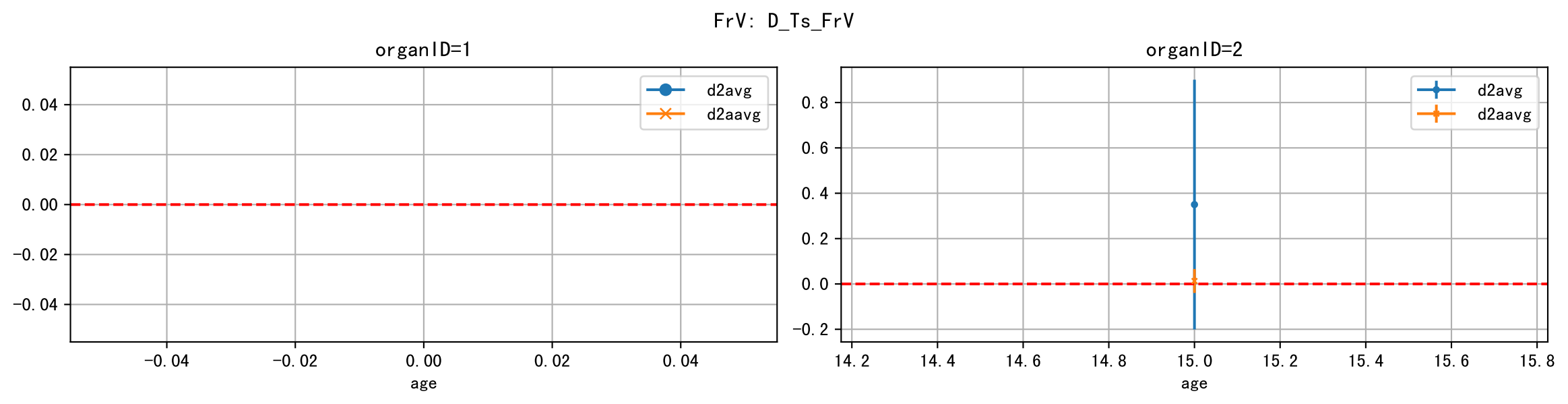

FrV trend at each age
age=15
age=20
age=25
Fr01avg
Fr05avg
15.0
12.5
10.0
7.5
5.0
2.5
25
20
15
10
32.5
30.0
27.5
25.0
22.5
20.0
T01
T02
organID

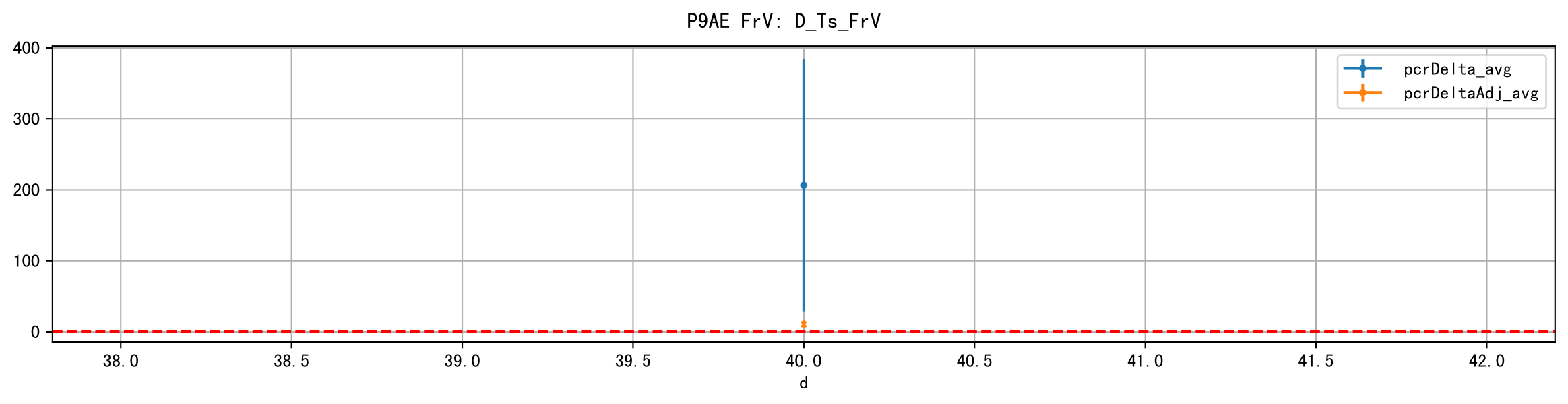

FrV: model Est vs obsFrV at Q90
q50
Fr01_est
Fr05_est
175
150
125
100
75
50
25
16
18
20
22
24
age

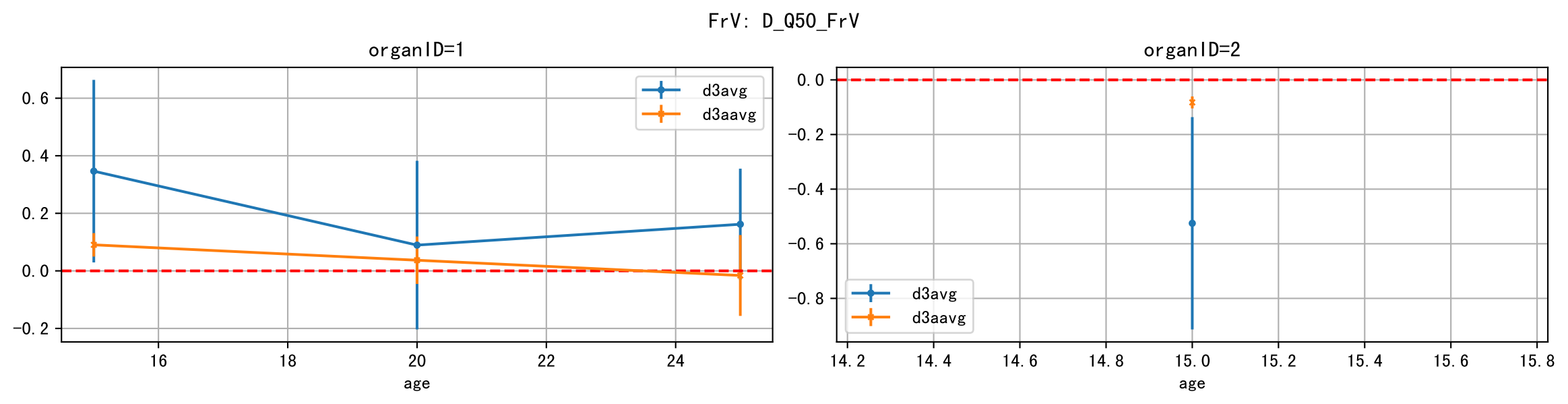

FrV: obsFrV vs obsFrV@Q90
q50
Fr01_avg
Fr05_avg
0
10
20
30
40
50
16
18
20
22
24
age

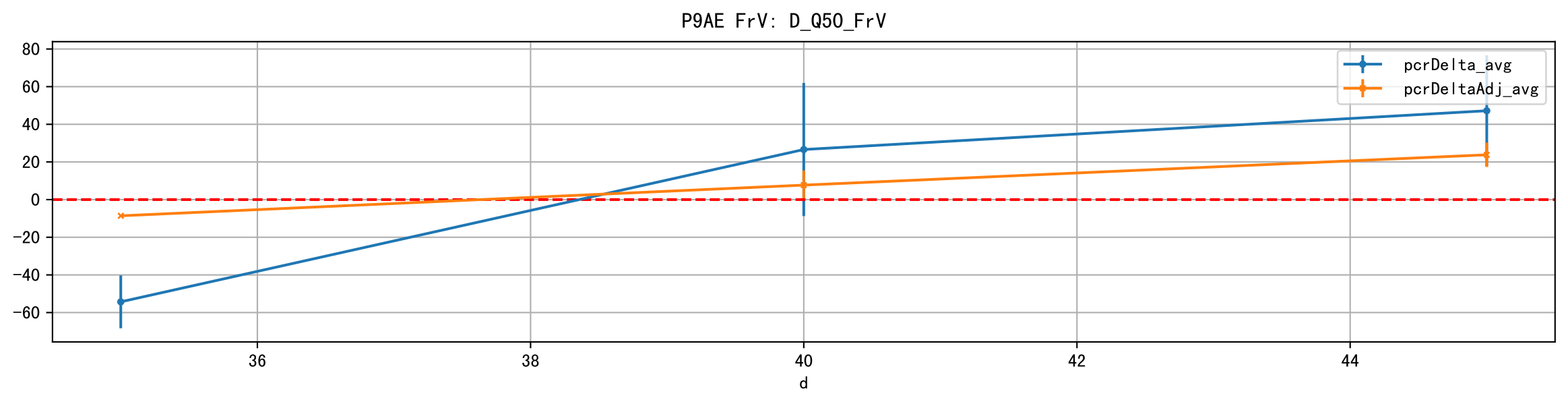

FrV: D_Fr1_FrV
organID=1
organID=2
d1avg
d1aavg
1.50
1.25
1.00
0.75
0.50
0.25
0.00
0.04
0.02
0.00
-0.02
-0.04
16
18
20
22
24
age

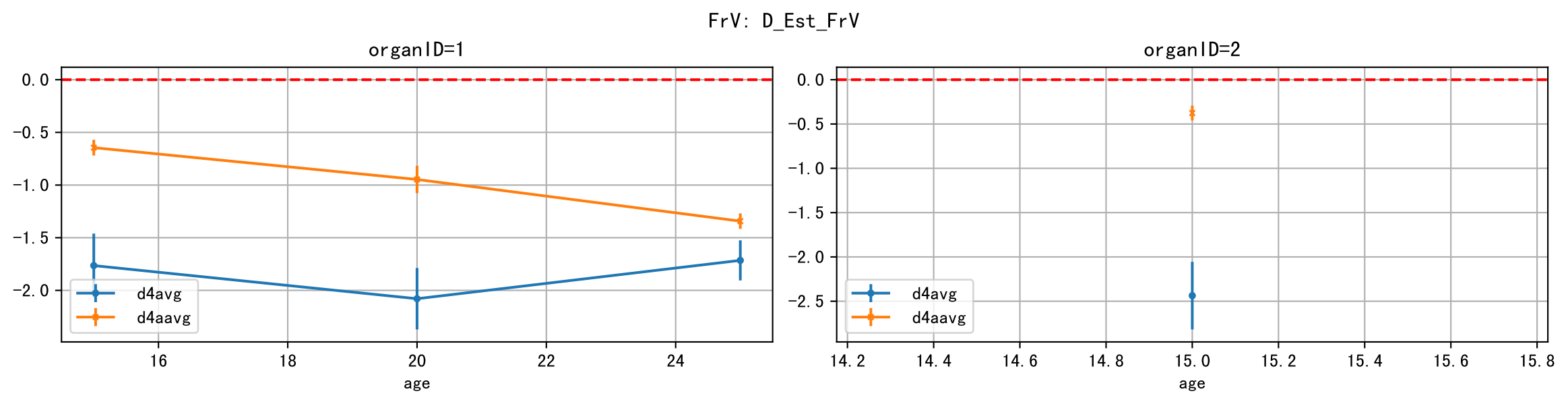

P9AE FrV: D_Fr1_FrV
pcrDelta_avg
pcrDeltaAdj_avg
140
120
100
80
60
40
20
0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
41.5
42.0
d

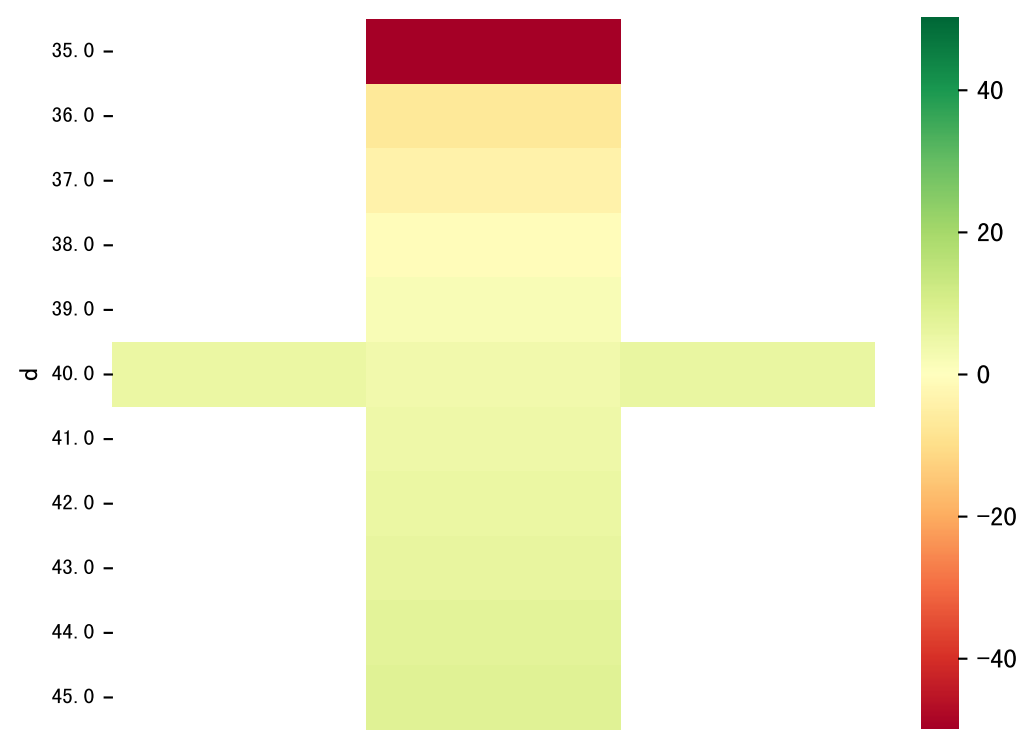

FrV: D_Ts_FrV
organID=1
d2avg
d2aavg
0.04
0.02
0.00
-0.02
-0.04
-0.04
-0.02
0.00
0.02
0.04
age
organID=2
d2avg
d2aavg
0.8
0.6
0.4
0.2
0.0
-0.2
14.2
14.4
14.6
14.8
15.0
15.2
15.4
15.6
15.8
age

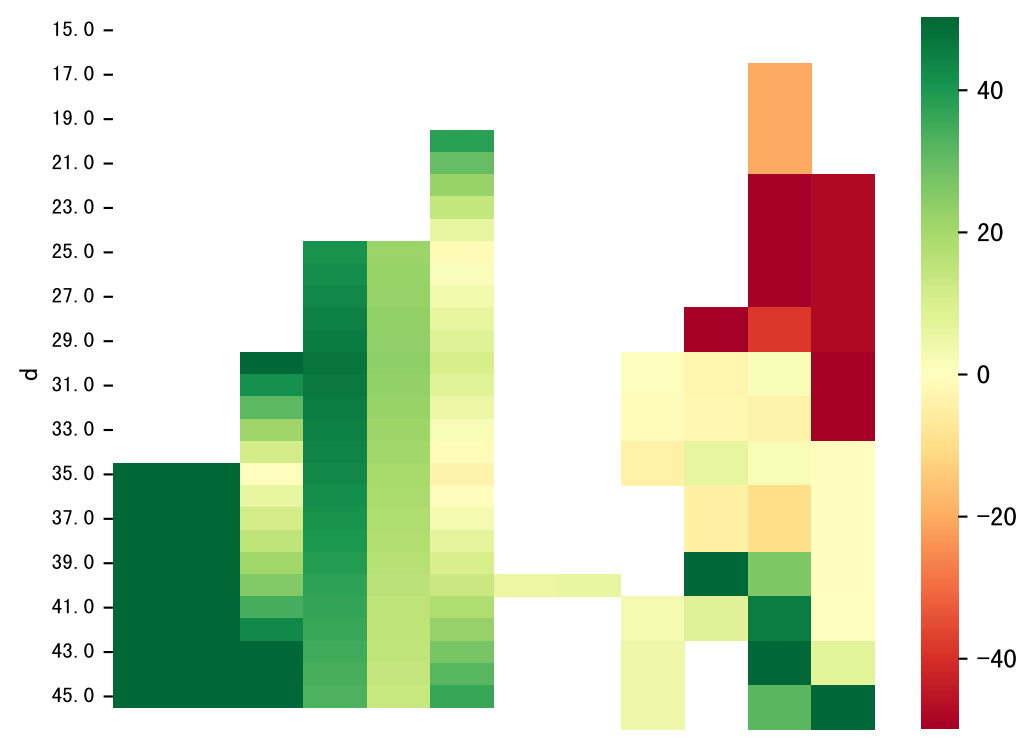

P9AE FrV: D_Ts_FrV
pcrDelta_avg
pcrDeltaAdj_avg
400
300
200
100
0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
41.5
42.0
d


FrV: D_Q50_FrV
organID=1
organID=2
d3avg
d3aavg
age
age


P9AE FrV: D_Q5O_FrV
pcrDelta_avg
pcrDeltaAdj_avg
80
60
40
20
0
−20
−40
−60
36
38
40
42
44
d


FrV: D_Est_FrV
organID=1
organID=2
d4avg
d4aavg
age
age


d
35.0
36.0
37.0
38.0
39.0
40.0
41.0
42.0
43.0
44.0
45.0
40
20
0
−20
−40


d
15.0
17.0
19.0
21.0
23.0
25.0
27.0
29.0
31.0
33.0
35.0
37.0
39.0
41.0
43.0
45.0
40
20
0
−20
−40