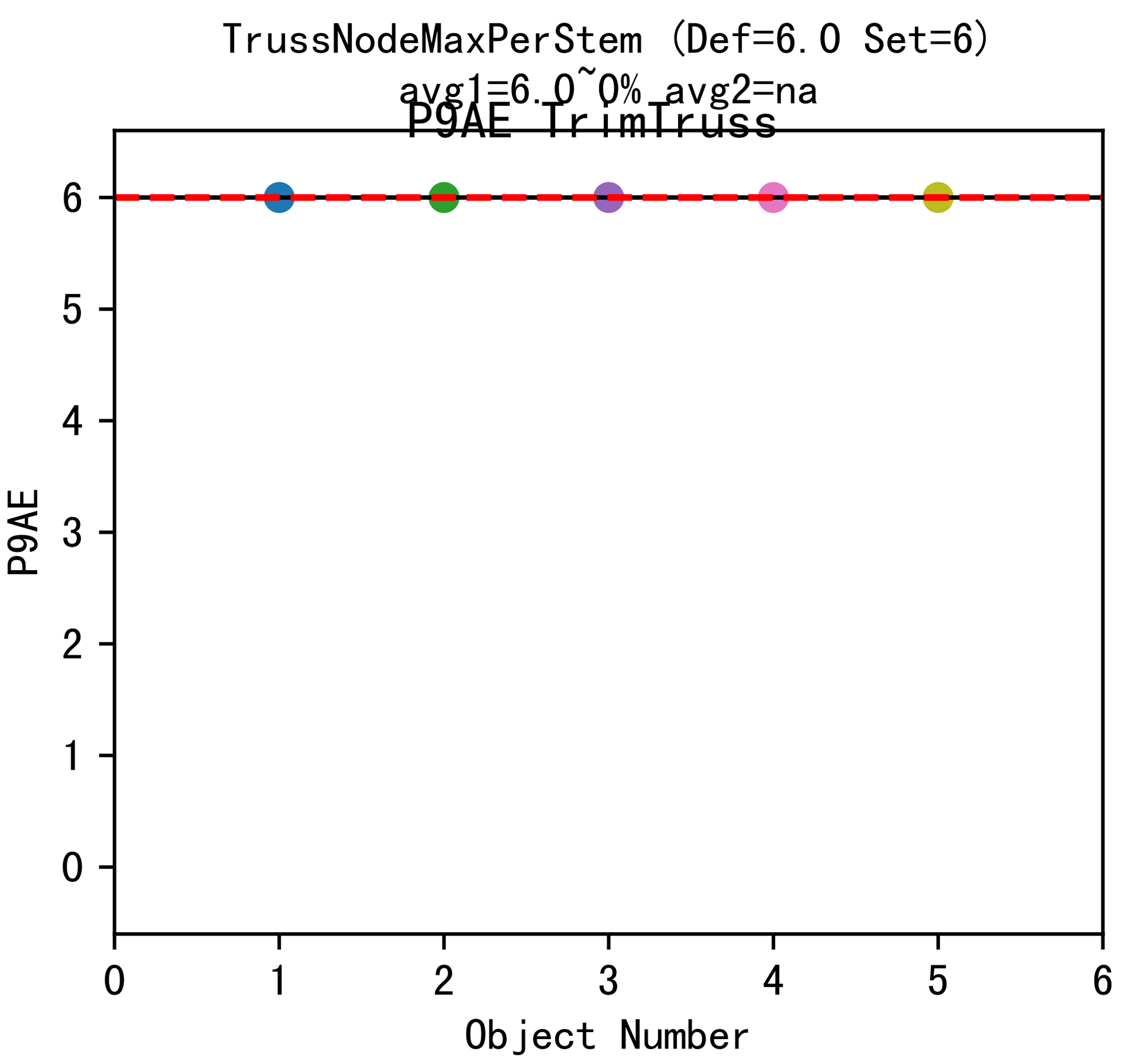
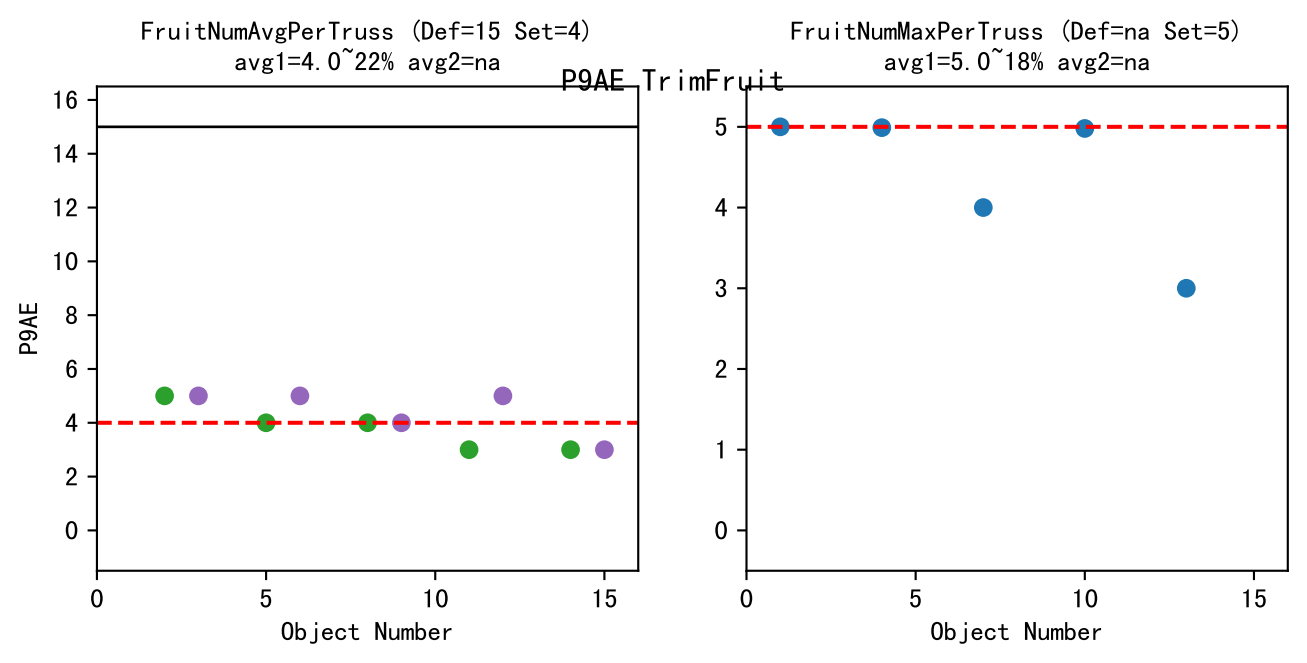
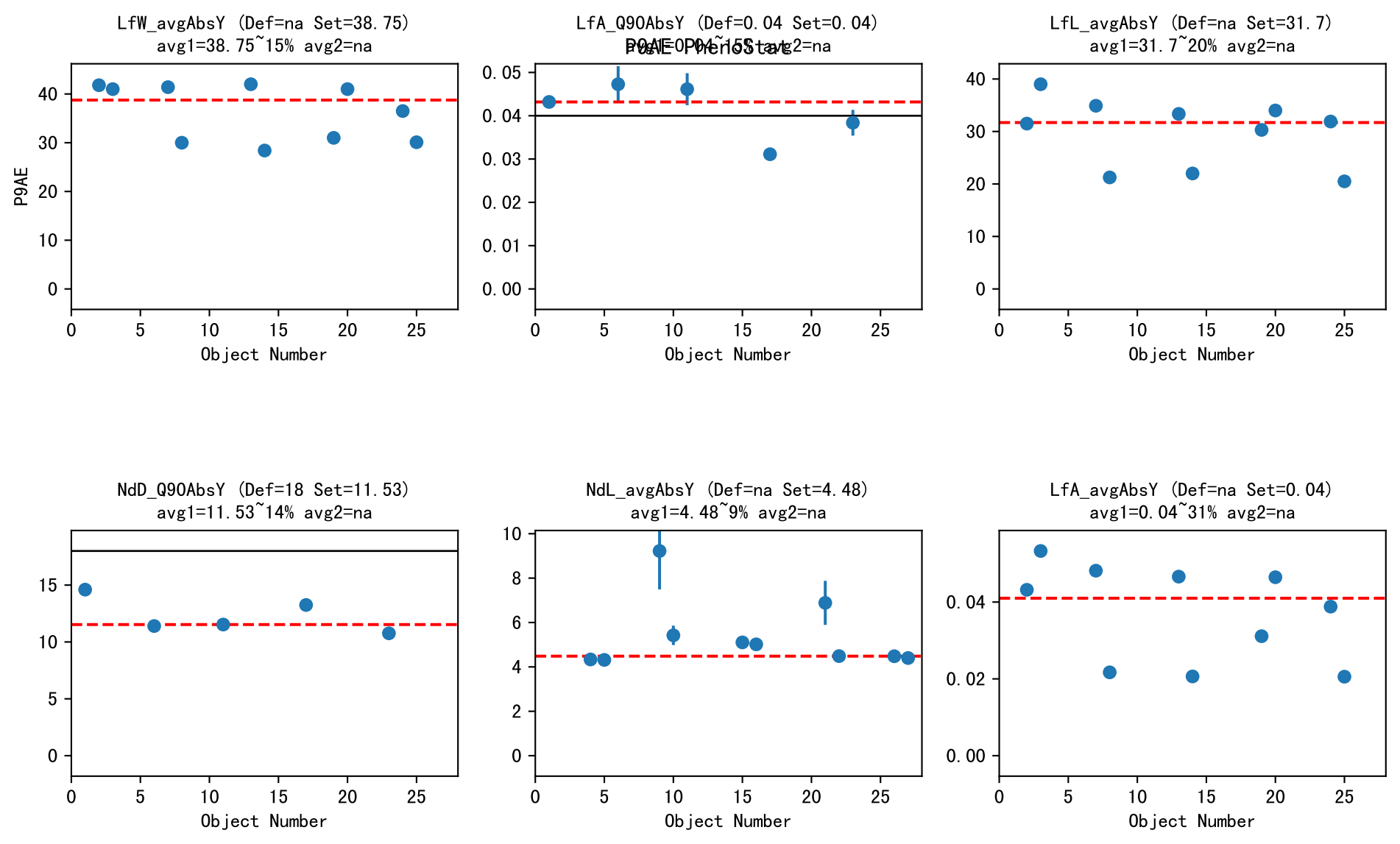
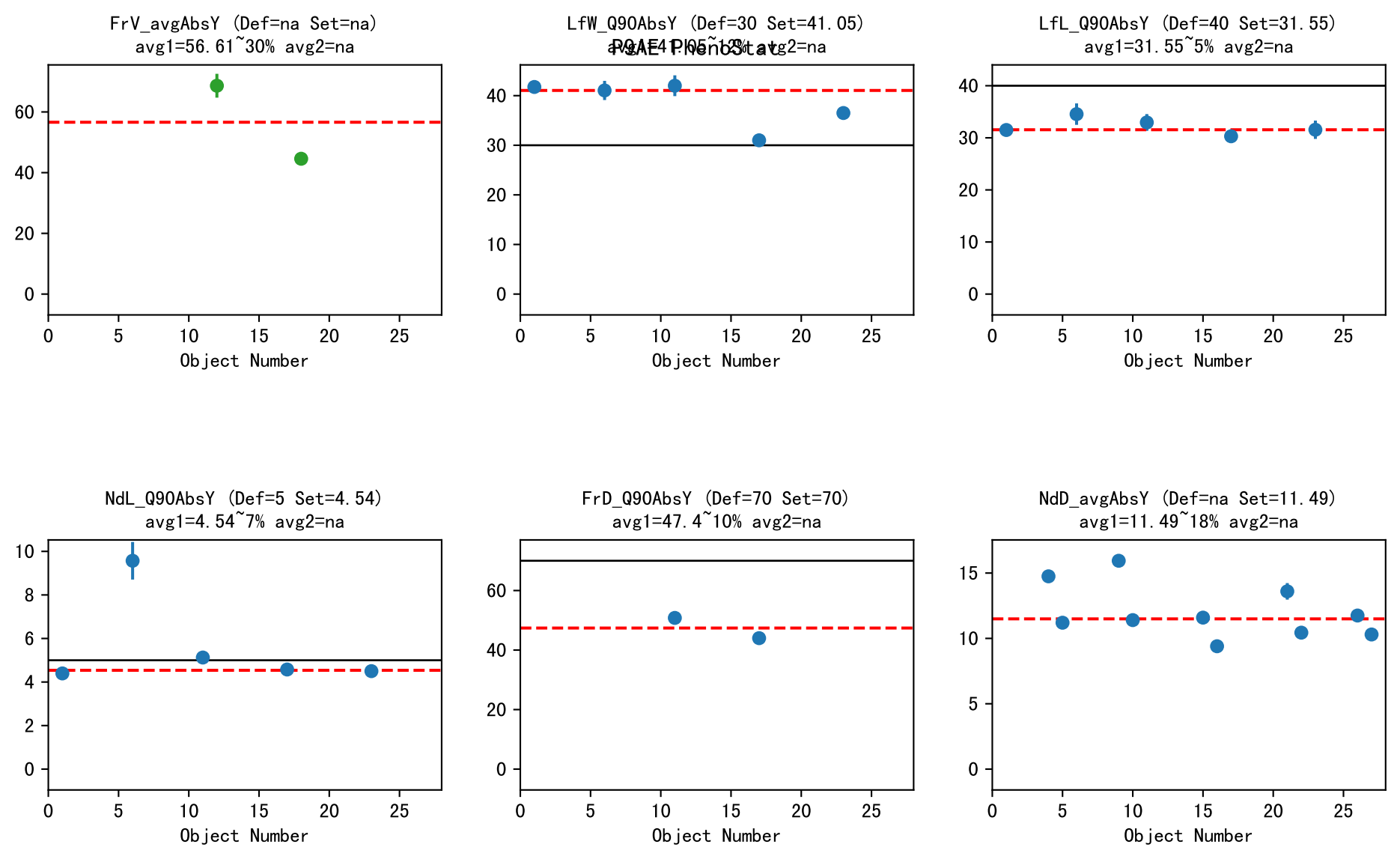
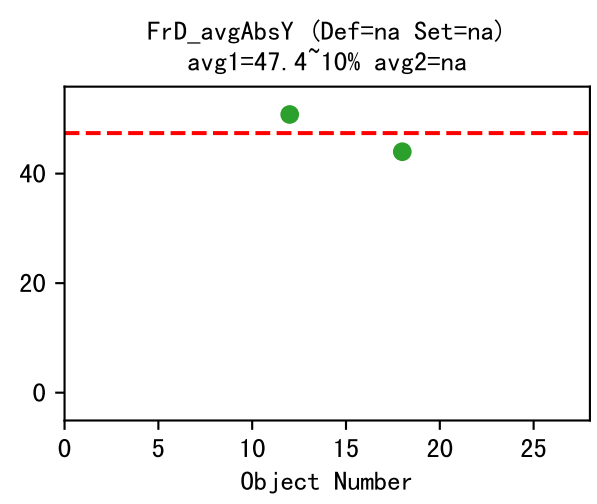
Phenotype Data Analysis Plots
PhenoData day range = 10 - 48
Analysis cutoff day = 48
NC11 P9
2025-05-19 (Day 49)

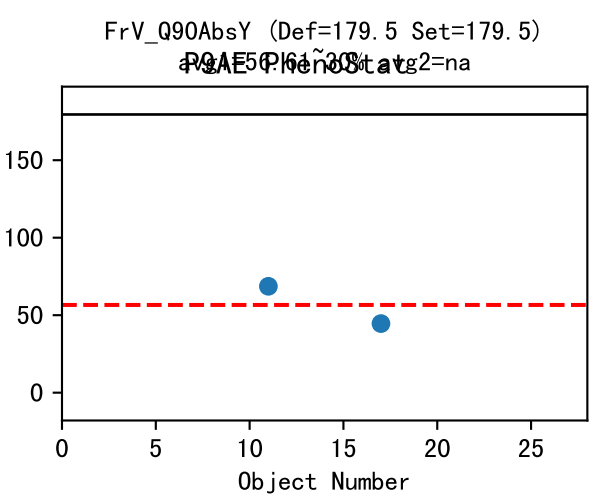

TrussNodeMaxPerStem (Def=6.0 Set=6)
avg1=6.0~0% avg2=na
P9AE TrimTruss
P9AE
Object Number
0
1
2
3
4
5
6

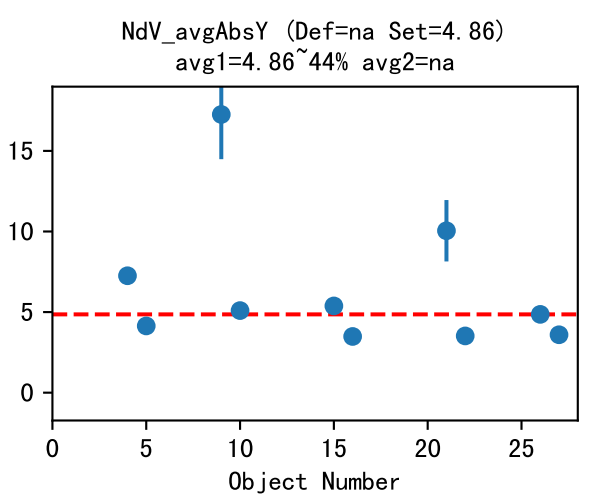

FruitNumAvgPerTruss (Def=15 Set=4)
avg1=4.0~22% avg2=na
FruitNumMaxPerTruss (Def=na Set=5)
avg1=5.0~18% avg2=na
P9AE_TrimFruit
P9AE
Object Number
Object Number

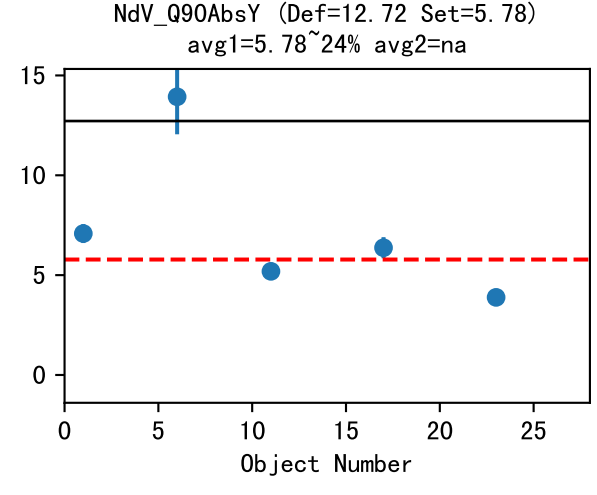

LfW_avgAbsY (Def=na Set=38.75)
avg1=38.75~15% avg2=na
P9AE
Object Number
LfA_Q90AbsY (Def=0.04 Set=0.04)
avg1=0.04~15% avg2=na
Object Number
LfL_avgAbsY (Def=na Set=31.7)
avg1=31.7~20% avg2=na
Object Number
NdD_Q90AbsY (Def=18 Set=11.53)
avg1=11.53~14% avg2=na
Object Number
NdL_avgAbsY (Def=na Set=4.48)
avg1=4.48~9% avg2=na
Object Number
LfA_avgAbsY (Def=na Set=0.04)
avg1=0.04~31% avg2=na
Object Number

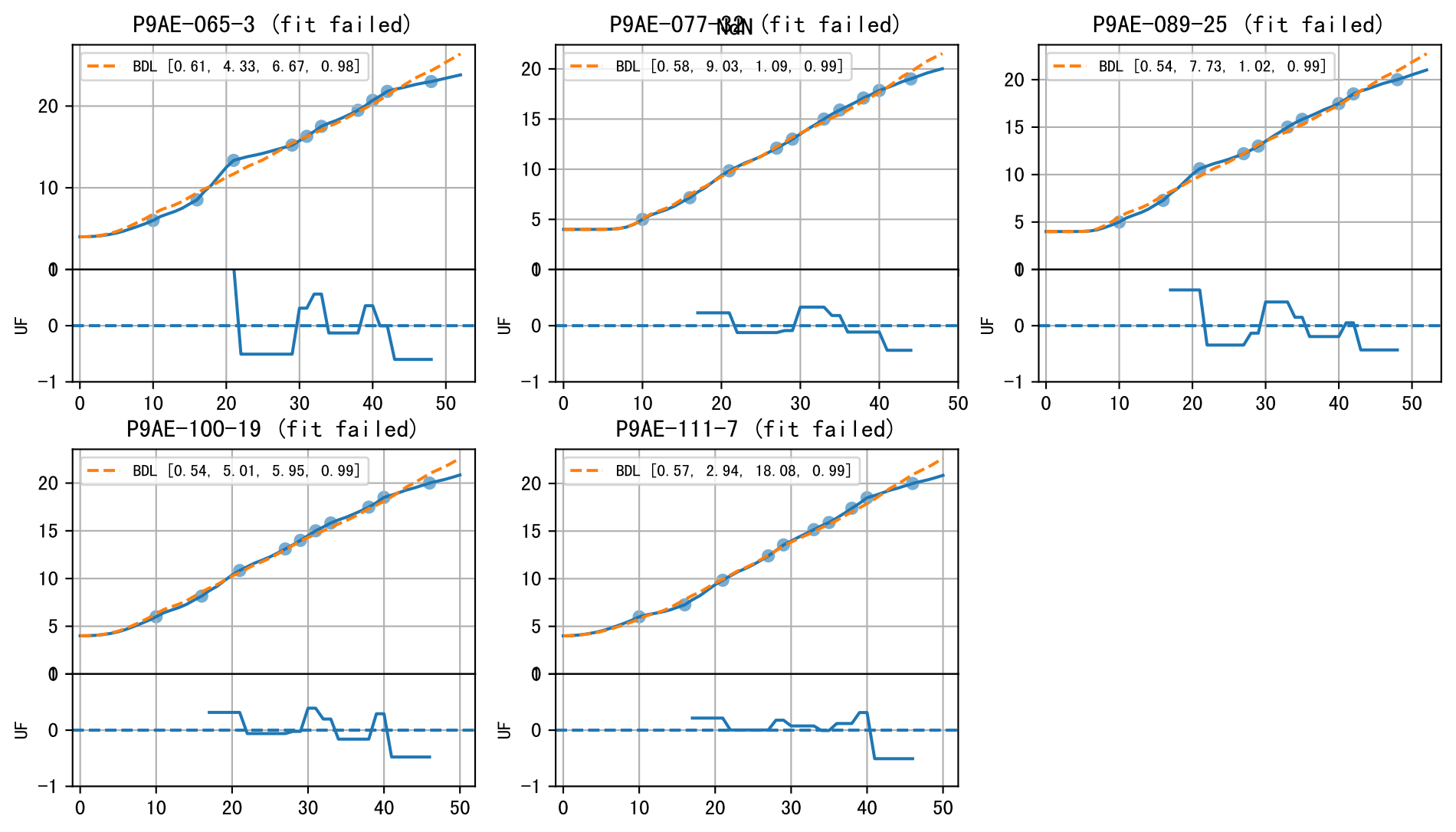

FrV_avgAbsY (Def=na Set=na)
avg1=56.61~30% avg2=na
LfW_Q90AbsY (Def=30 Set=41.05)
avg1=41.05~3% avg2=na
LfL_Q90AbsY (Def=40 Set=31.55)
avg1=31.55~5% avg2=na
NdL_Q90AbsY (Def=5 Set=4.54)
avg1=4.54~7% avg2=na
FrD_Q90AbsY (Def=70 Set=70)
avg1=47.4~10% avg2=na
NdD_avgAbsY (Def=na Set=11.49)
avg1=11.49~18% avg2=na
Object Number

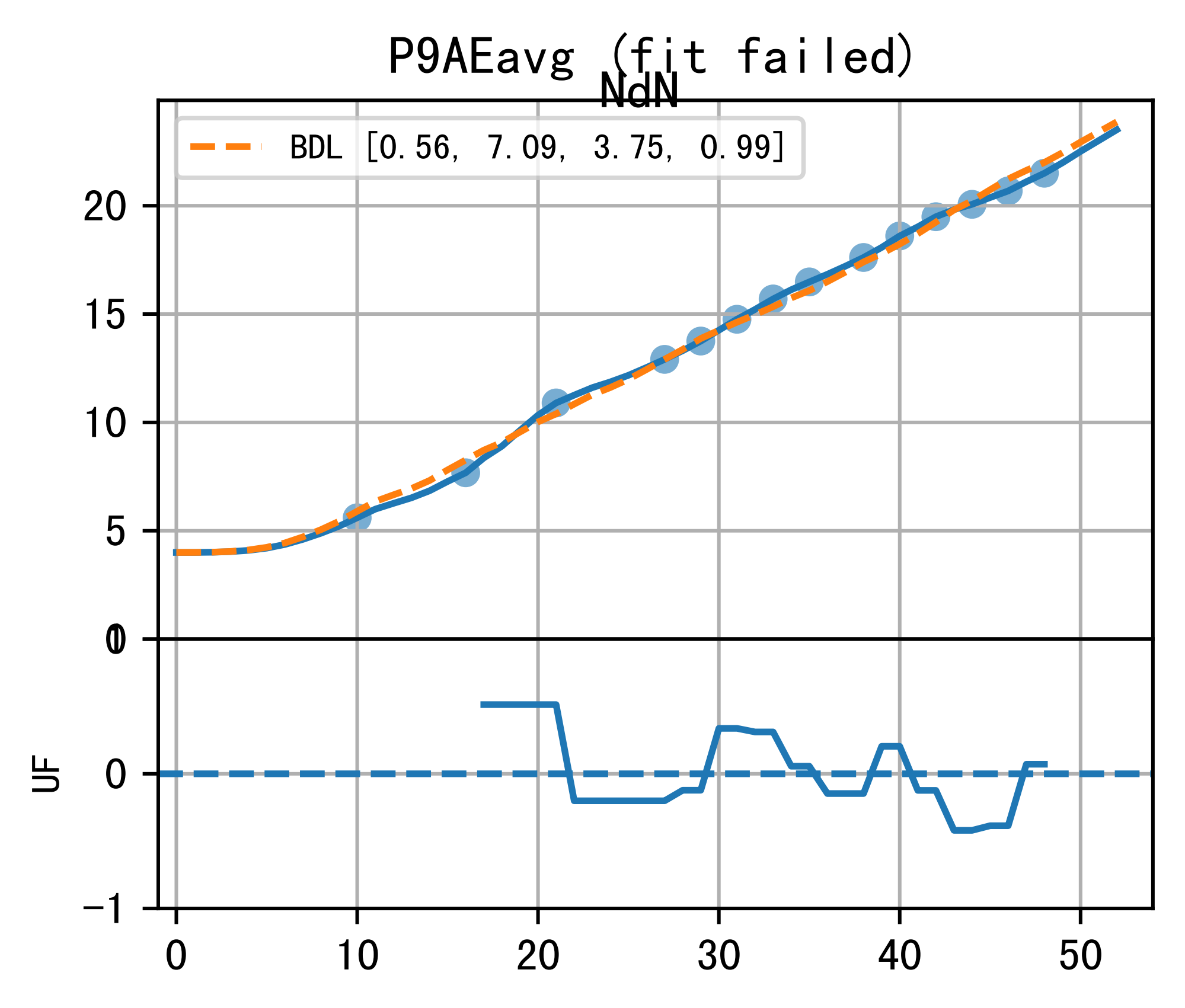

FrD_avgAbsY (Def=na Set=na)
avg1=47.4~10% avg2=na
0
20
40
0
5
10
15
20
25
Object Number

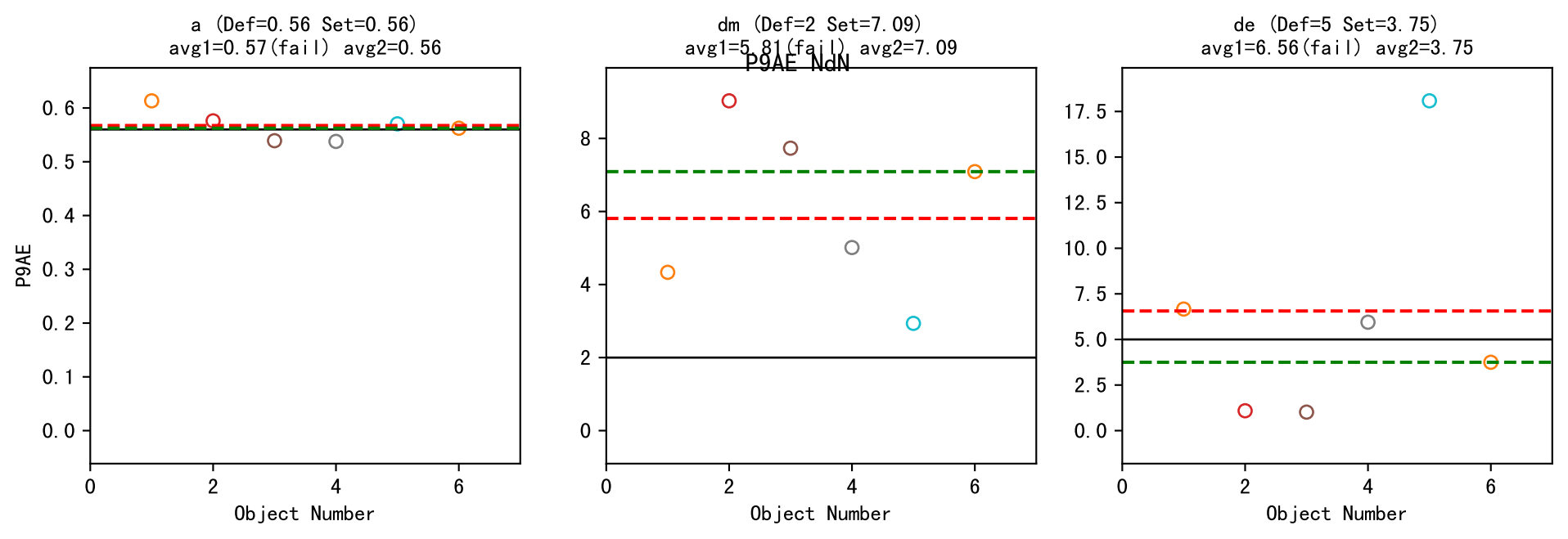

FrV_Q90AbsY (Def=179.5 Set=179.5)
avg1=61~38% avg2=na
0
50
100
150
0
5
10
15
20
25
Object Number

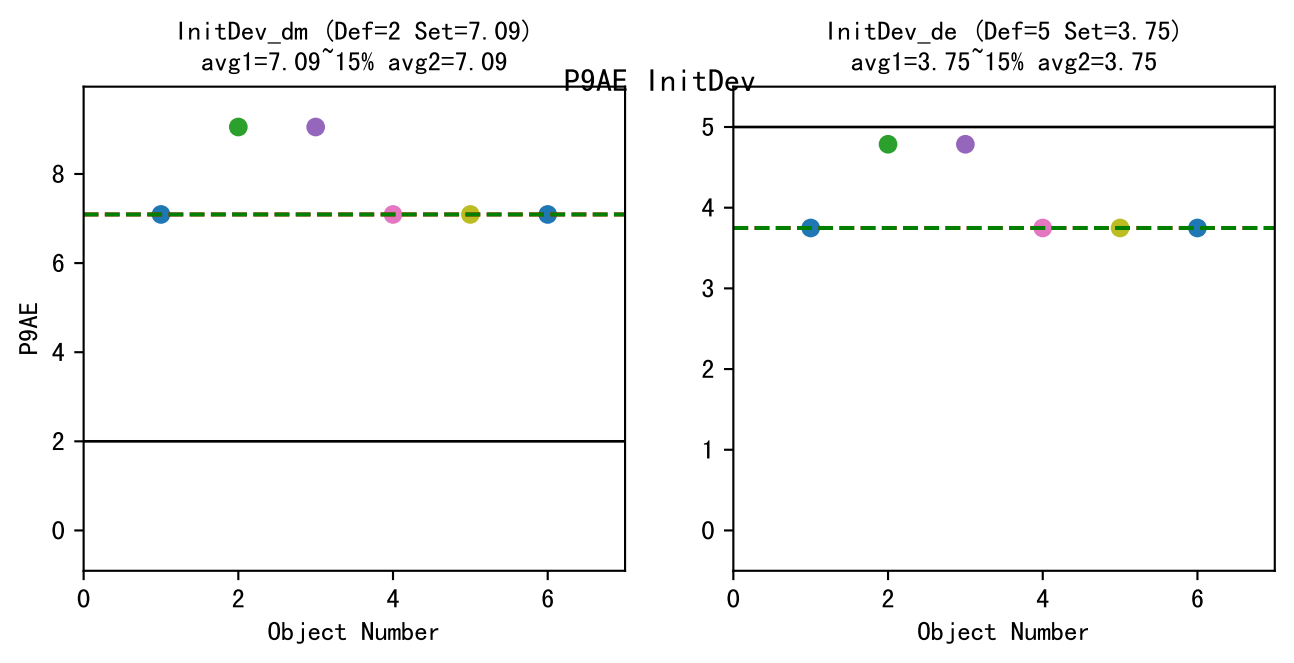

NdV_avgAbsY (Def=na Set=4.86)
avg1=4.86~44% avg2=na
0
5
10
15
0
5
10
15
20
25
Object Number

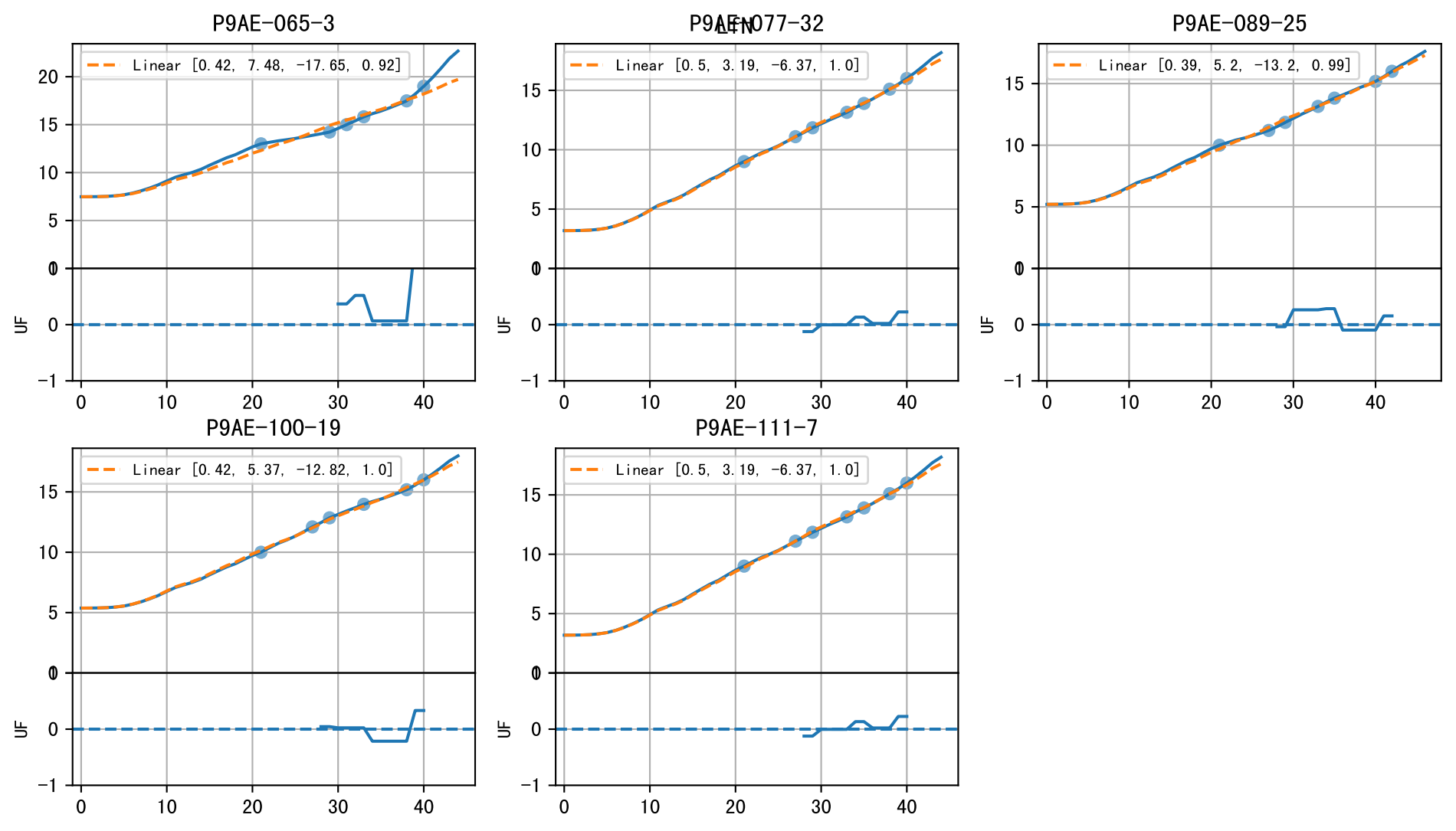

NdV_Q90AbsY (Def=12.72 Set=5.78)
avg1=5.78~24% avg2=na
0
5
10
15
0
5
10
15
20
25
Object Number

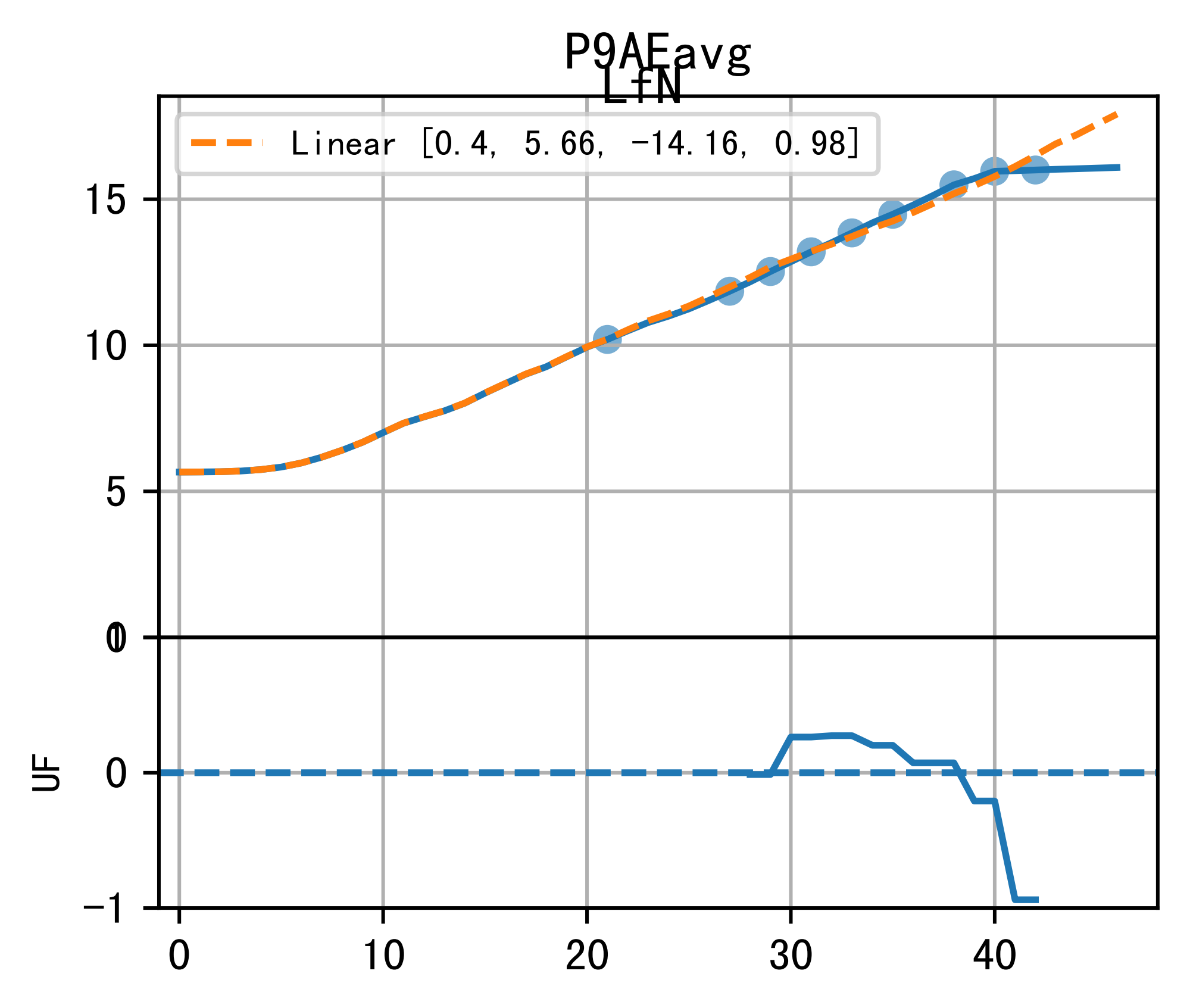

P9AE-065-3 (fit failed)
BDL [0.61, 4.33, 6.67, 0.98]
P9AE-077-32 (fit failed)
BDL [0.58, 9.03, 1.09, 0.99]
P9AE-089-25 (fit failed)
BDL [0.54, 7.73, 1.02, 0.99]
P9AE-100-19 (fit failed)
BDL [0.54, 5.01, 5.95, 0.99]
P9AE-111-7 (fit failed)
BDL [0.57, 2.94, 18.08, 0.99]
UF

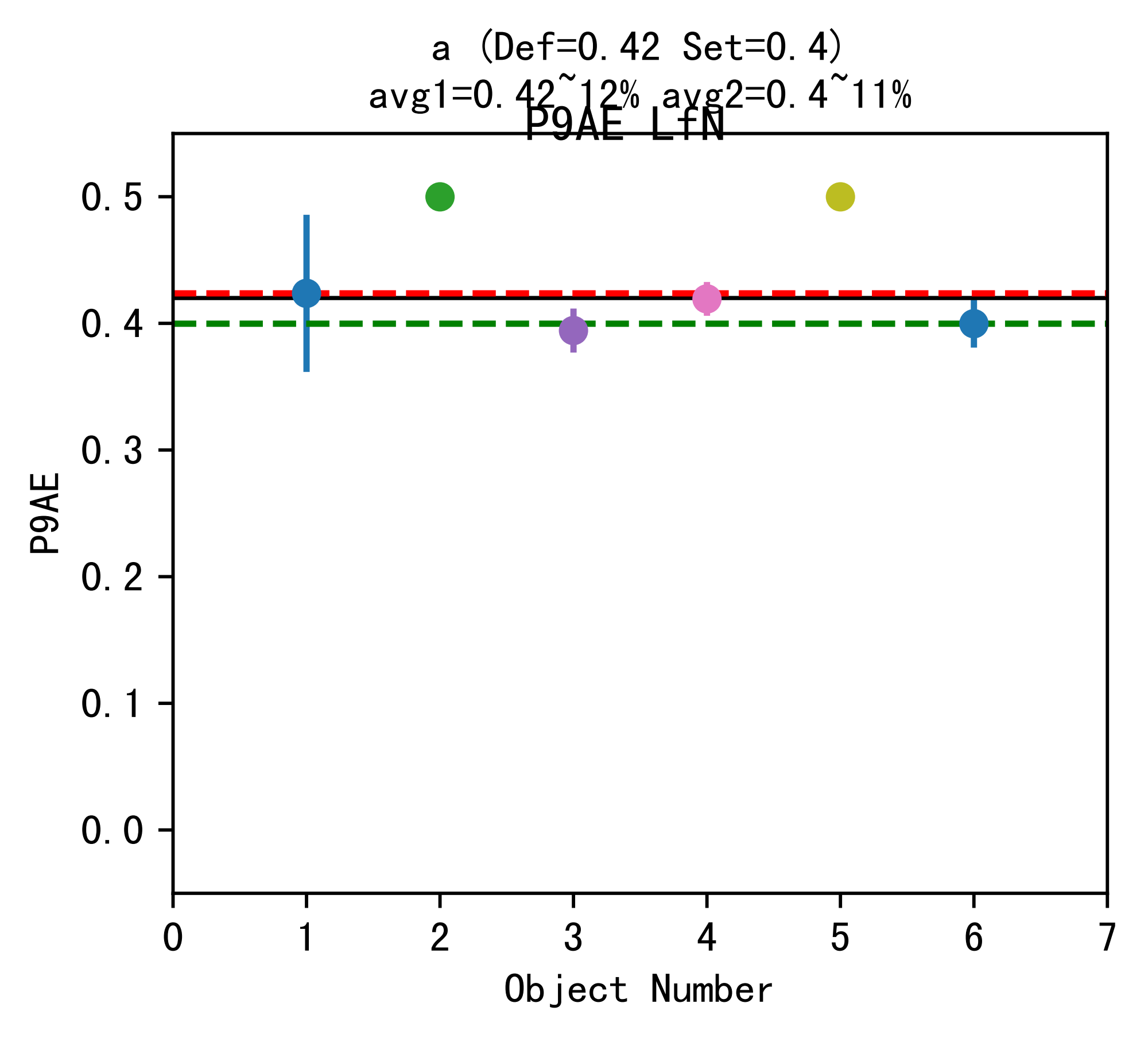

P9AEavg (fit failed)
NdN
BDL [0.56, 7.09, 3.75, 0.99]
20
15
10
5
0
0
UF
0
−1
0
10
20
30
40
50

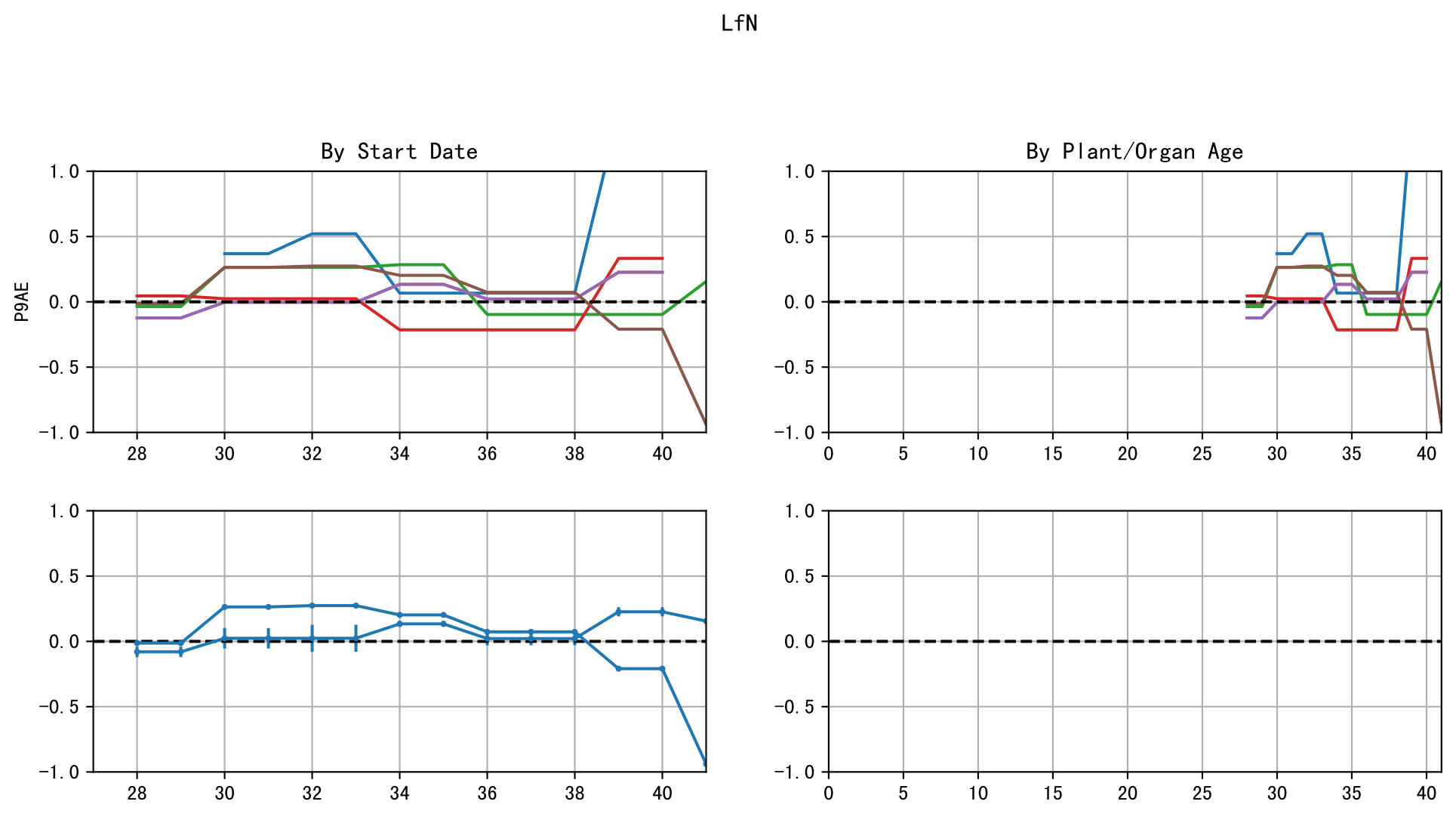

a (Def=0.56 Set=0.56)
avg1=0.57(fail) avg2=0.56
P9AE
Object Number
dm (Def=2 Set=7.09)
avg1=5.81(fail) avg2=7.09
P9AE NdN
Object Number
de (Def=5 Set=3.75)
avg1=6.56(fail) avg2=3.75
Object Number

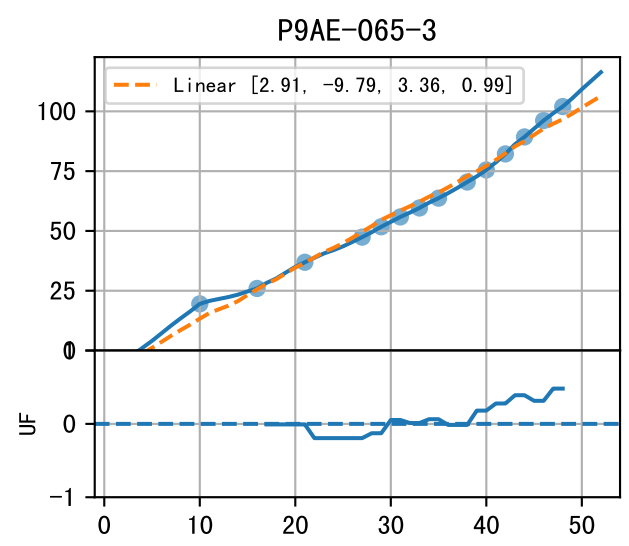

P9AE InitDev
InitDev_dm (Def=2 Set=7.09)
avg1=7.09~15% avg2=7.09
InitDev_de (Def=5 Set=3.75)
avg1=3.75~15% avg2=3.75
P9AE
Object Number
Object Number
0
2
4
6
8
1
3
5

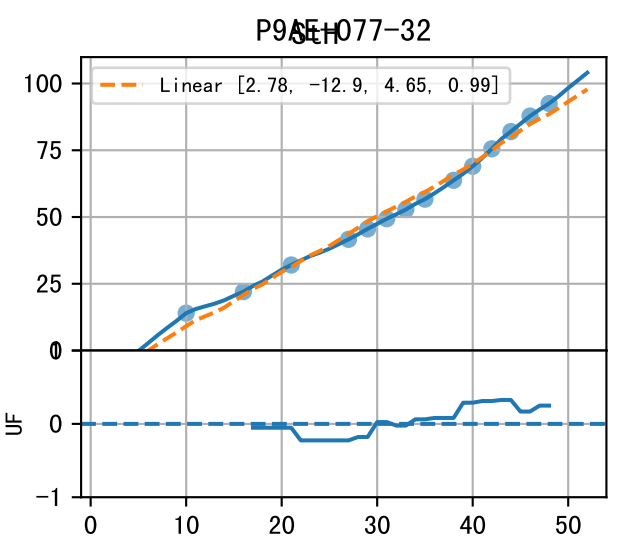

P9AE-065-3
Linear [0.42, 7.48, -17.65, 0.92]
P9AE-077-32
Linear [0.5, 3.19, -6.37, 1.0]
P9AE-089-25
Linear [0.39, 5.2, -13.2, 0.99]
P9AE-100-19
Linear [0.42, 5.37, -12.82, 1.0]
P9AE-111-7
Linear [0.5, 3.19, -6.37, 1.0]
UF

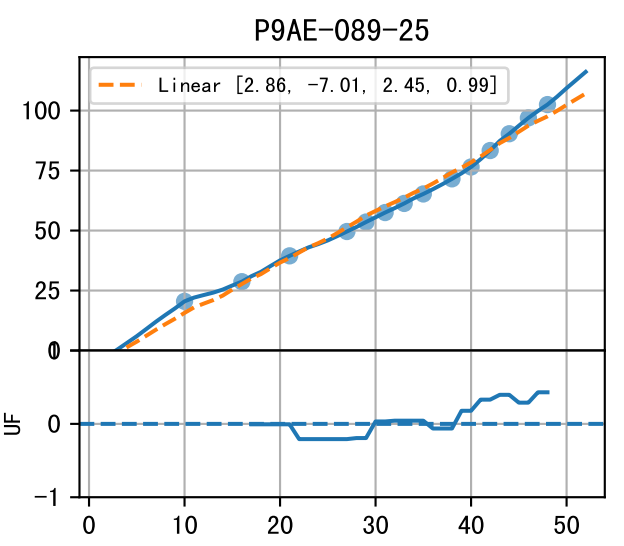

P9AEavg
LfN
Linear [0.4, 5.66, -14.16, 0.98]
15
10
5
0
0
-1
UF
0
10
20
30
40

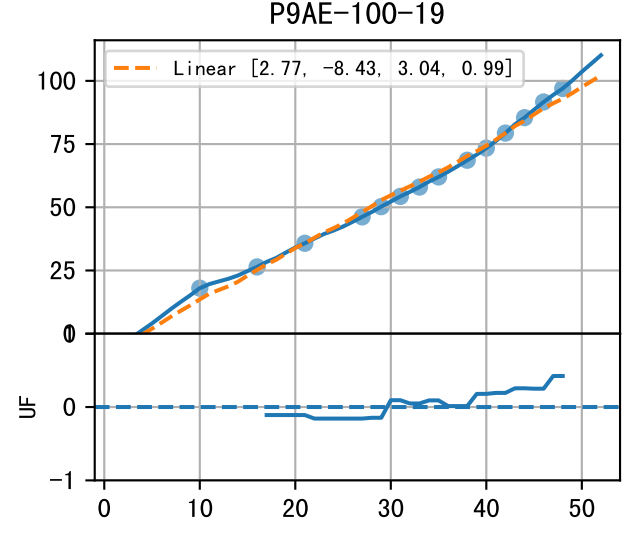

a (Def=0.42 Set=0.4)
avg1=0.42~12% avg2=0.4~11%
P9AE LfN
0.5
0.4
0.3
0.2
0.1
0.0
P9AE
0
1
2
3
4
5
6
7
Object Number

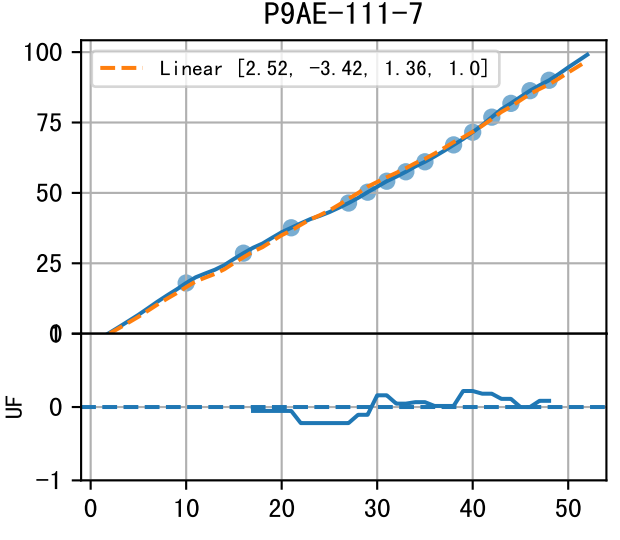

LfN
By Start Date
By Plant/Organ Age
P9AE
1.0
0.5
0.0
−0.5
−1.0
28
30
32
34
36
38
40
0
5
10
15
20
25
30
35
40

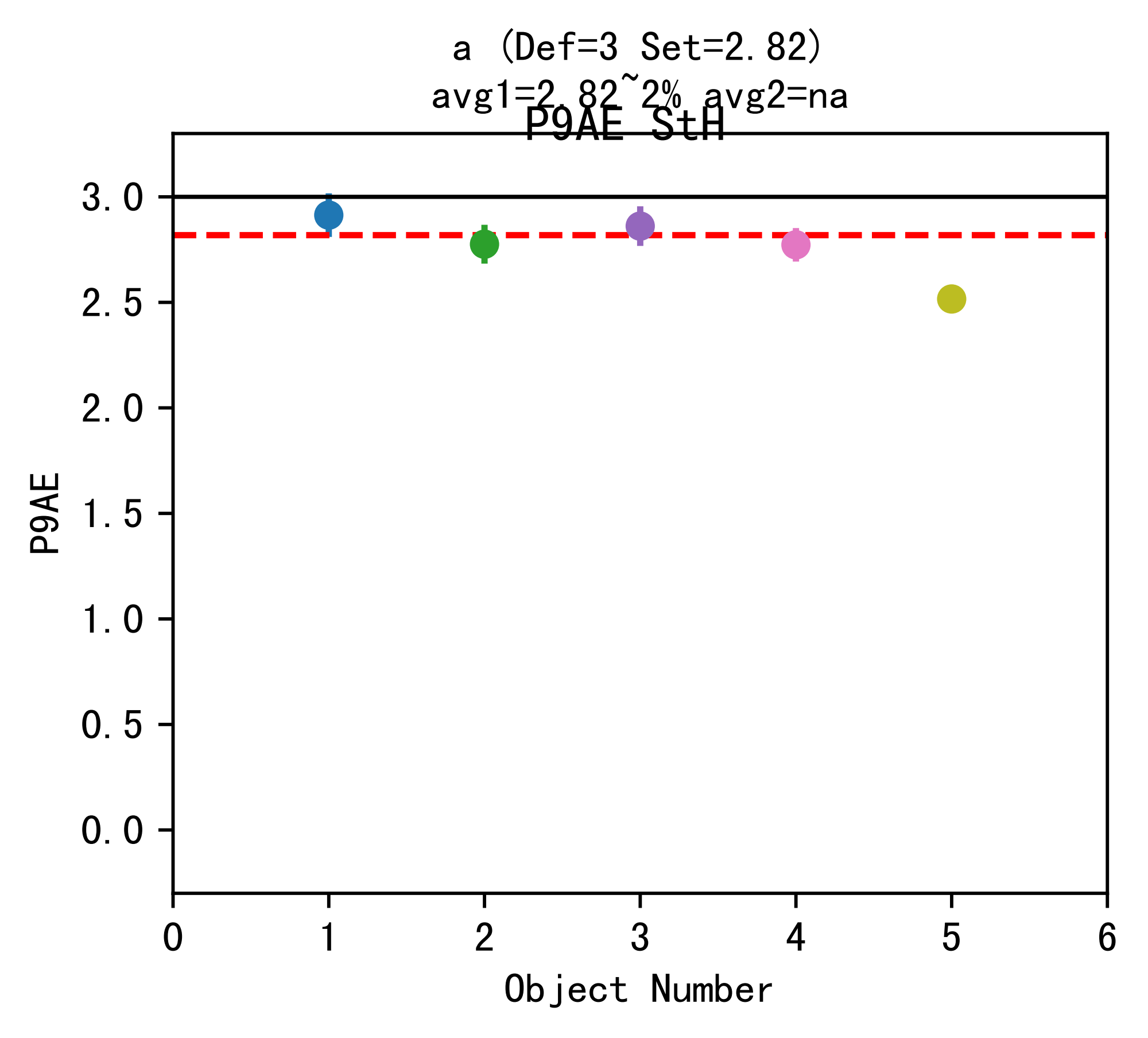

P9AE-065-3
Linear [2.91, -9.79, 3.36, 0.99]
UF

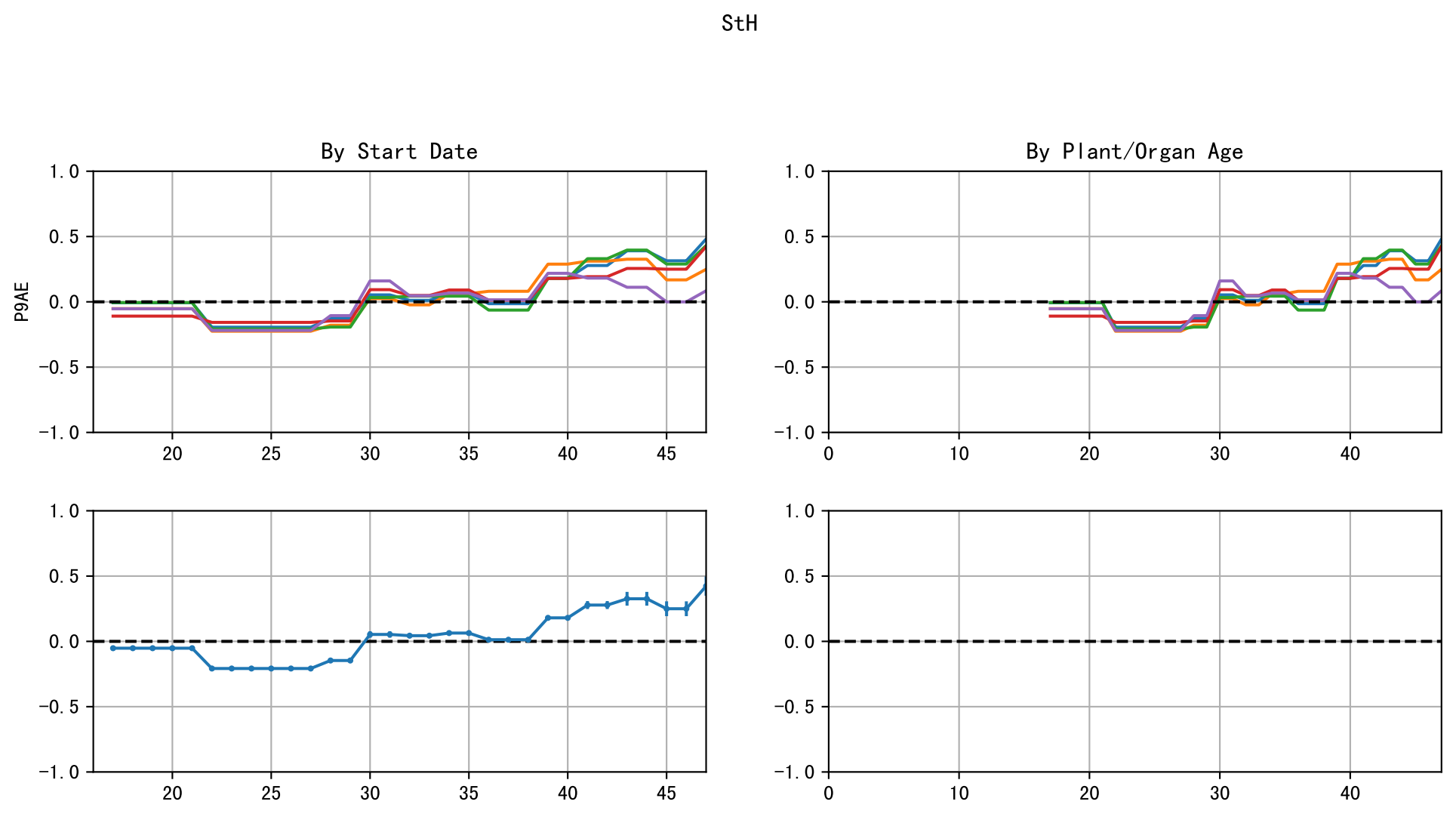

P9AE-077-32
Linear [2.78, -12.9, 4.65, 0.99]
UF

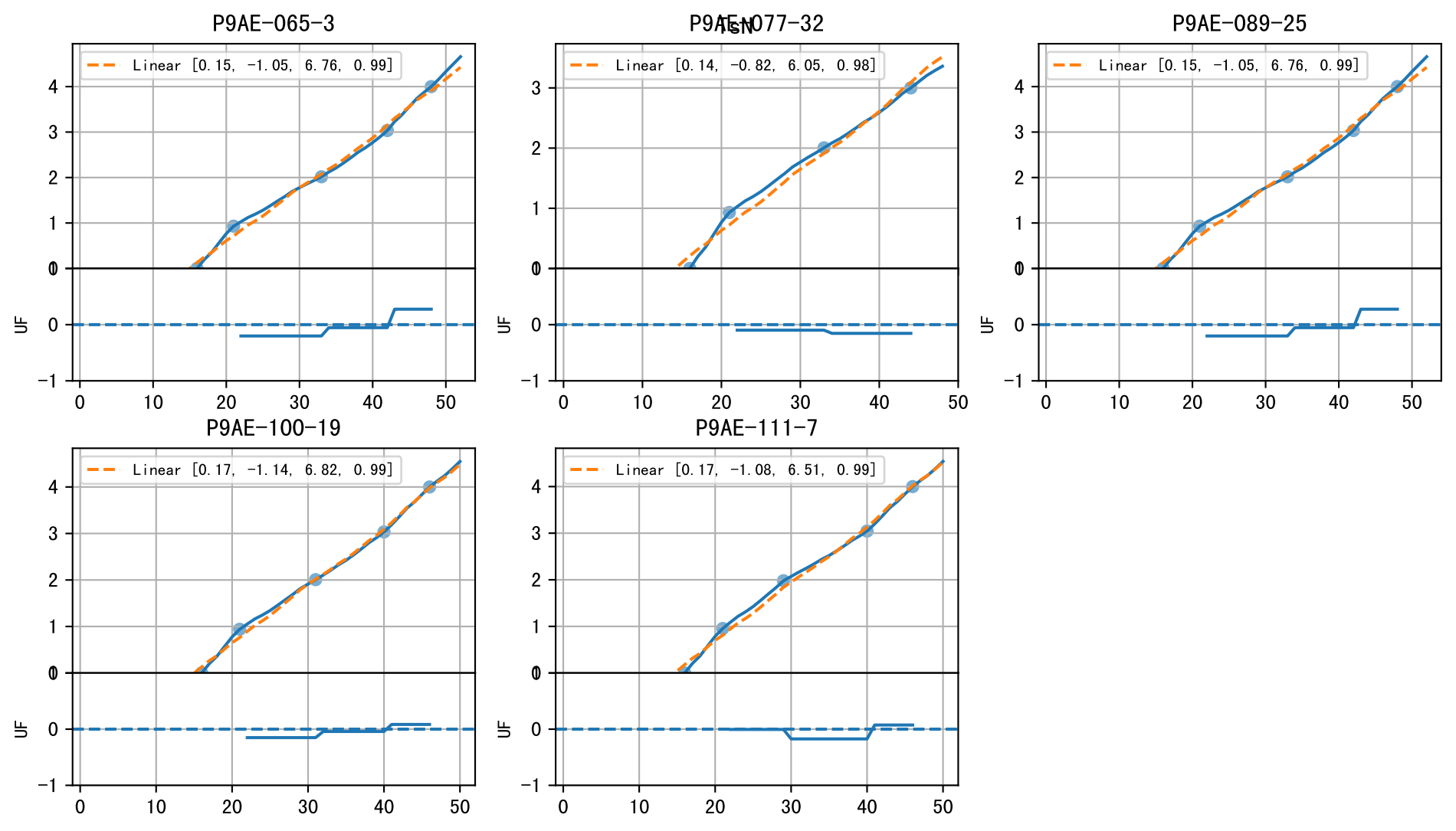

P9AE-089-25
Linear [2.86, -7.01, 2.45, 0.99]
UF

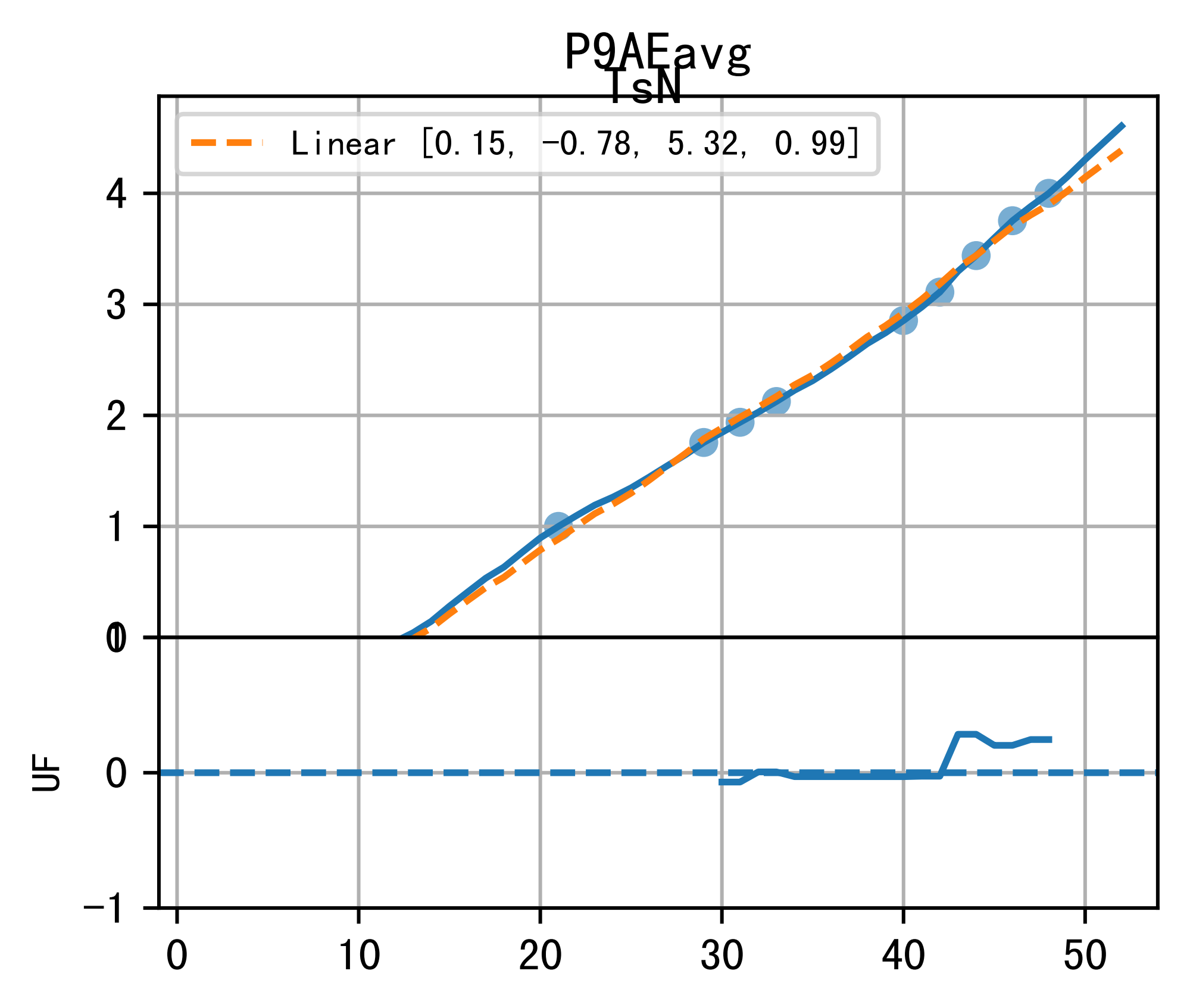

P9AE-100-19
Linear [2.77, -8.43, 3.04, 0.99]
UF

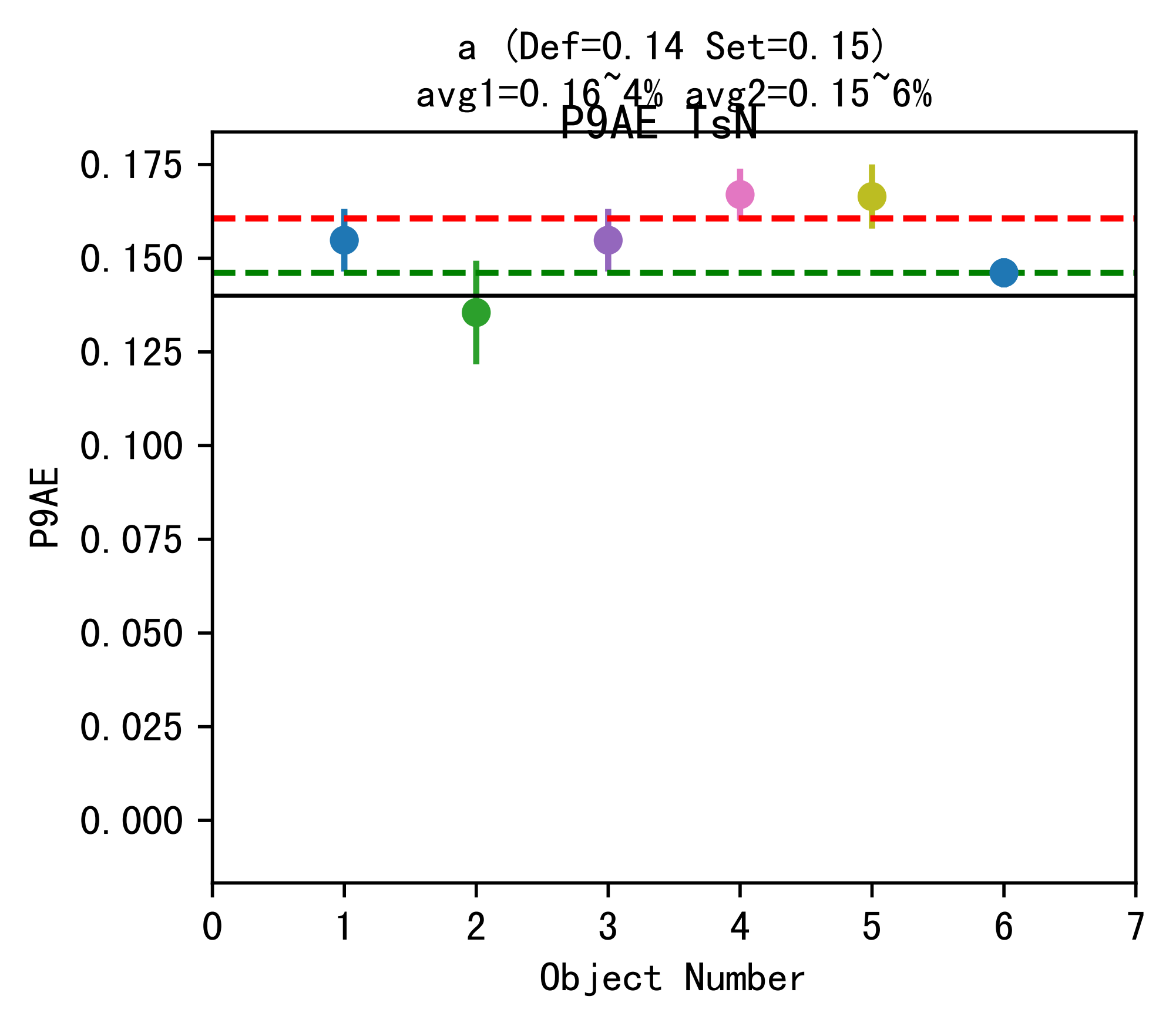

P9AE-111-7
Linear [2.52, -3.42, 1.36, 1.0]
UF

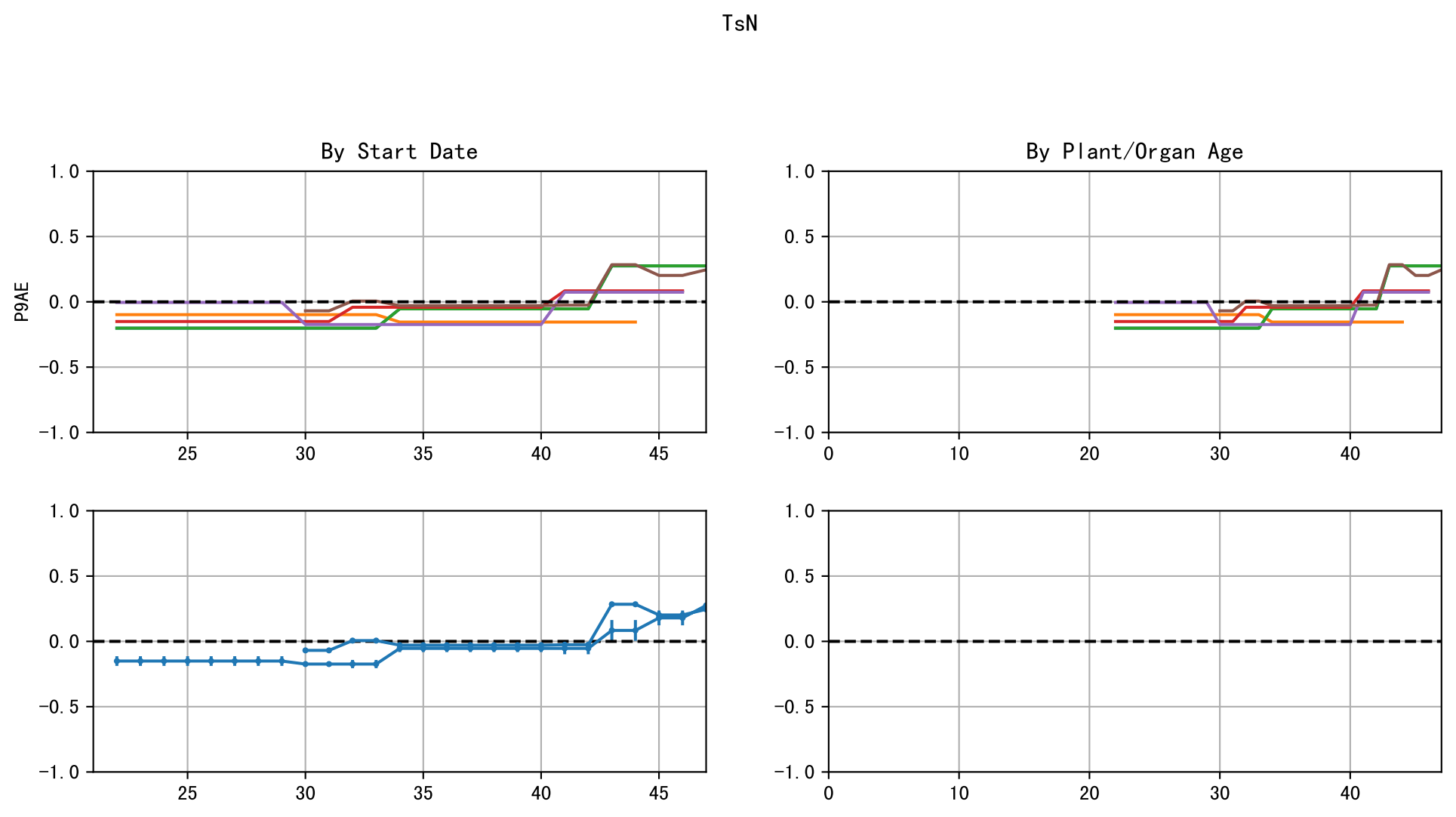

a (Def=3 Set=2.82)
avg1=2.82~2% avg2=na
P9AE StH
3.0
2.5
2.0
1.5
1.0
0.5
0.0
P9AE
0
1
2
3
4
5
6
Object Number

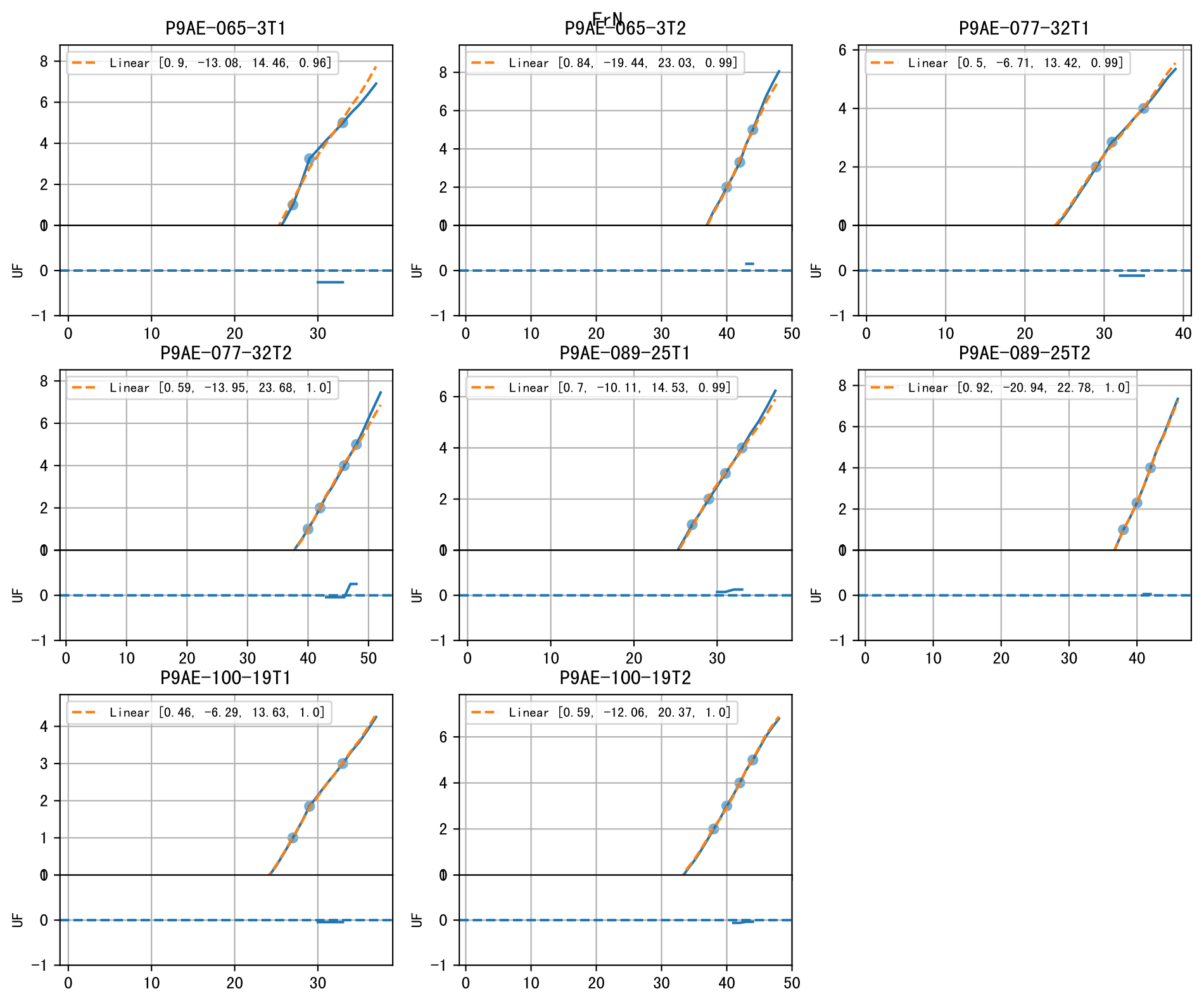

StH
By Start Date
By Plant/Organ Age
P9AE
1.0
0.5
0.0
−0.5
−1.0
20
25
30
35
40
45
0
10
20
30
40

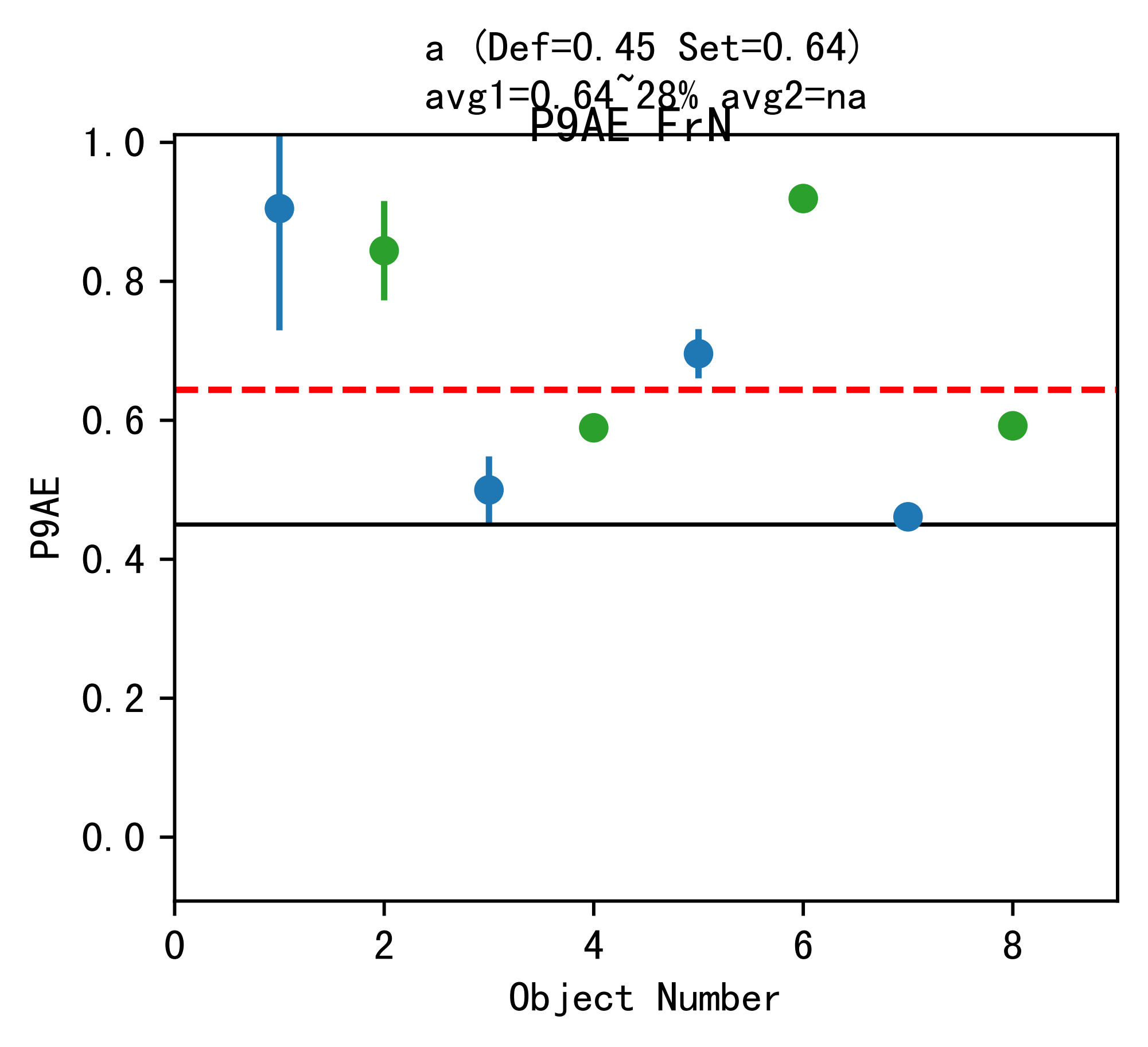

P9AE-065-3
Linear [0.15, -1.05, 6.76, 0.99]
P9AE-077-32
Linear [0.14, -0.82, 6.05, 0.98]
P9AE-089-25
Linear [0.15, -1.05, 6.76, 0.99]
P9AE-100-19
Linear [0.17, -1.14, 6.82, 0.99]
P9AE-111-7
Linear [0.17, -1.08, 6.51, 0.99]
TSN
UF

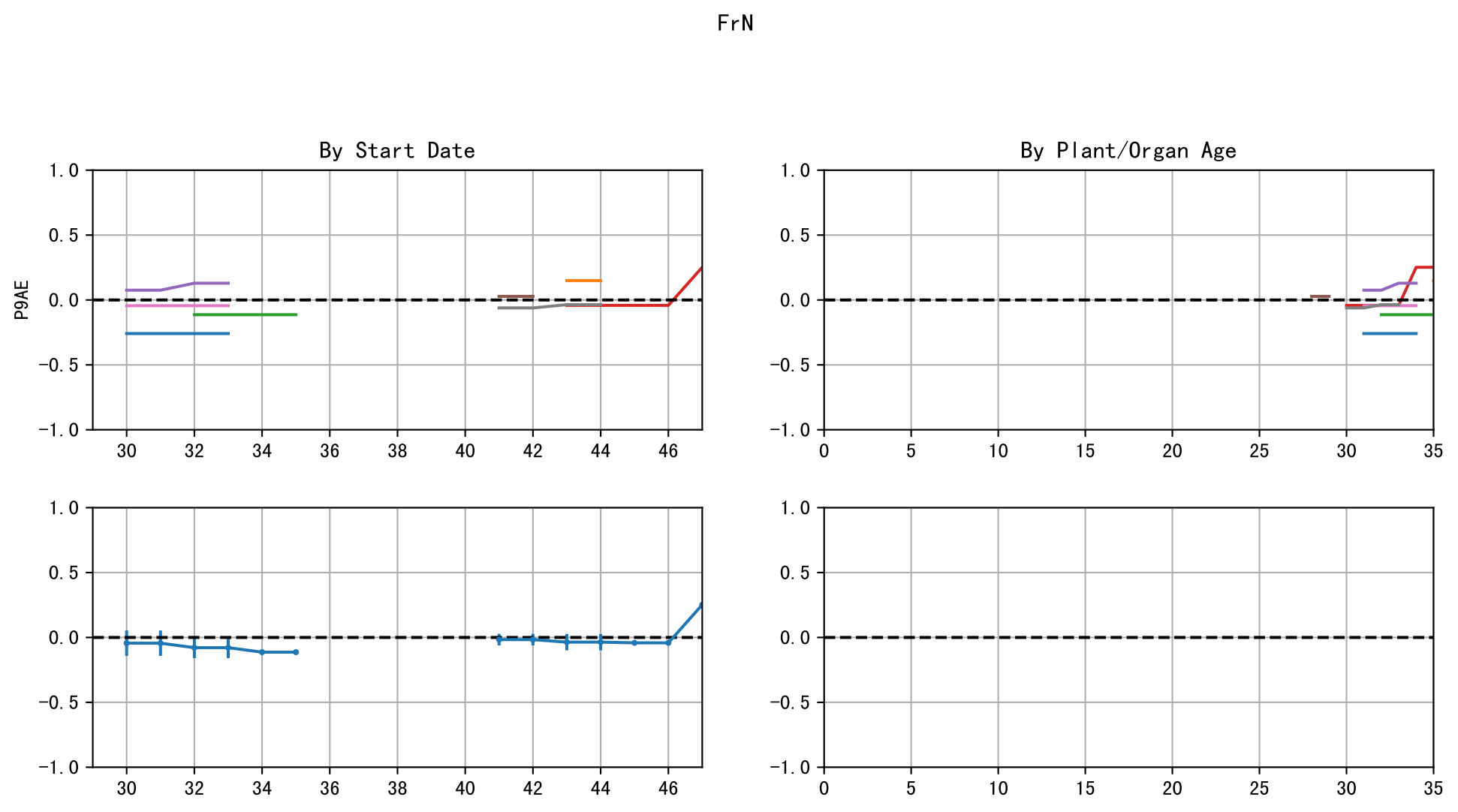

P9AEavg
TsN
Linear [0.15, -0.78, 5.32, 0.99]
4
3
2
1
0
0
-1
UF
0
10
20
30
40
50

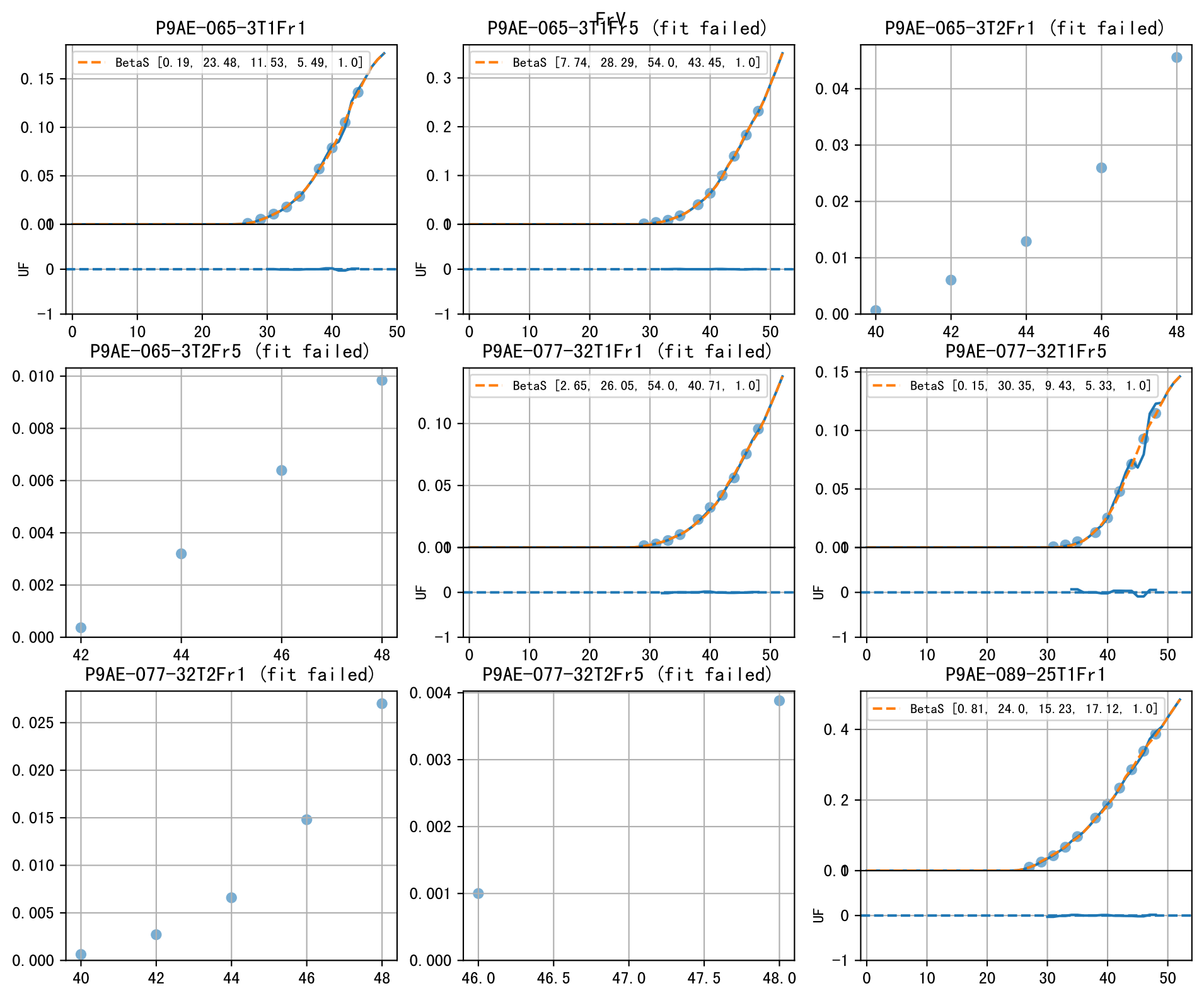

a (Def=0.14 Set=0.15)
avg1=0.16~4% avg2=0.15~6%
P9AE IsN
0.175
0.150
0.125
0.100
0.075
0.050
0.025
0.000
P9AE
0
1
2
3
4
5
6
7
Object Number

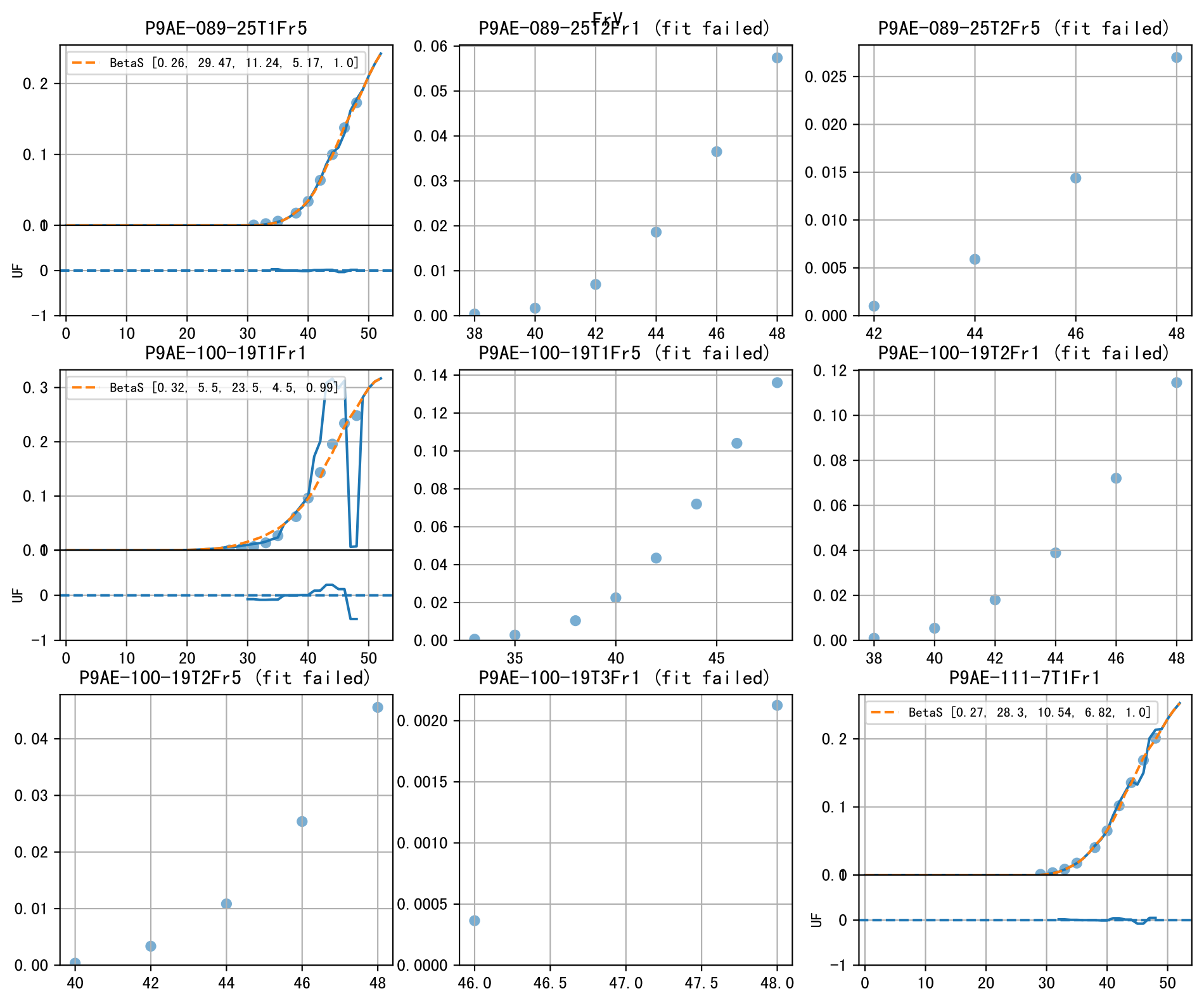

TsN
By Start Date
By Plant/Organ Age
P9AE
1.0
0.5
0.0
−0.5
−1.0
25
30
35
40
45
0
10
20
30
40

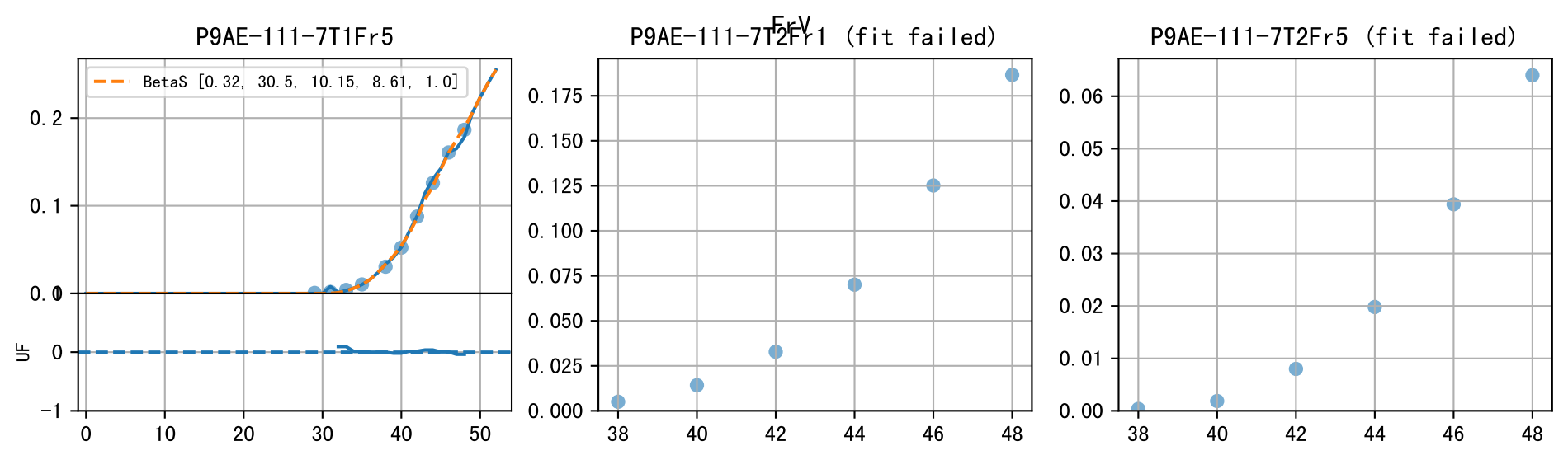

FrN
P9AE-065-3T1
Linear [0.9, -13.08, 14.46, 0.96]
P9AE-065-3T2
Linear [0.84, -19.44, 23.03, 0.99]
P9AE-077-32T1
Linear [0.5, -6.71, 13.42, 0.99]
P9AE-077-32T2
Linear [0.59, -13.95, 23.68, 1.0]
P9AE-089-25T1
Linear [0.7, -10.11, 14.53, 0.99]
P9AE-089-25T2
Linear [0.92, -20.94, 22.78, 1.0]
P9AE-100-19T1
Linear [0.46, -6.29, 13.63, 1.0]
P9AE-100-19T2
Linear [0.59, -12.06, 20.37, 1.0]
UF

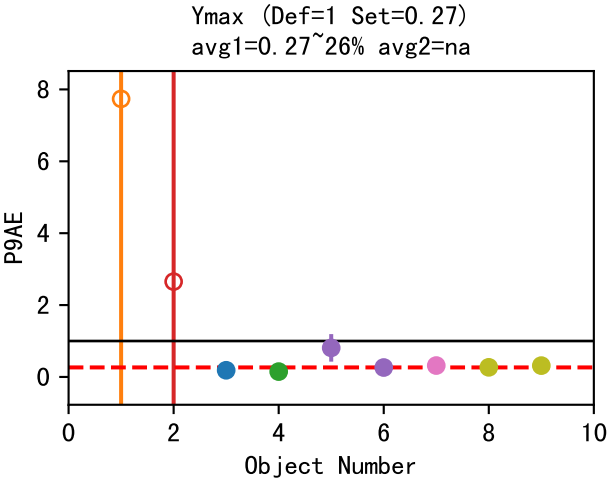

a (Def=0.45 Set=0.64)
avg1=0.64~28% avg2=na
P9AE FrN
1.0
0.8
0.6
0.4
0.2
0.0
P9AE
0
2
4
6
8
Object Number

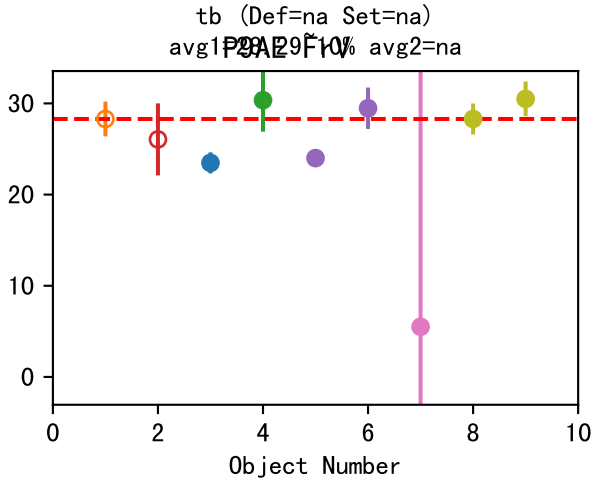

FrN
By Start Date
By Plant/Organ Age
P9AE
1.0
0.5
0.0
−0.5
−1.0
30
32
34
36
38
40
42
44
46
0
5
10
15
20
25
30
35

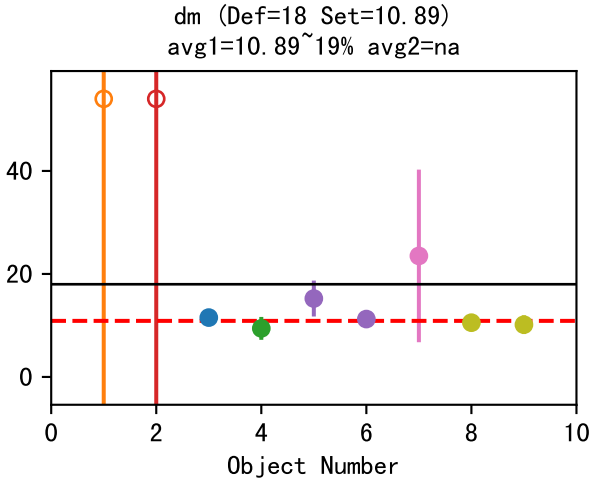

FrV
P9AE-065-3T1Fr1
BetaS [0.19, 23.48, 11.53, 5.49, 1.0]
UF
P9AE-065-3T1Fr5 (fit failed)
BetaS [7.74, 28.29, 54.0, 43.45, 1.0]
UF
P9AE-065-3T2Fr1 (fit failed)
P9AE-065-3T2Fr5 (fit failed)
P9AE-077-32T1Fr1 (fit failed)
BetaS [2.65, 26.05, 54.0, 40.71, 1.0]
UF
P9AE-077-32T1Fr5
BetaS [0.15, 30.35, 9.43, 5.33, 1.0]
UF
P9AE-077-32T2Fr1 (fit failed)
P9AE-077-32T2Fr5 (fit failed)
P9AE-089-25T1Fr1
BetaS [0.81, 24.0, 15.23, 17.12, 1.0]
UF

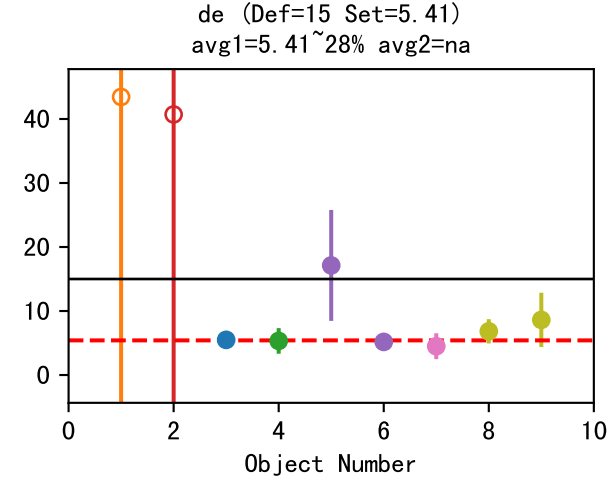

FrV
P9AE-089-25T1Fr5
BetaS [0.26, 29.47, 11.24, 5.17, 1.0]
UF
P9AE-089-25T2Fr1 (fit failed)
P9AE-089-25T2Fr5 (fit failed)
P9AE-100-19T1Fr1
BetaS [0.32, 5.5, 23.5, 4.5, 0.99]
UF
P9AE-100-19T1Fr5 (fit failed)
P9AE-100-19T2Fr1 (fit failed)
P9AE-100-19T2Fr5 (fit failed)
P9AE-100-19T3Fr1 (fit failed)
P9AE-111-7T1Fr1
BetaS [0.27, 28.3, 10.54, 6.82, 1.0]
UF

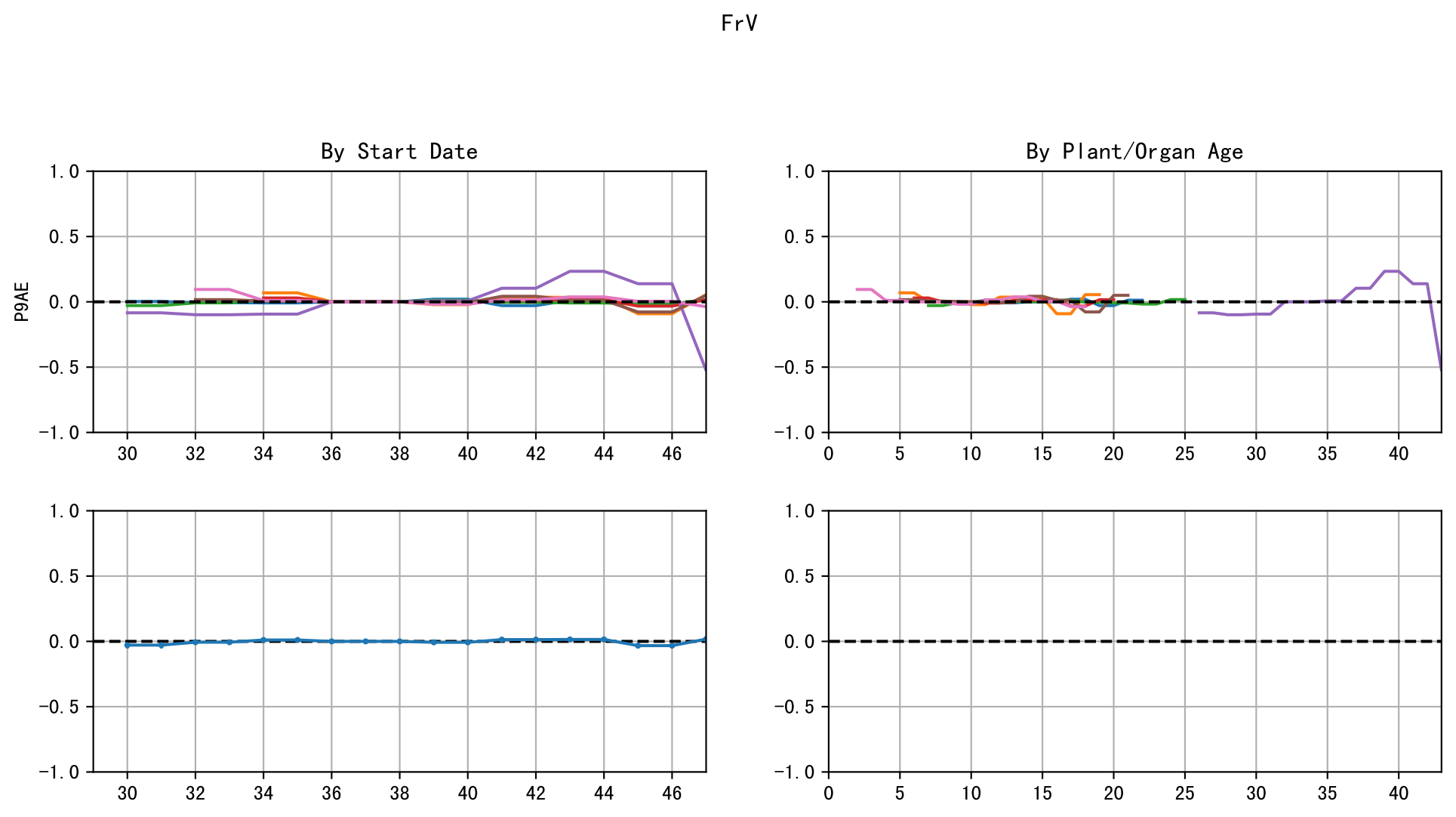

P9AE-111-7T1Fr5
BetaS [0.32, 30.5, 10.15, 8.61, 1.0]
UF
P9AE-111-7T2Fr1 (fit failed)
FrV
P9AE-111-7T2Fr5 (fit failed)

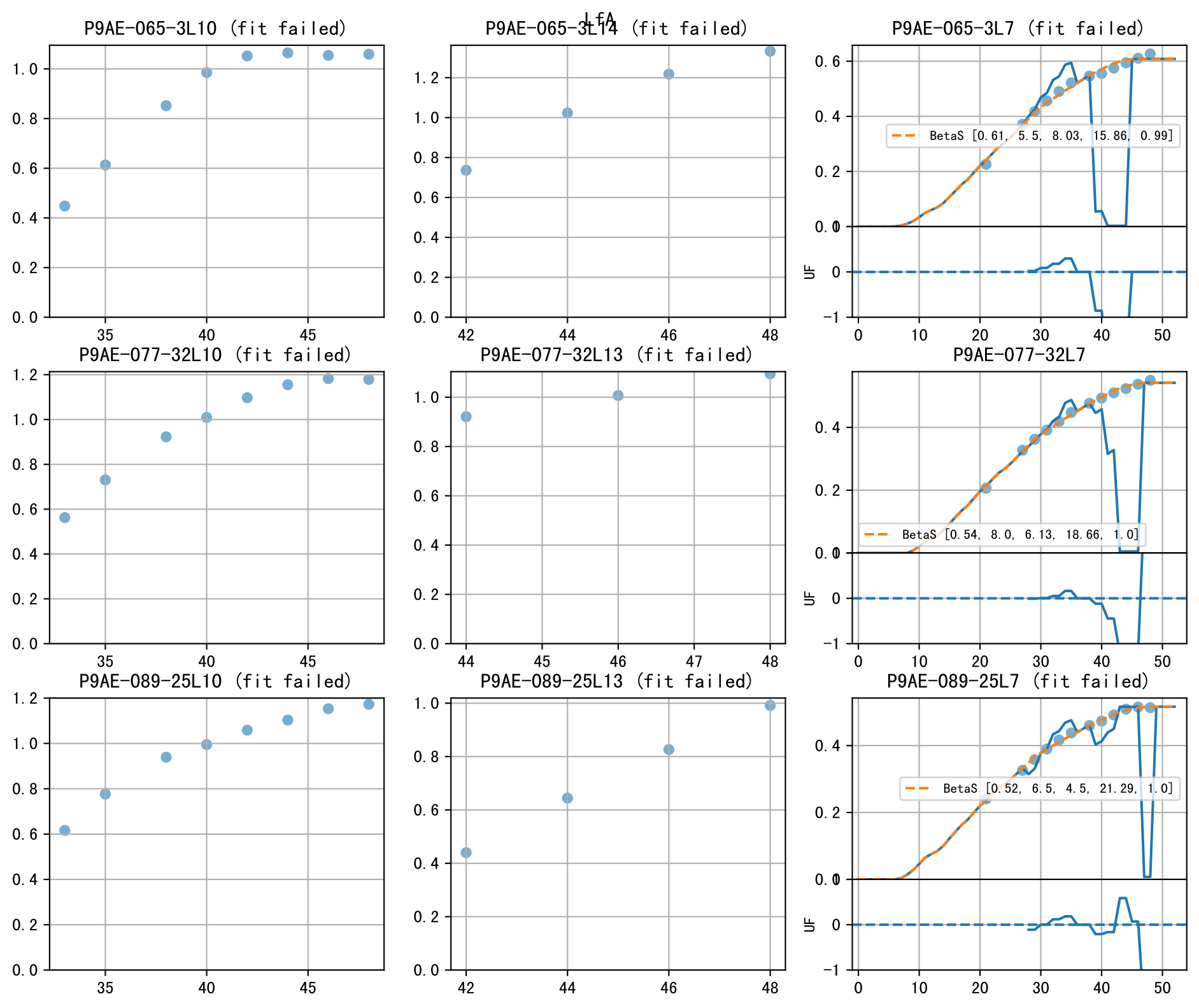

Ymax (Def=1 Set=0.27)
avg1=0.27~26% avg2=na
P9AE
Object Number

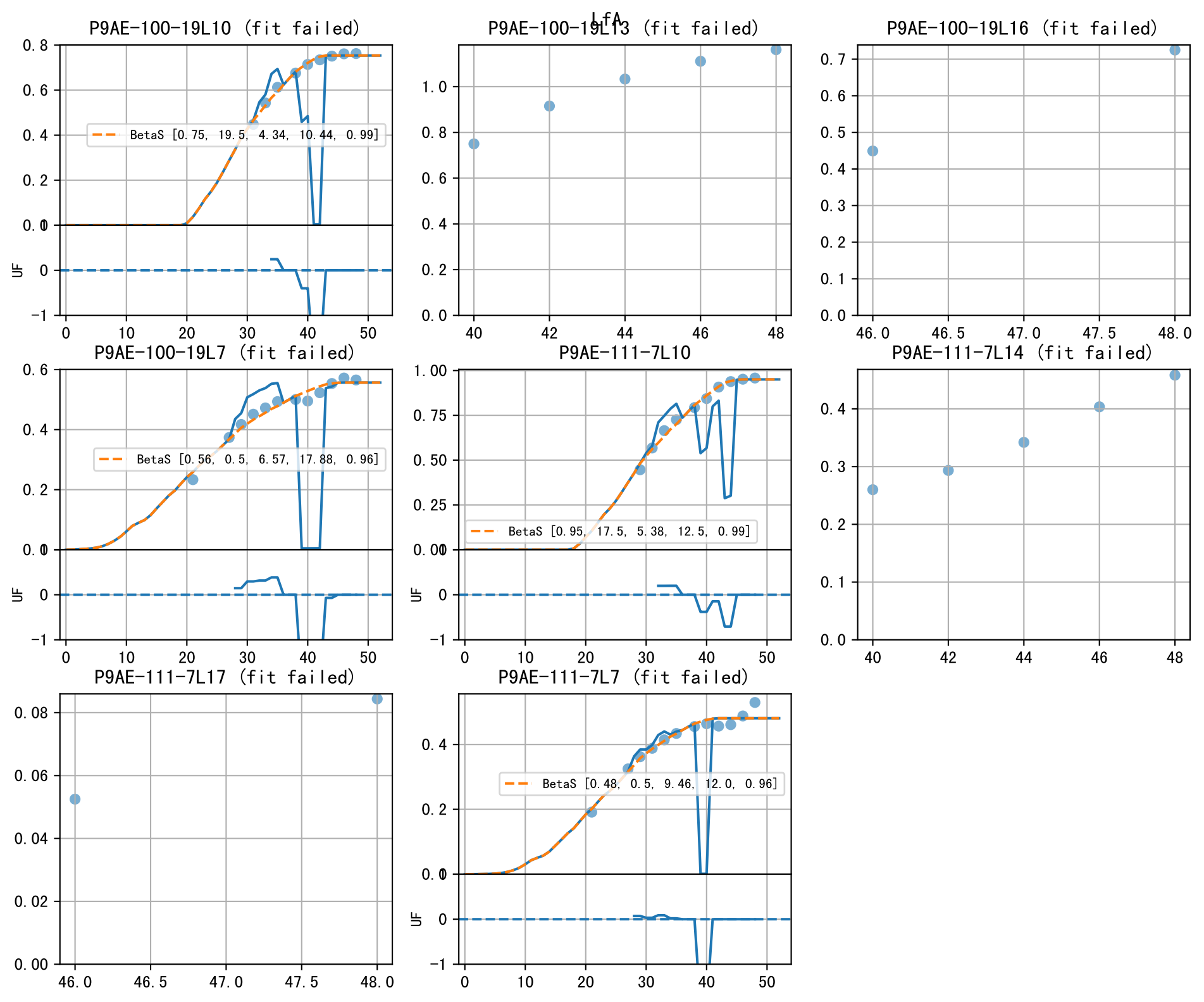

tb (Def=na Set=na)
avg1=29.10~10% avg2=na
Object Number

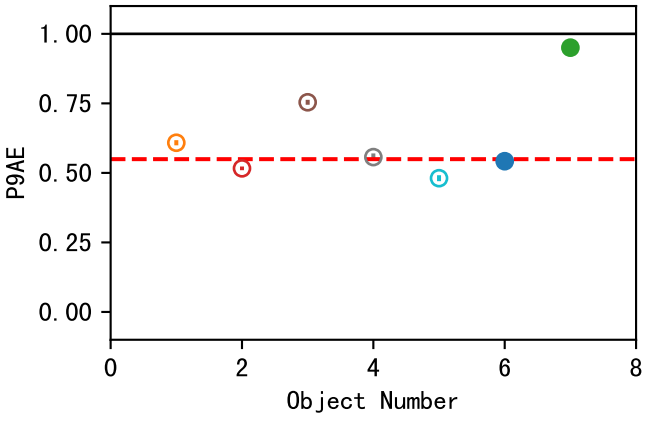

dm (Def=18 Set=10.89)
avg1=10.89~19% avg2=na
Object Number

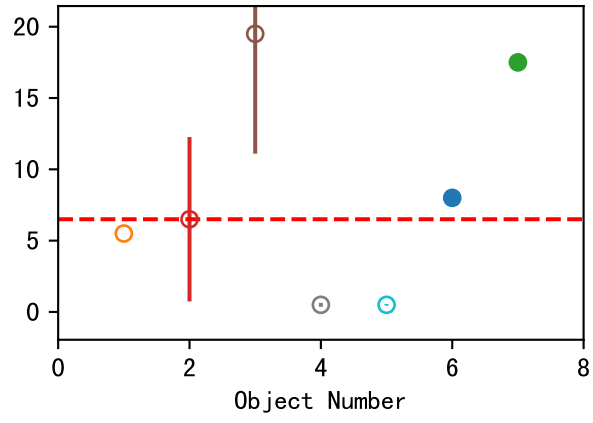

de (Def=15 Set=5.41)
avg1=5.41~28% avg2=na
Object Number

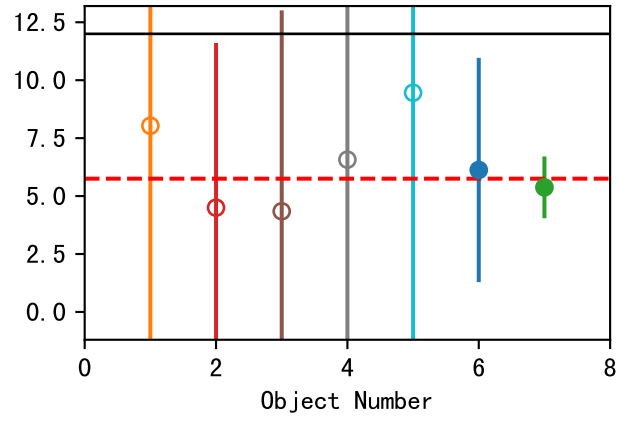

FrV
By Start Date
By Plant/Organ Age
P9AE
1.0
0.5
0.0
−0.5
−1.0
30
32
34
36
38
40
42
44
46
0
5
10
15
20
25
30
35
40

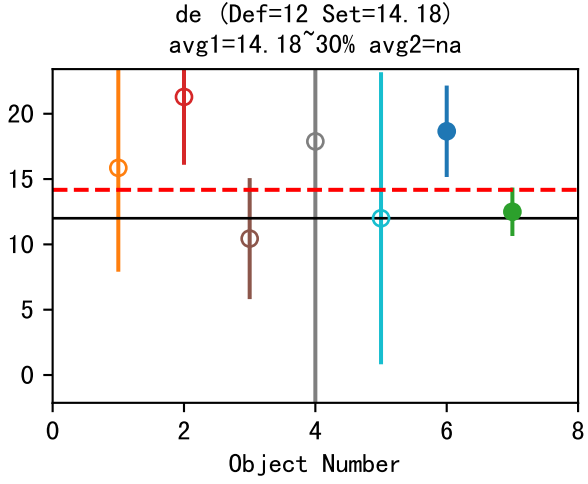

LfA
P9AE-065-3L10 (fit failed)
P9AE-065-3L14 (fit failed)
P9AE-065-3L7 (fit failed)
BetaS [0.61, 5.5, 8.03, 15.86, 0.99]
UF
P9AE-077-32L10 (fit failed)
P9AE-077-32L13 (fit failed)
P9AE-077-32L7
BetaS [0.54, 8.0, 6.13, 18.66, 1.0]
UF
P9AE-089-25L10 (fit failed)
P9AE-089-25L13 (fit failed)
P9AE-089-25L7 (fit failed)
BetaS [0.52, 6.5, 4.5, 21.29, 1.0]
UF

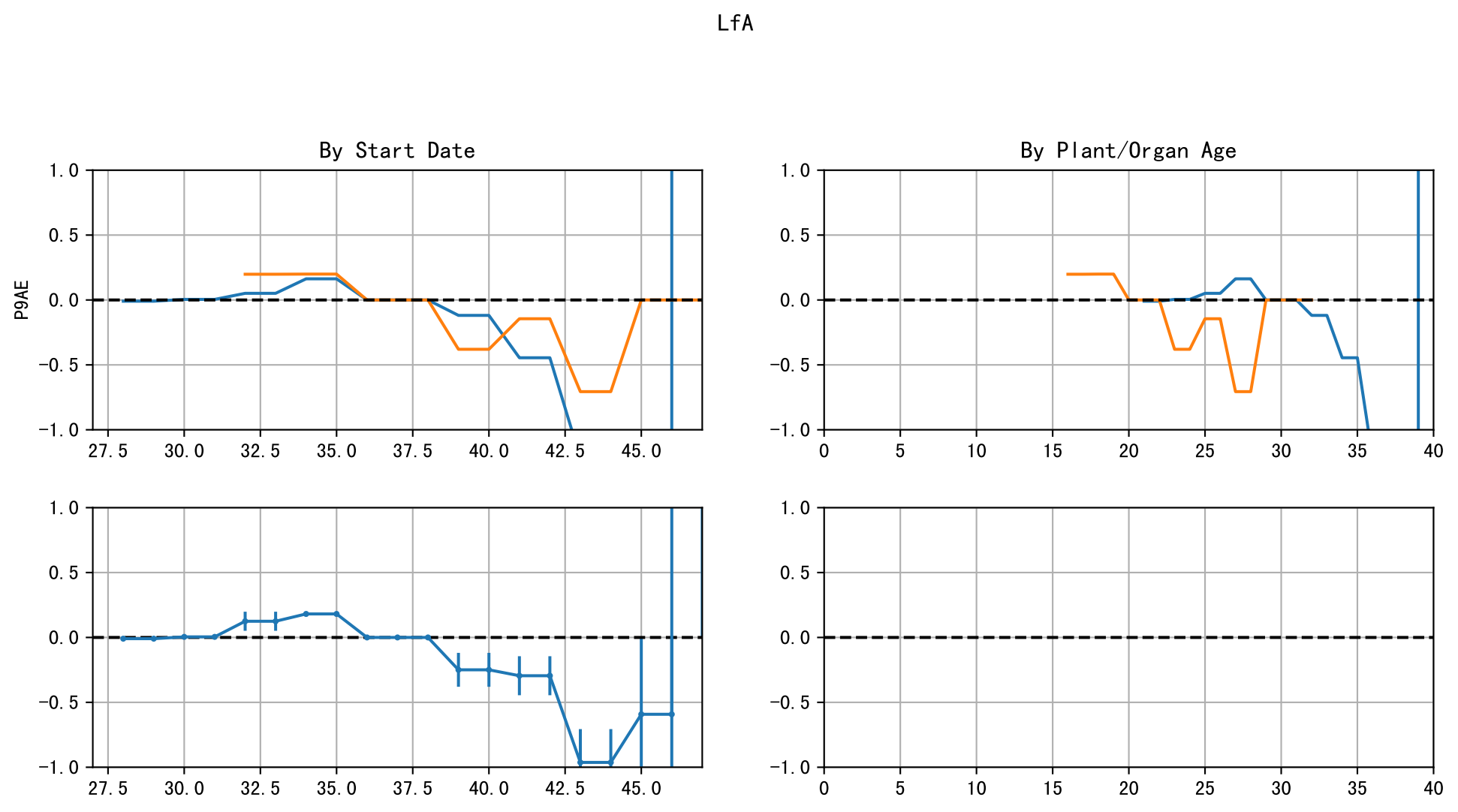

LfA
P9AE-100-19L10 (fit failed)
BetaS [0.75, 19.5, 4.34, 10.44, 0.99]
UF
P9AE-100-19L13 (fit failed)
P9AE-100-19L16 (fit failed)
P9AE-100-19L7 (fit failed)
BetaS [0.56, 0.5, 6.57, 17.88, 0.96]
UF
P9AE-111-7L10
BetaS [0.95, 17.5, 5.38, 12.5, 0.99]
UF
P9AE-111-7L14 (fit failed)
P9AE-111-7L17 (fit failed)
P9AE-111-7L7 (fit failed)
BetaS [0.48, 0.5, 9.46, 12.0, 0.96]
UF

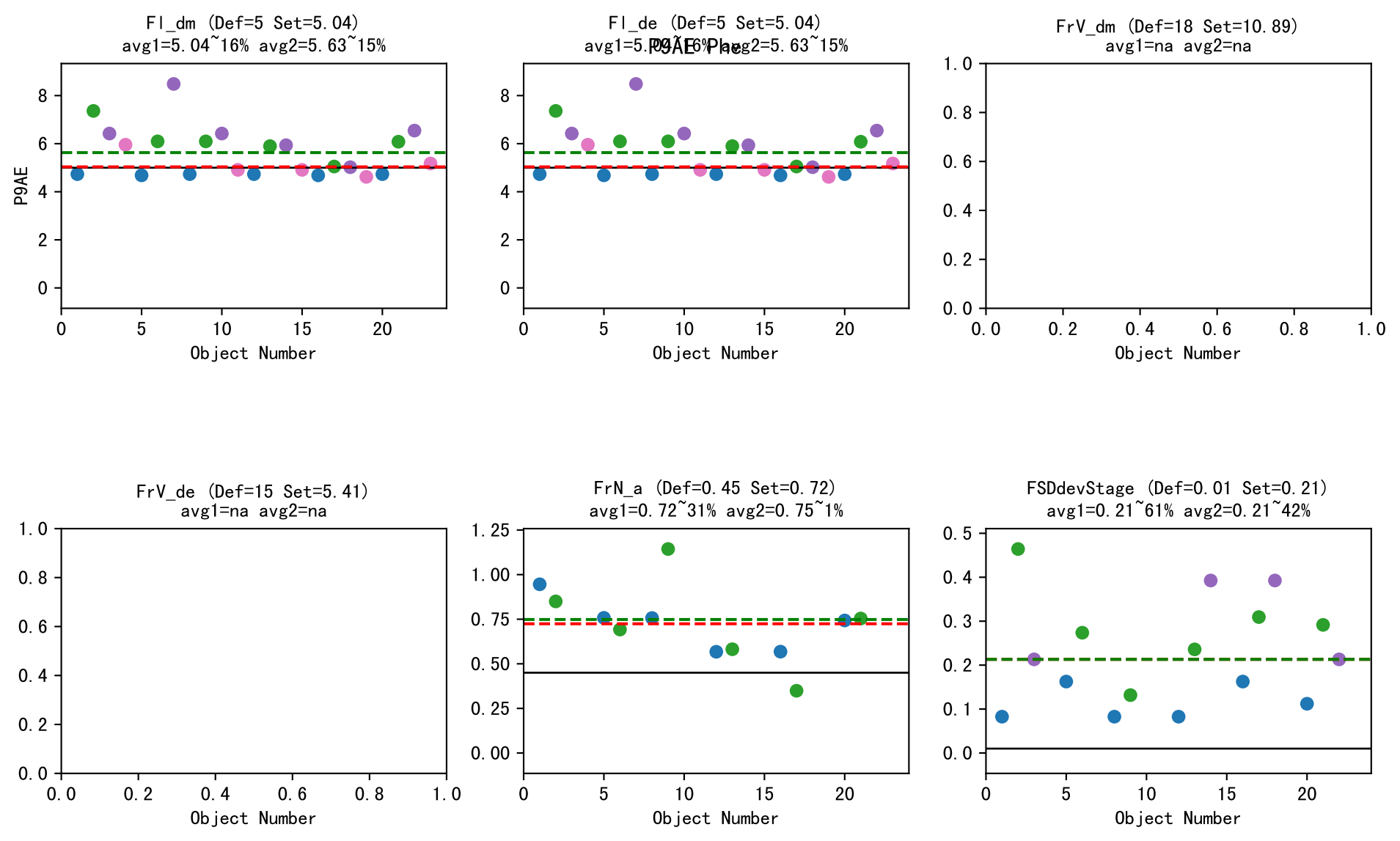

Ymax (Def=1 Set=0.55)
avg1=0.55~18% avg2=na
P9AE
1.00
0.75
0.50
0.25
0.00
0
2
4
6
8
Object Number

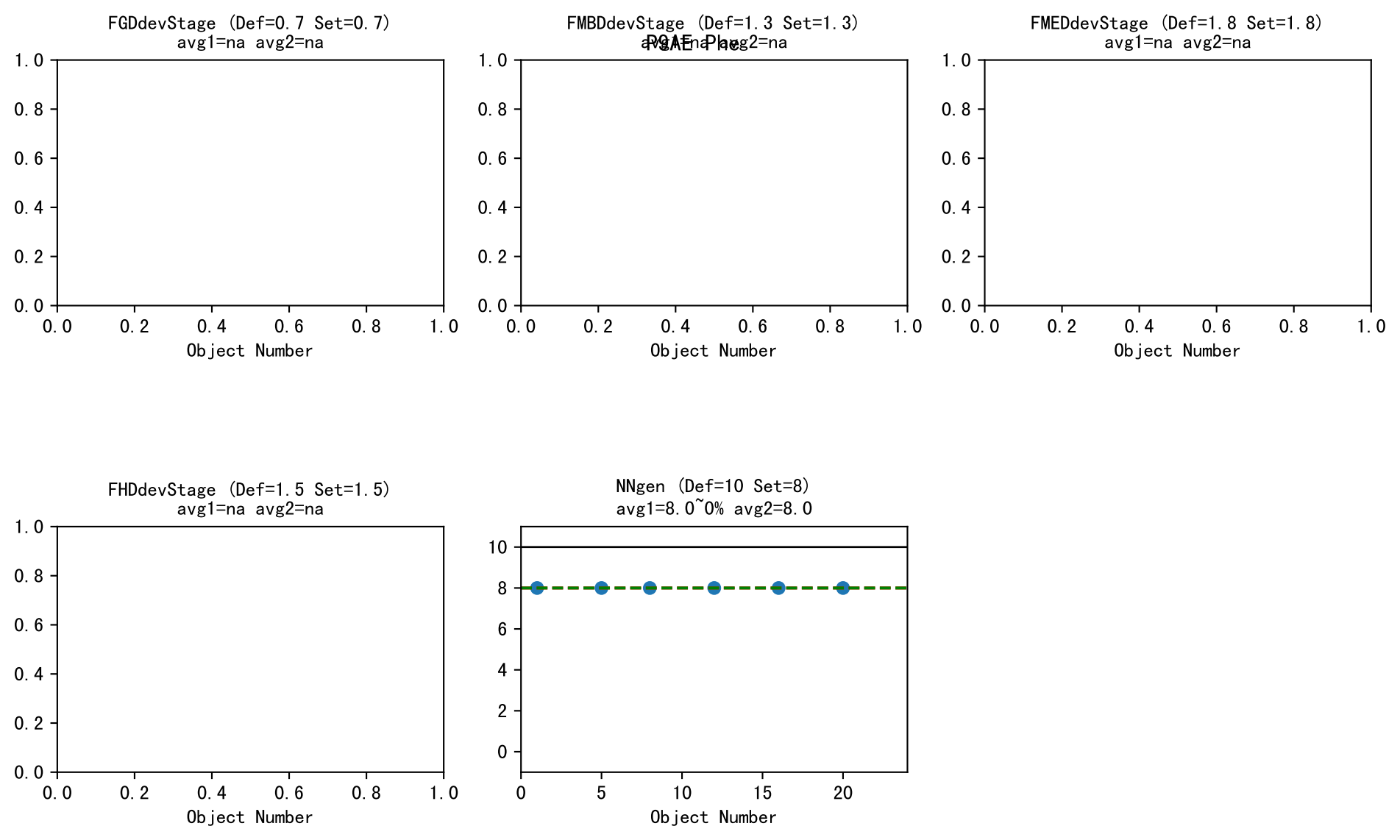

tb (Def=na Set=na)
avg1=6.5~16% avg2=na
20
15
10
5
0
0
2
4
6
8
Object Number

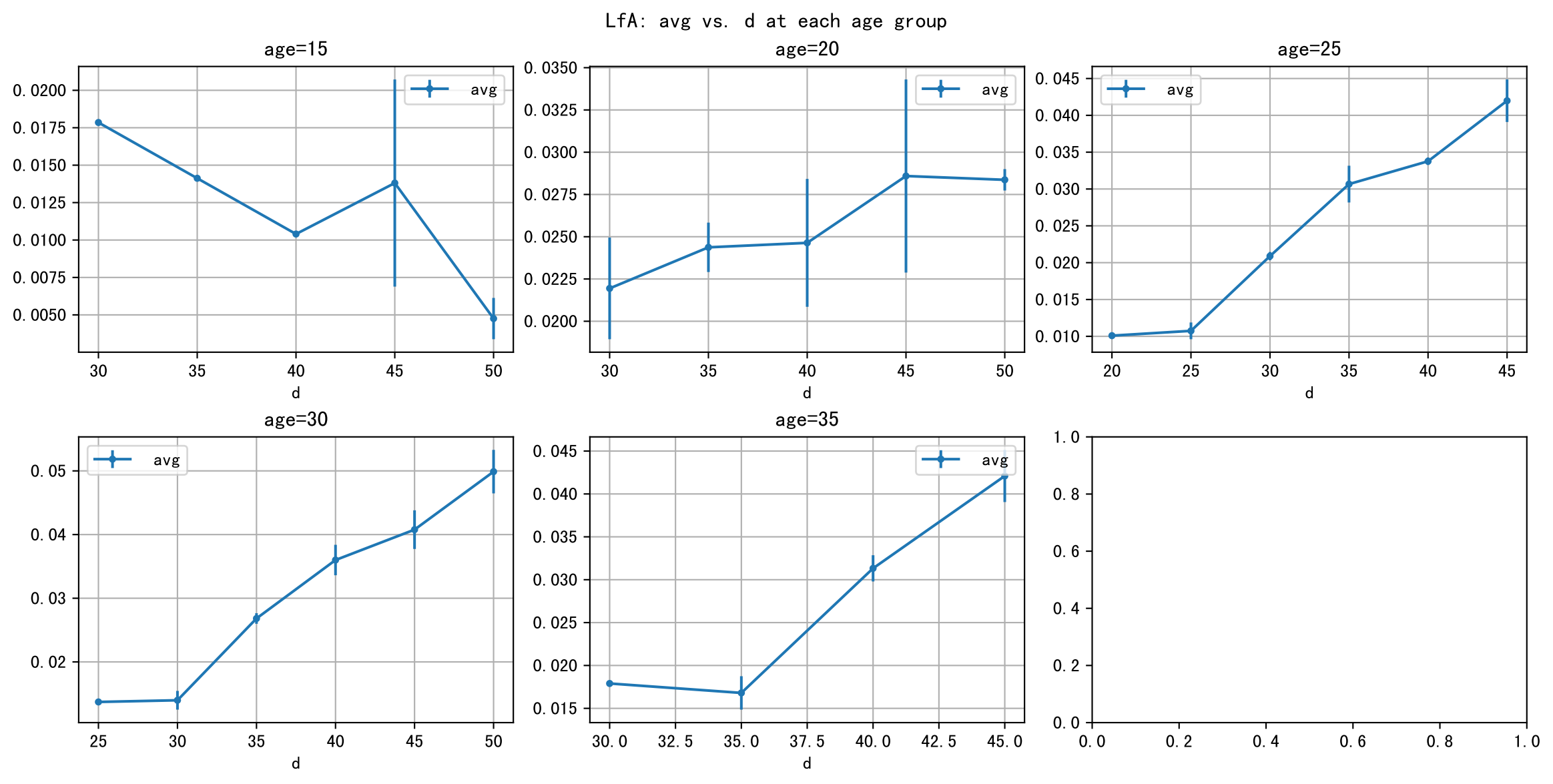

dm (Def=12 Set=12)
avg1=5.75~9% avg2=na
12.5
10.0
7.5
5.0
2.5
0.0
0
2
4
6
8
Object Number

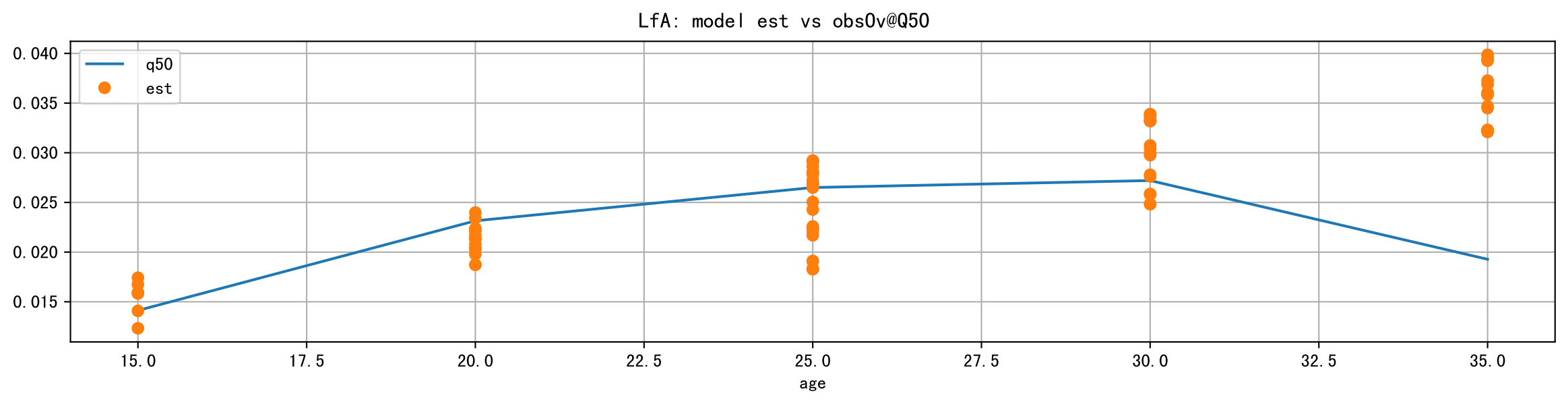

de (Def=12 Set=14.18)
avg1=14.18~30% avg2=na
20
15
10
5
0
0
2
4
6
8
Object Number

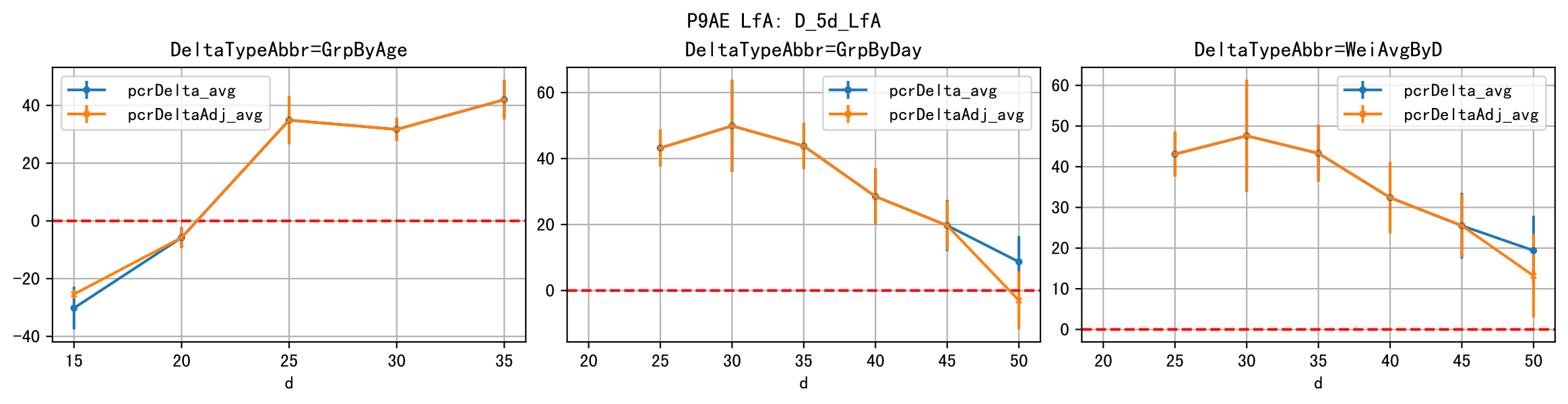

LfA
By Start Date
By Plant/Organ Age
P9AE
1.0
0.5
0.0
−0.5
−1.0
27.5
30.0
32.5
35.0
37.5
40.0
42.5
45.0
0
5
10
15
20
25
30
35
40

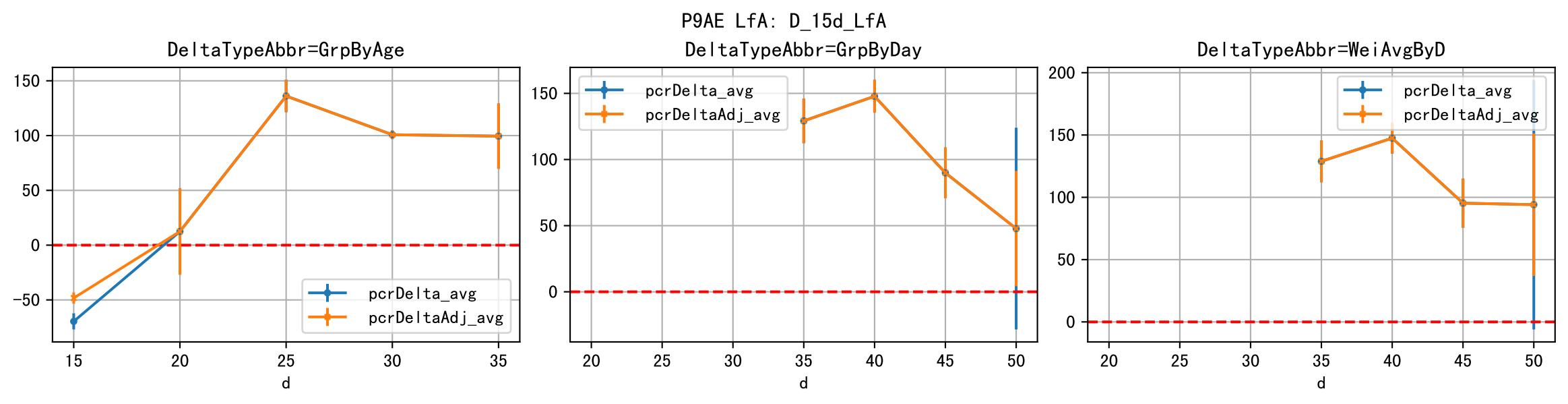

Fl_dm (Def=5 Set=5.04)
avg1=5.04~16% avg2=5.63~15%
Fl_de (Def=5 Set=5.04)
avg1=5.04~16% avg2=5.63~15%
FrV_dm (Def=18 Set=10.89)
avg1=na avg2=na
FrV_de (Def=15 Set=5.41)
avg1=na avg2=na
FrN_a (Def=0.45 Set=0.72)
avg1=0.72~31% avg2=0.75~1%
FSDdevStage (Def=0.01 Set=0.21)
avg1=0.21~61% avg2=0.21~42%
P9AE
Object Number

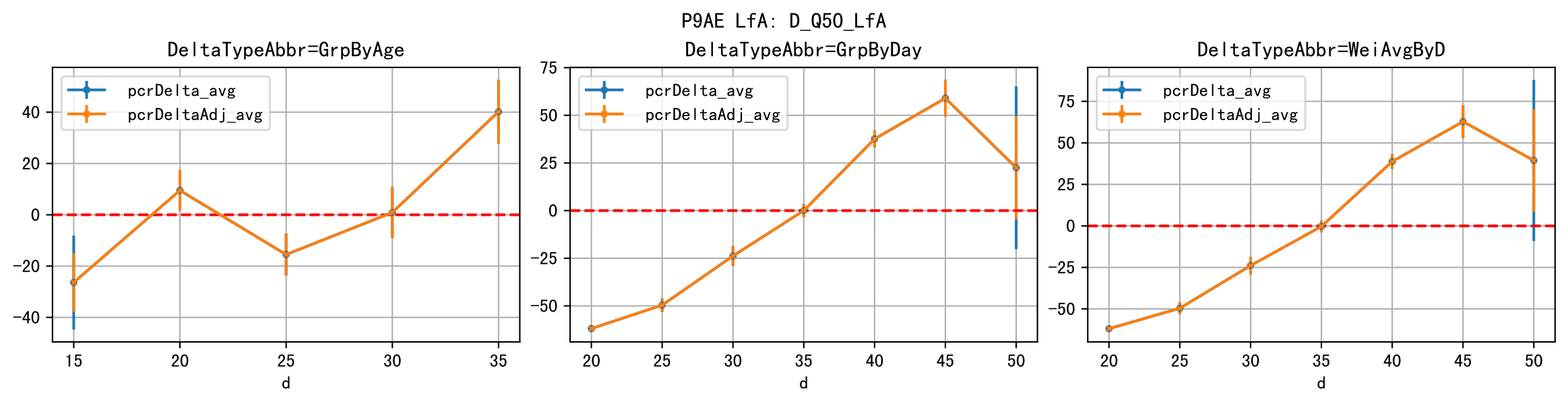

FGDdevStage (Def=0.7 Set=0.7)
avg1=na avg2=na
FMBDdevStage (Def=1.3 Set=1.3)
avg1=na avg2=na
FMEDdevStage (Def=1.8 Set=1.8)
avg1=na avg2=na
FHDdevStage (Def=1.5 Set=1.5)
avg1=na avg2=na
NNgen (Def=10 Set=8)
avg1=8.0~0% avg2=8.0
Object Number

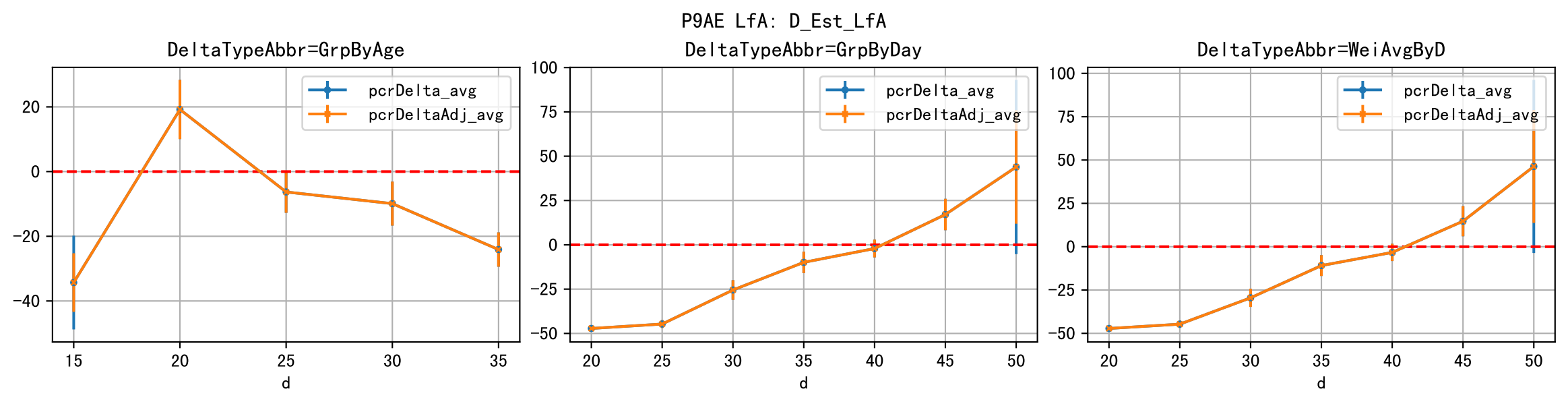

LfA: avg vs. d at each age group
age=15
age=20
age=25
age=30
age=35
avg
d

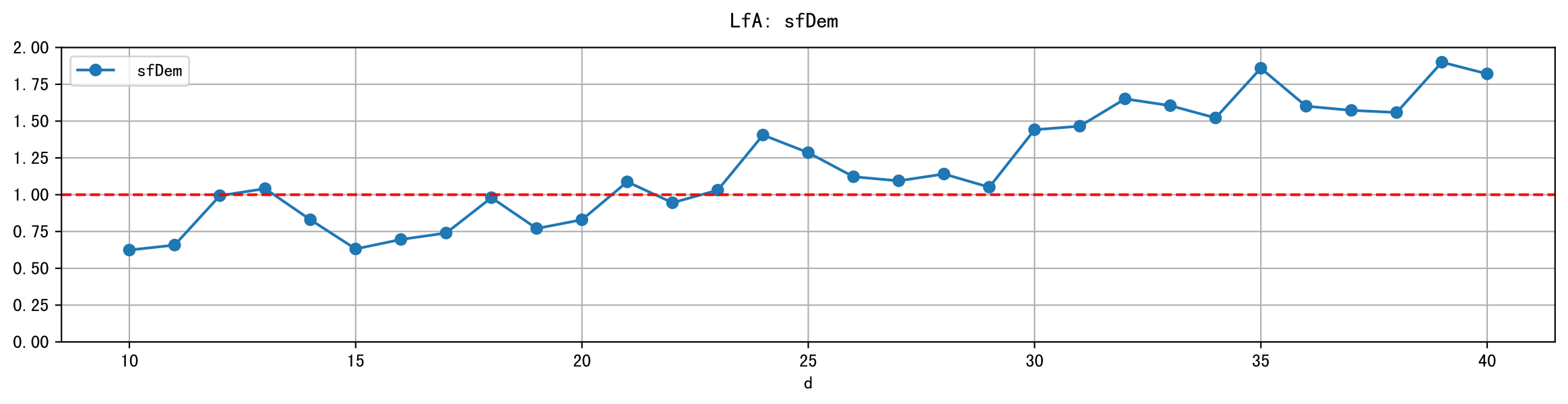

LfA: model est vs obsOv@Q50
q50
est
0.040
0.035
0.030
0.025
0.020
0.015
15.0
17.5
20.0
22.5
25.0
27.5
30.0
32.5
35.0
age

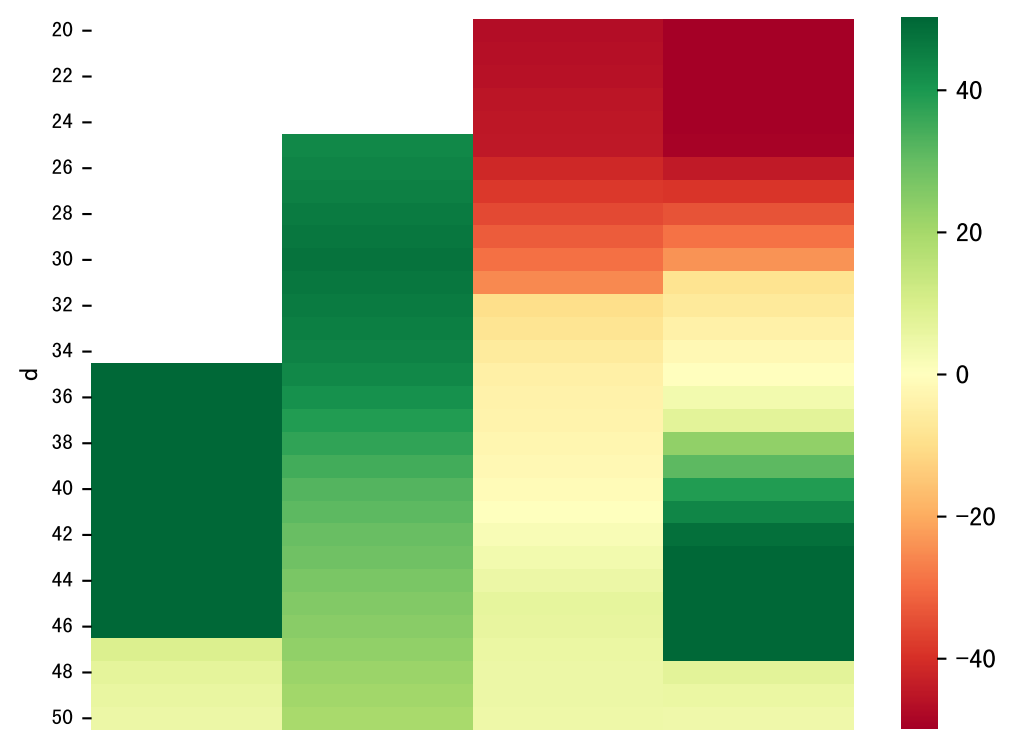

P9AE LfA: D_5d_LfA
DeltaTypeAbbr=GrpByAge
DeltaTypeAbbr=GrpByDay
DeltaTypeAbbr=WeiAvgByD
pcrDelta_avg
pcrDeltaAdj_avg
d

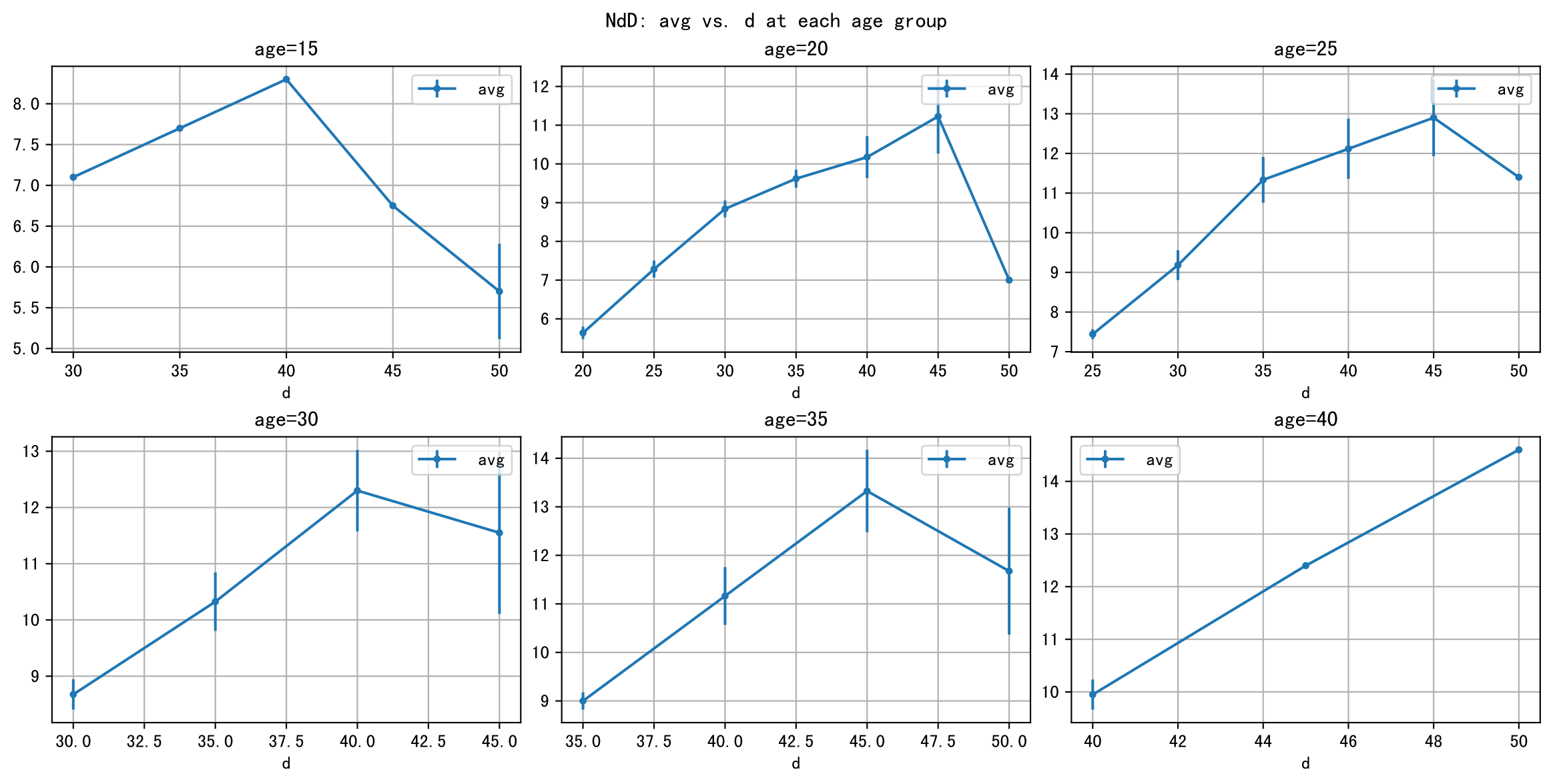

P9AE LfA: D_15d_LfA
DeltaTypeAbbr=GrpByAge
DeltaTypeAbbr=GrpByDay
DeltaTypeAbbr=WeiAvgByD
pcrDelta_avg
pcrDeltaAdj_avg
d

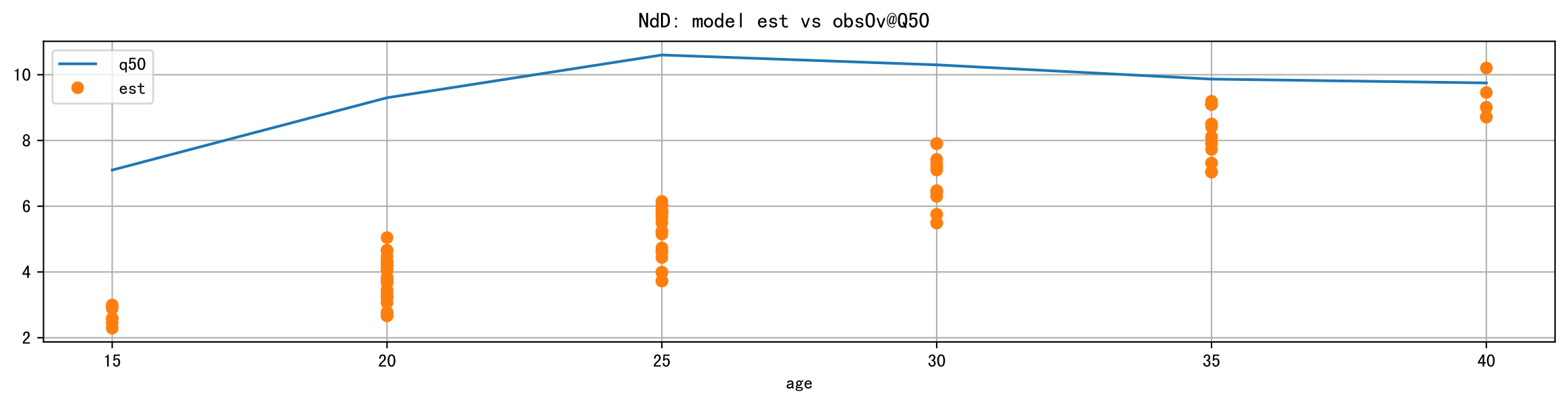

P9AE LfA: D_Q50_LfA
DeltaTypeAbbr=GrpByAge
DeltaTypeAbbr=GrpByDay
DeltaTypeAbbr=WeiAvgByD
pcrDelta_avg
pcrDeltaAdj_avg
d

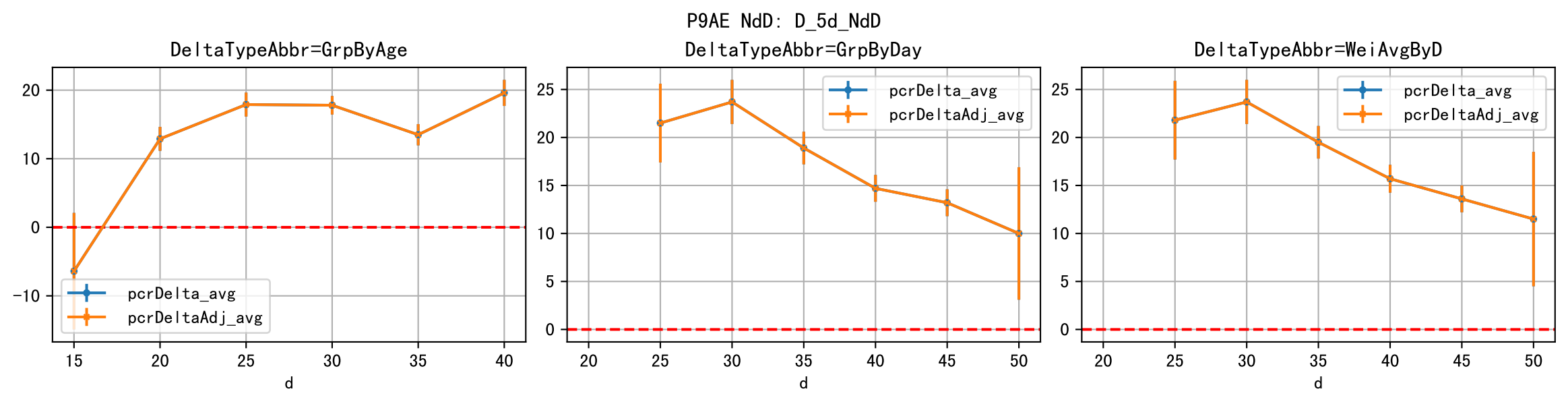

P9AE LfA: D_Est_LfA
DeltaTypeAbbr=GrpByAge
DeltaTypeAbbr=GrpByDay
DeltaTypeAbbr=WeiAvgByD
pcrDelta_avg
pcrDeltaAdj_avg
d

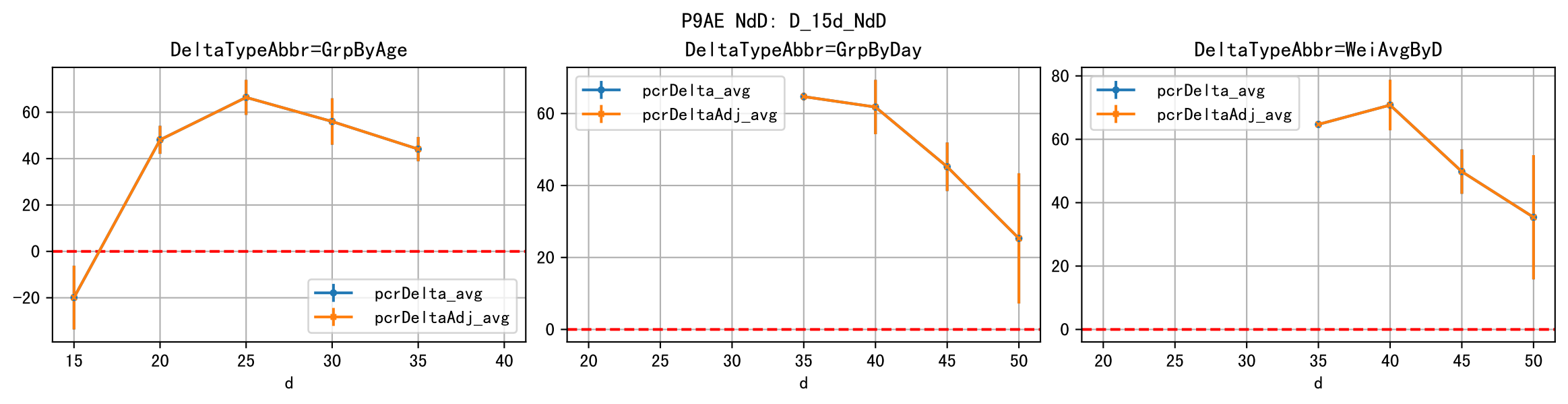

LfA: sfDem
sfDem
2.00
1.75
1.50
1.25
1.00
0.75
0.50
0.25
0.00
10
15
20
25
30
35
40
d

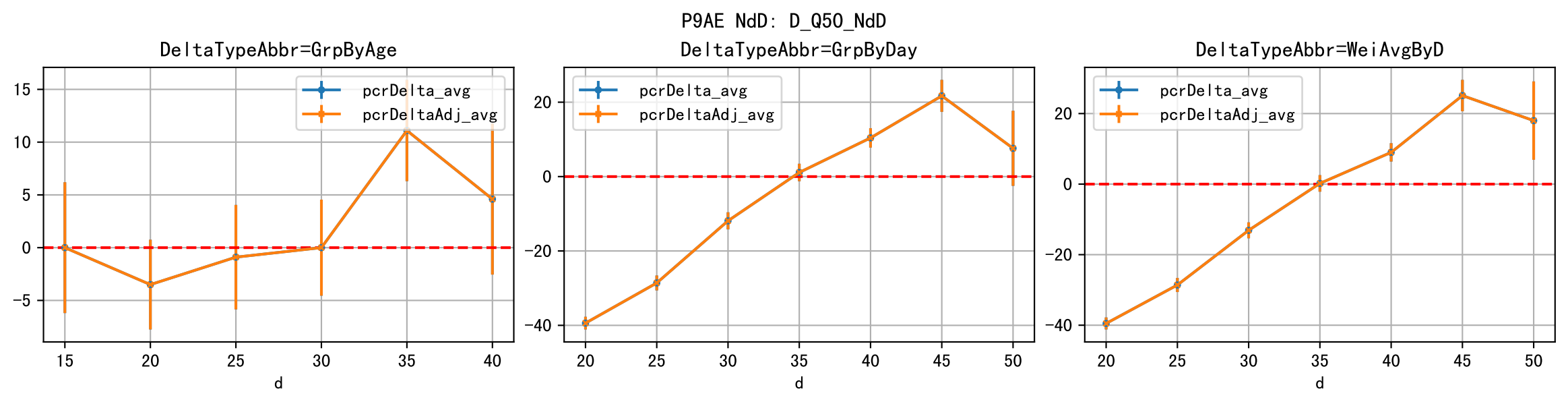

d
20
22
24
26
28
30
32
34
36
38
40
42
44
46
48
50
40
20
0
−20
−40

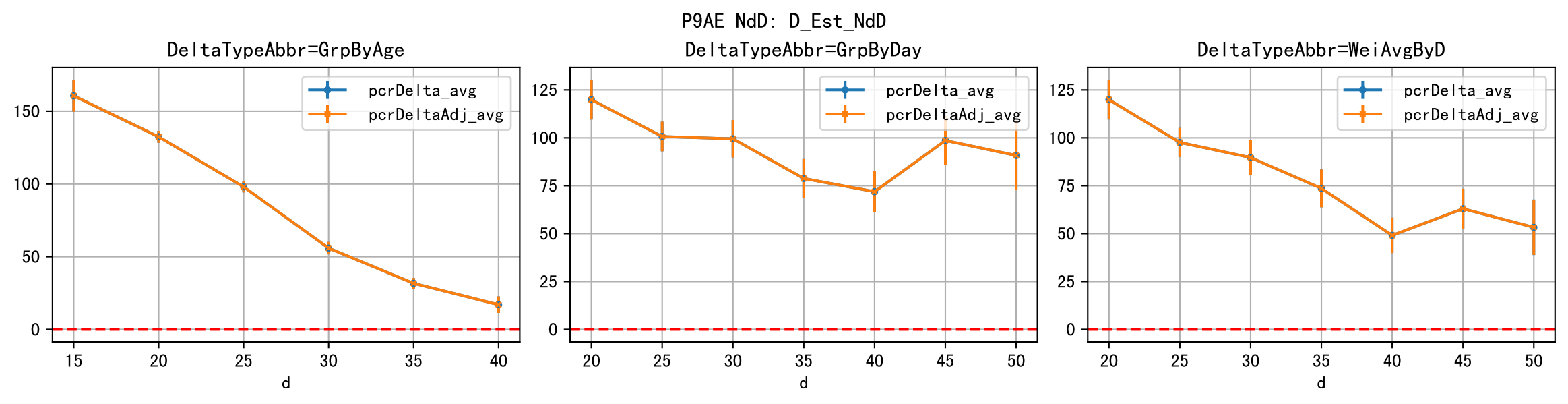

NdD: avg vs. d at each age group
age=15
age=20
age=25
age=30
age=35
age=40
avg
d

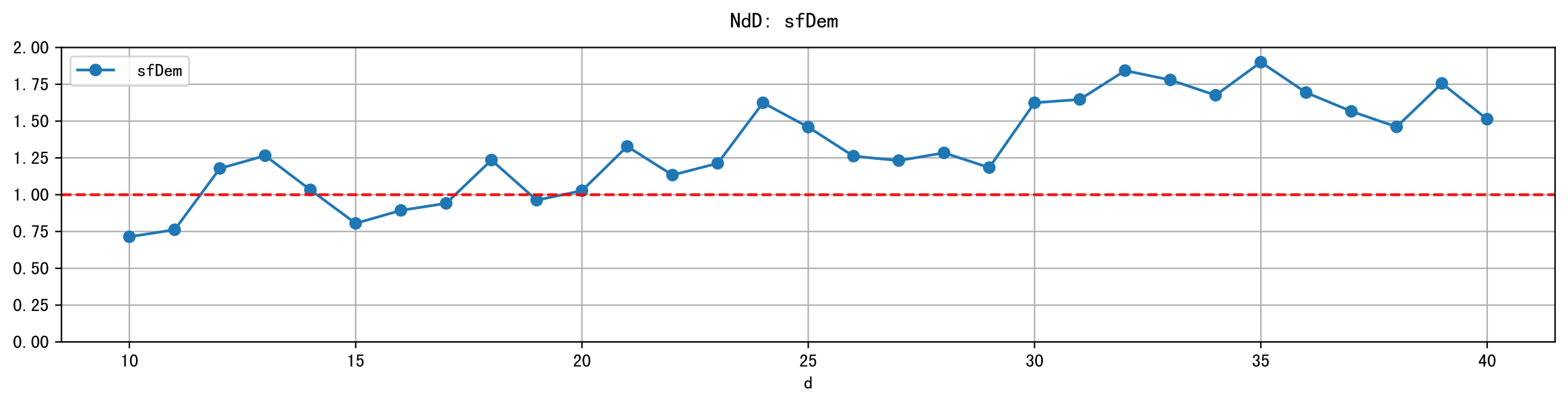

NdD: model est vs obsOv@Q50
q50
est
10
8
6
4
2
15
20
25
30
35
40
age

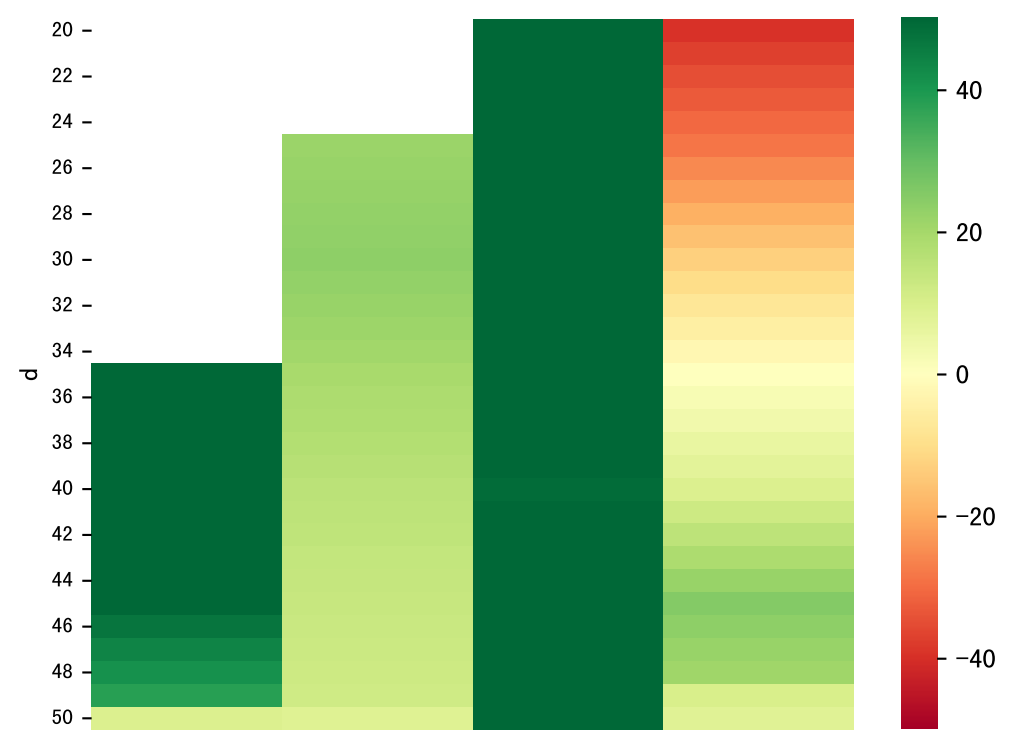

P9AE NdD: D_5d_NdD
DeltaTypeAbbr=GrpByAge
DeltaTypeAbbr=GrpByDay
DeltaTypeAbbr=WeiAvgByD
pcrDelta_avg
pcrDeltaAdj_avg
d

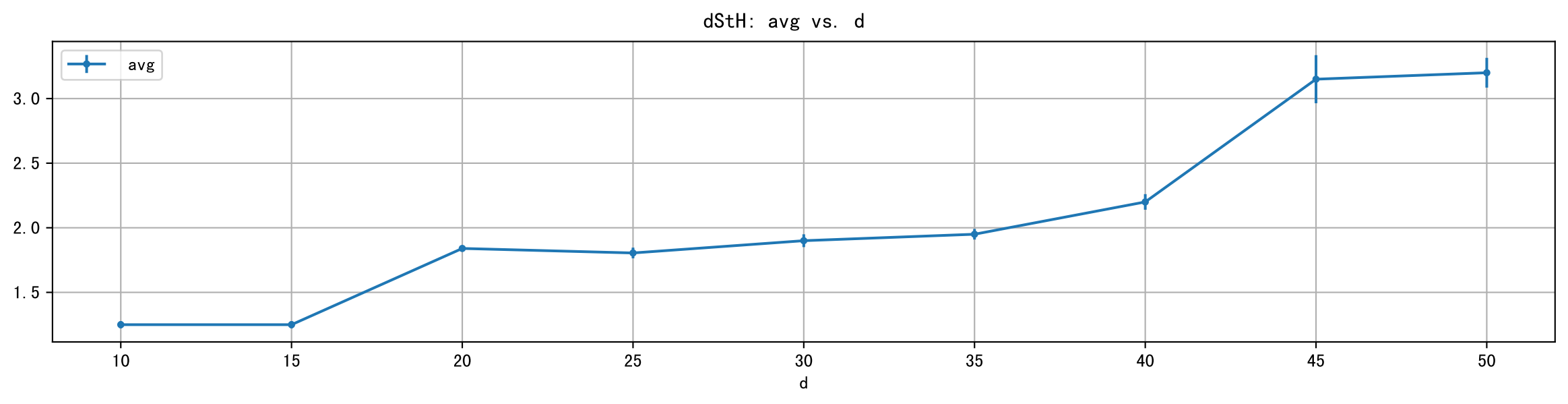

P9AE NdD: D_15d_NdD
DeltaTypeAbbr=GrpByAge
DeltaTypeAbbr=GrpByDay
DeltaTypeAbbr=WeiAvgByD
pcrDelta_avg
pcrDeltaAdj_avg
d

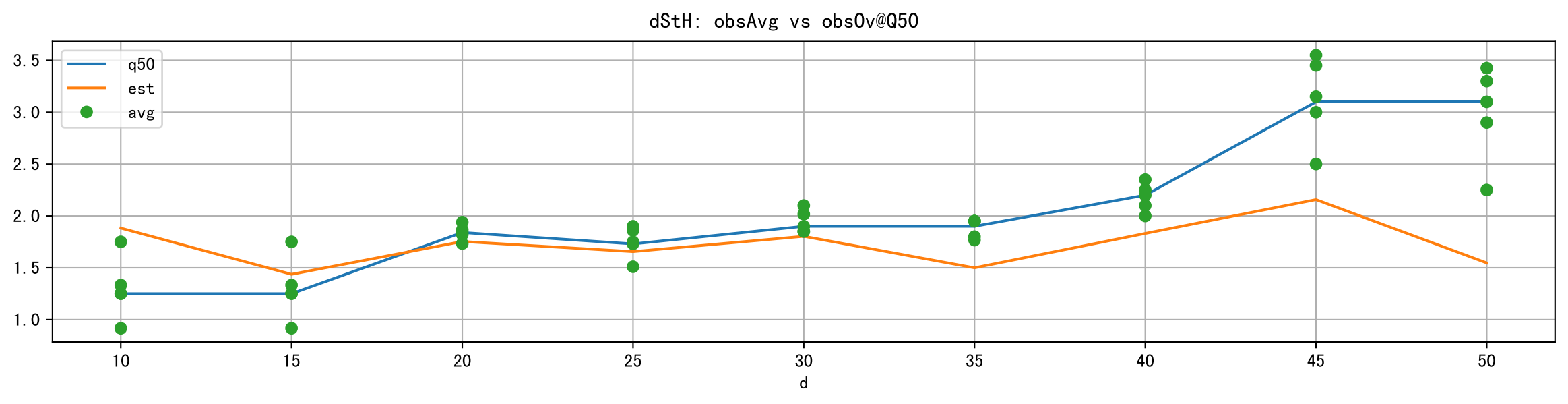

P9AE NdD: D_Q50_NdD
DeltaTypeAbbr=GrpByAge
DeltaTypeAbbr=GrpByDay
DeltaTypeAbbr=WeiAvgByD
pcrDelta_avg
pcrDeltaAdj_avg
d

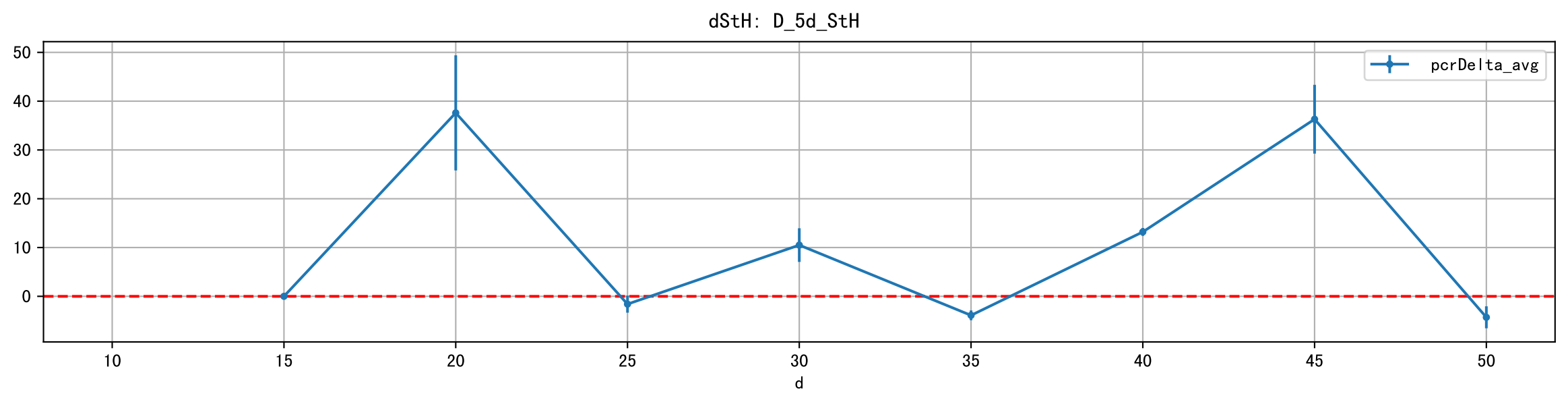

P9AE NdD: D_Est_NdD
DeltaTypeAbbr=GrpByAge
DeltaTypeAbbr=GrpByDay
DeltaTypeAbbr=WeiAvgByD
pcrDelta_avg
pcrDeltaAdj_avg
d

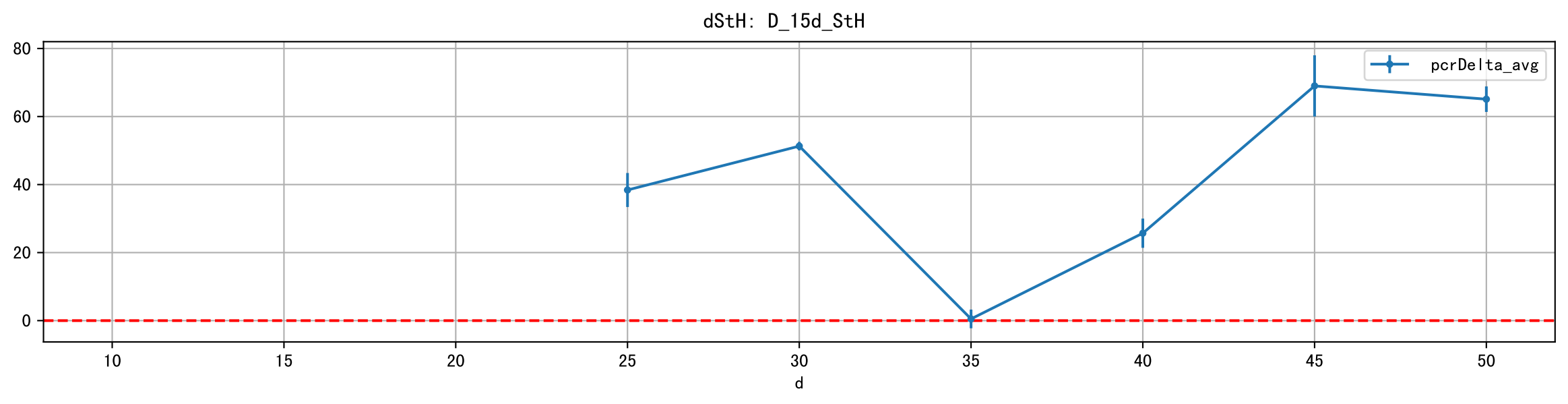

NdD: sfDem
sfDem
2.00
1.75
1.50
1.25
1.00
0.75
0.50
0.25
0.00
10
15
20
25
30
35
40
d

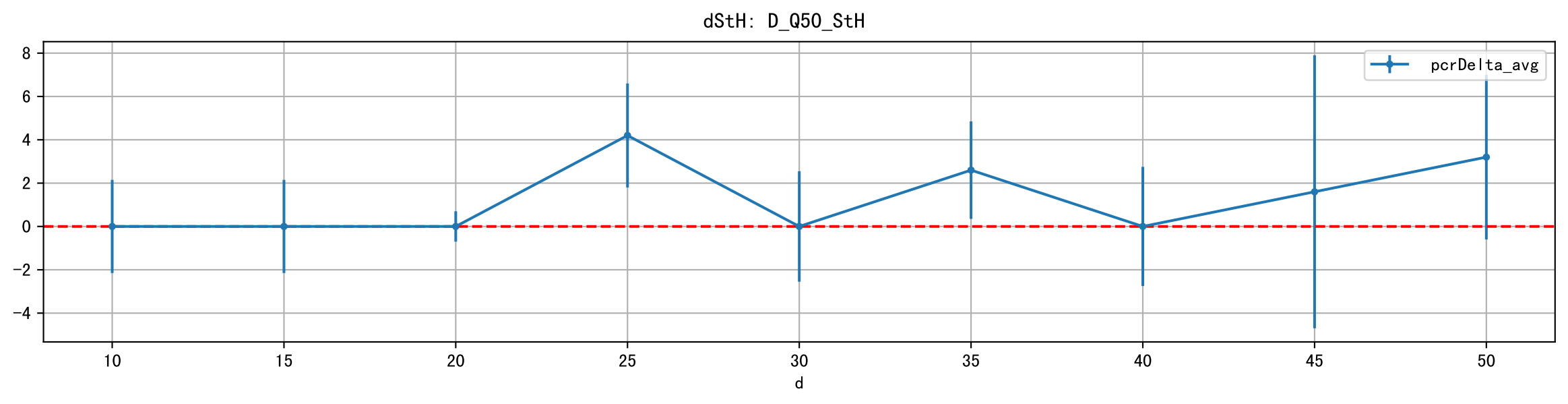

d
20
22
24
26
28
30
32
34
36
38
40
42
44
46
48
50
40
20
0
−20
−40

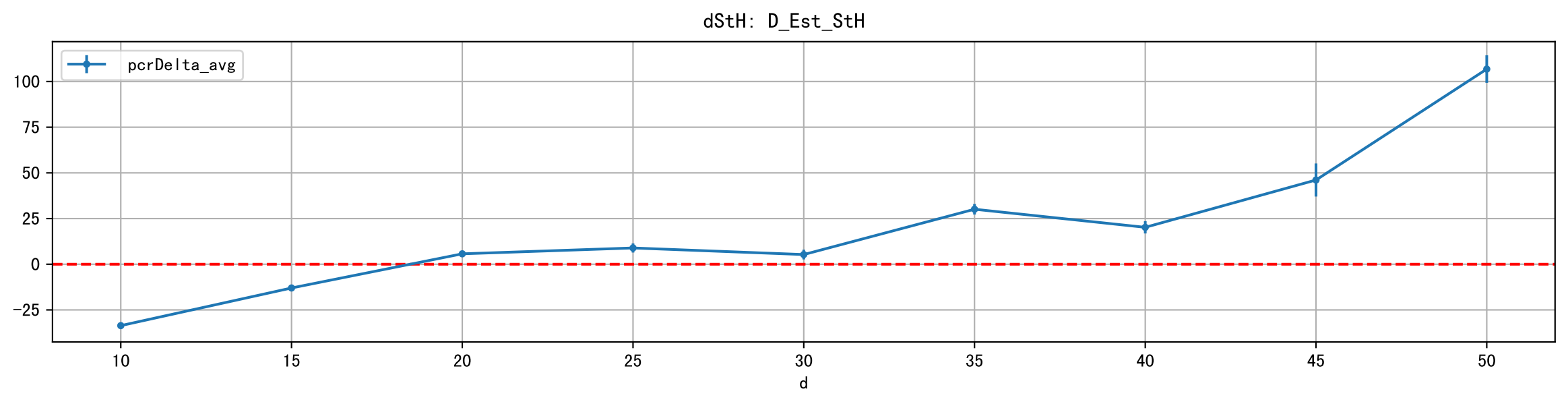

dStH: avg vs. d
avg
3.0
2.5
2.0
1.5
10
15
20
25
30
35
40
45
50
d

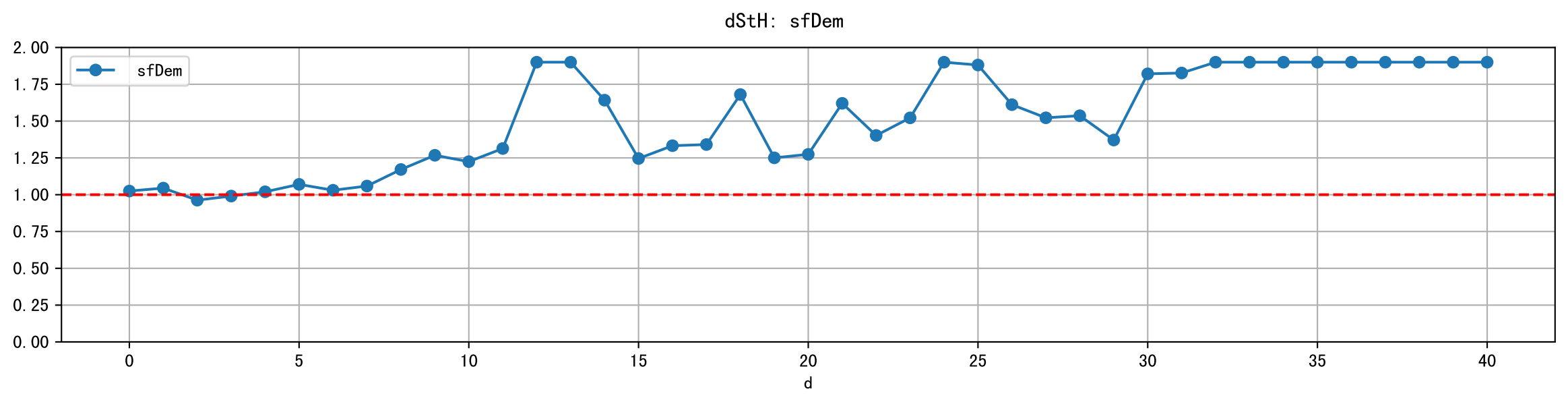

dStH: obsAvg vs obsOv@Q50
q50
est
avg
3.5
3.0
2.5
2.0
1.5
1.0
10
15
20
25
30
35
40
45
50
d

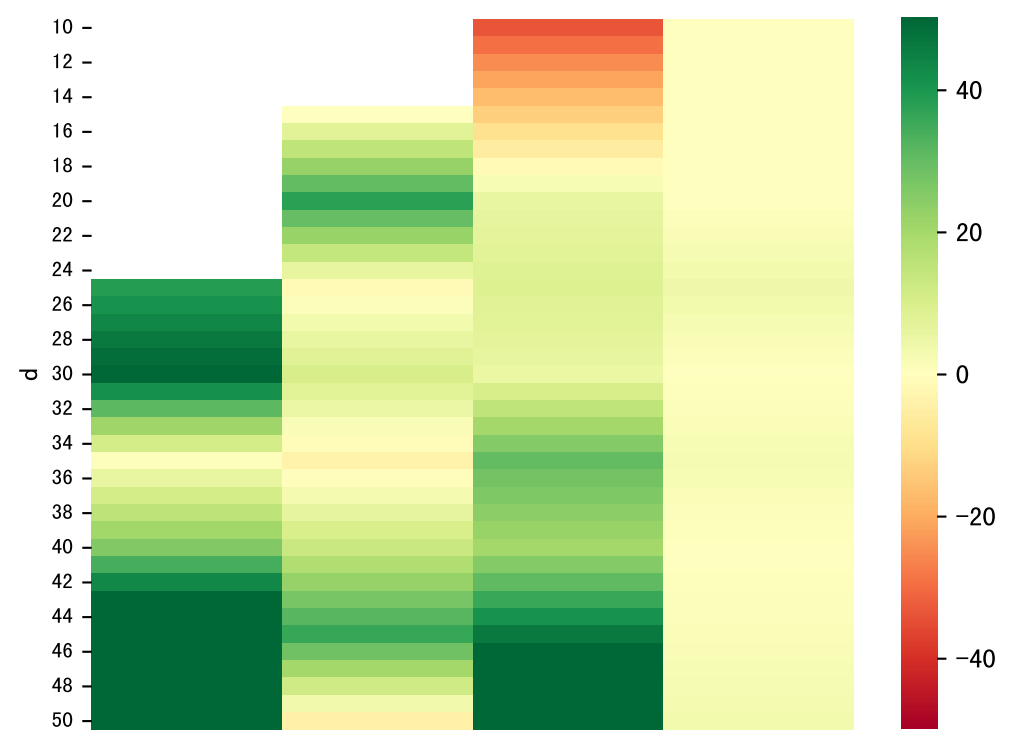

dStH: D_5d_StH
pcrDelta_avg
50
40
30
20
10
0
10
15
20
25
30
35
40
45
50
d

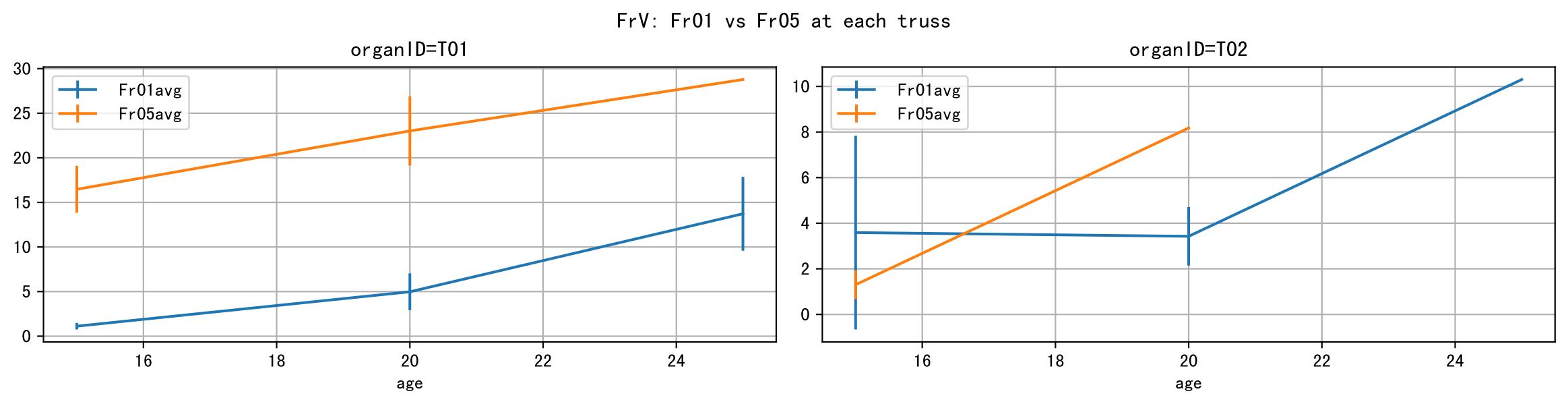

dStH: D_15d_StH
pcrDelta_avg
80
60
40
20
0
10
15
20
25
30
35
40
45
50
d

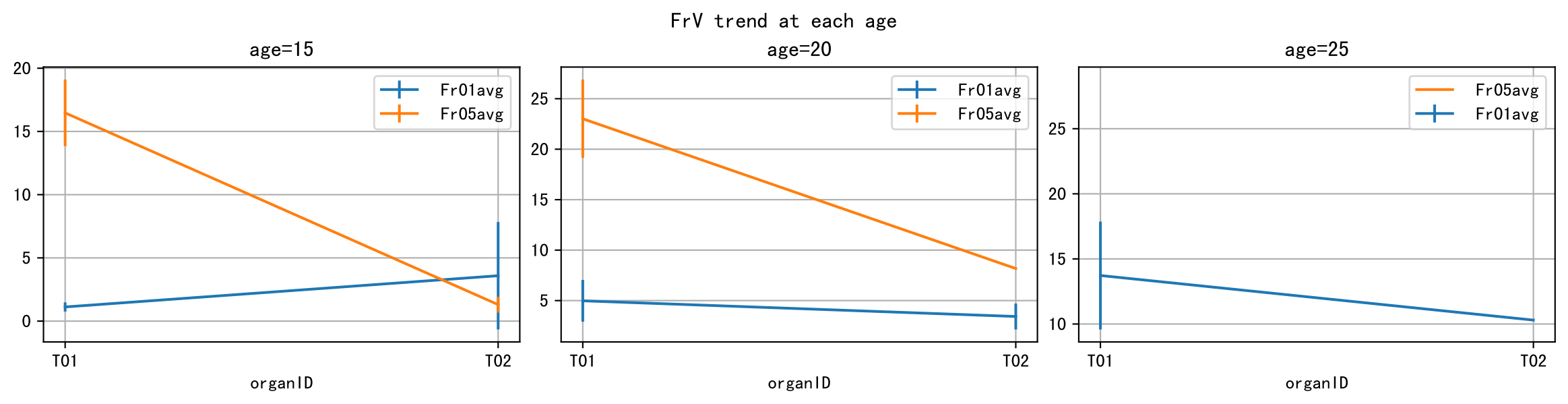

dStH: D_Q50_StH
pcrDelta_avg
8
6
4
2
0
−2
−4
10
15
20
25
30
35
40
45
50
d

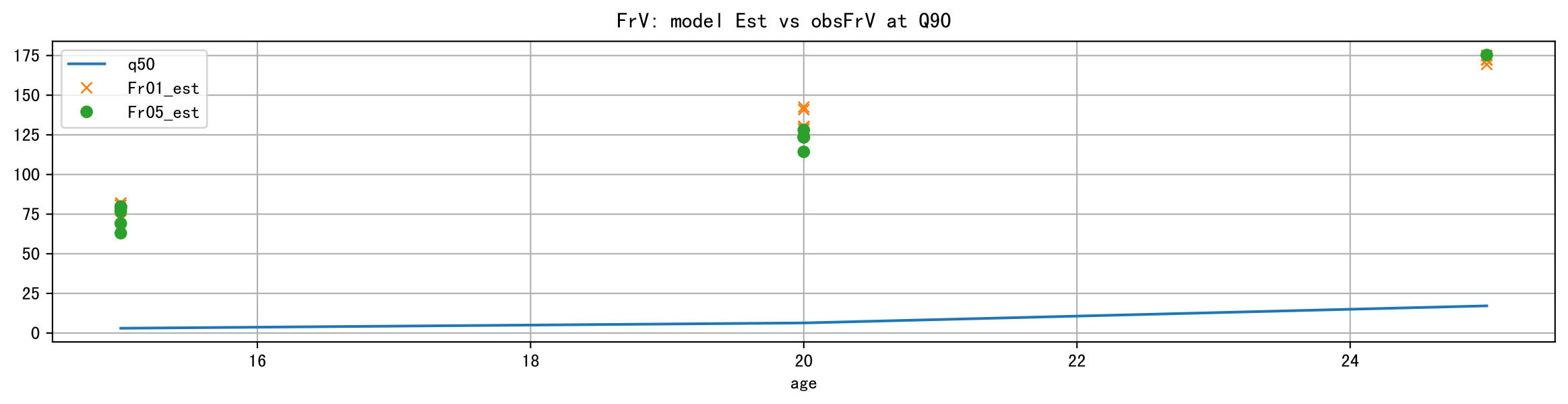

dStH: D_Est_StH
pcrDelta_avg
100
75
50
25
0
−25
10
15
20
25
30
35
40
45
50
d

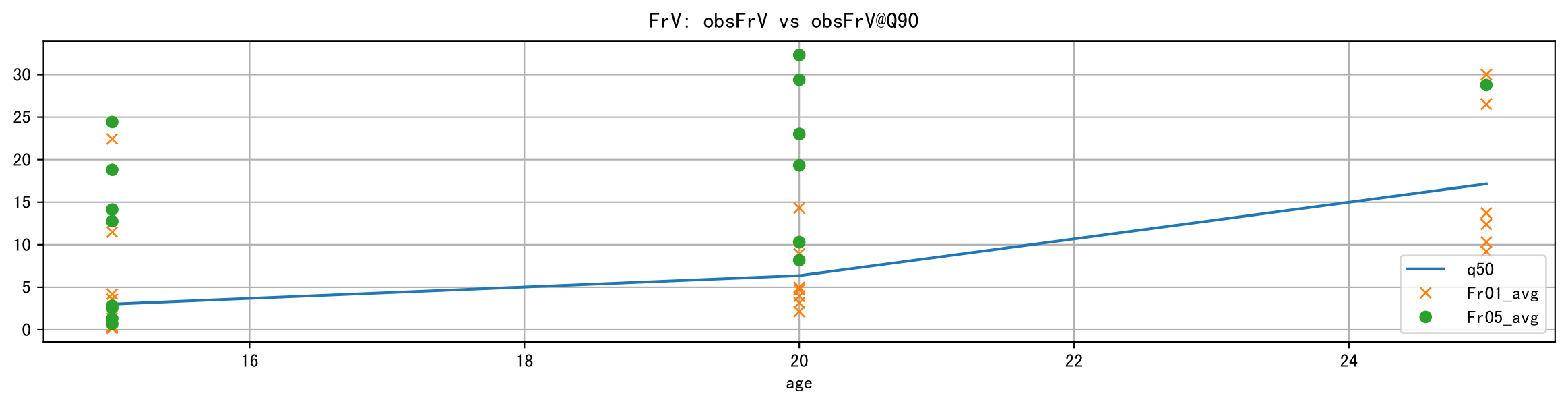

dStH: sfDem
sfDem
2.00
1.75
1.50
1.25
1.00
0.75
0.50
0.25
0.00
0
5
10
15
20
25
30
35
40
d

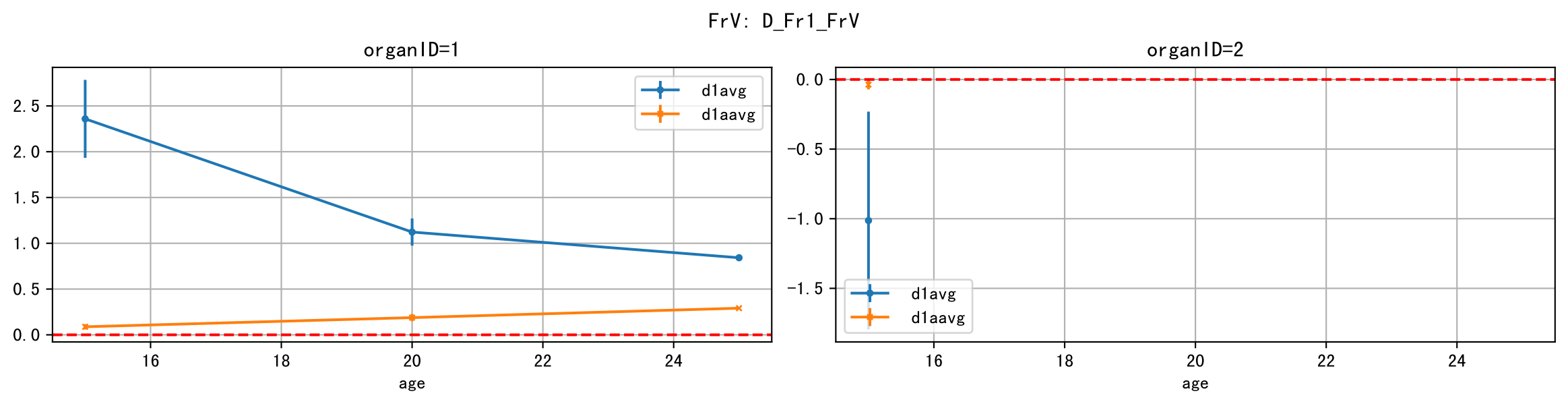

d
10
12
14
16
18
20
22
24
26
28
30
32
34
36
38
40
42
44
46
48
50
40
20
0
−20
−40

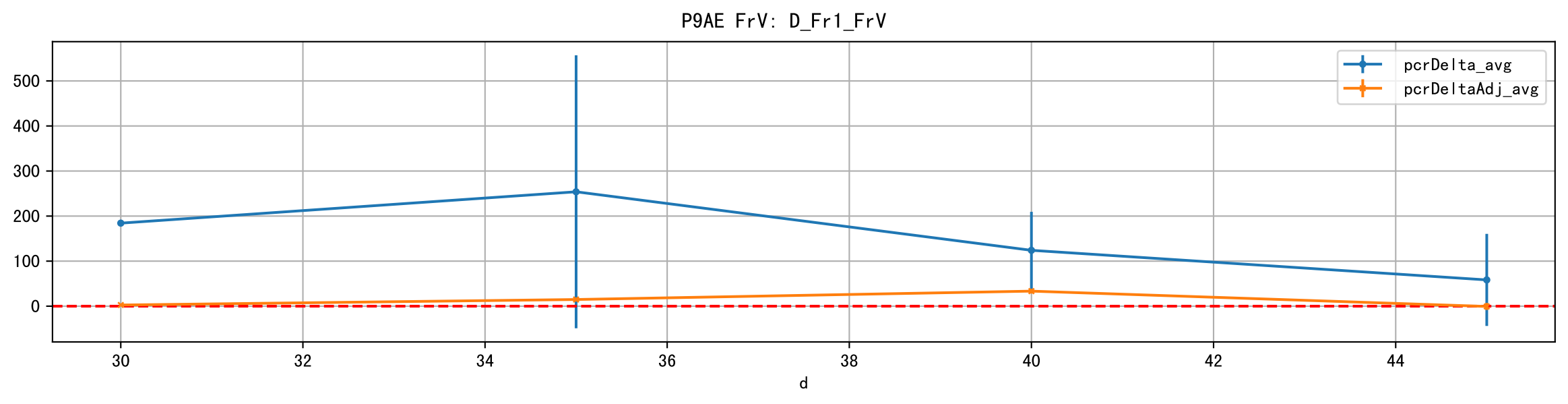

FrV: Fr01 vs Fr05 at each truss
organID=T01
organID=T02
Fr01avg
Fr05avg
Fr01avg
Fr05avg
age
age

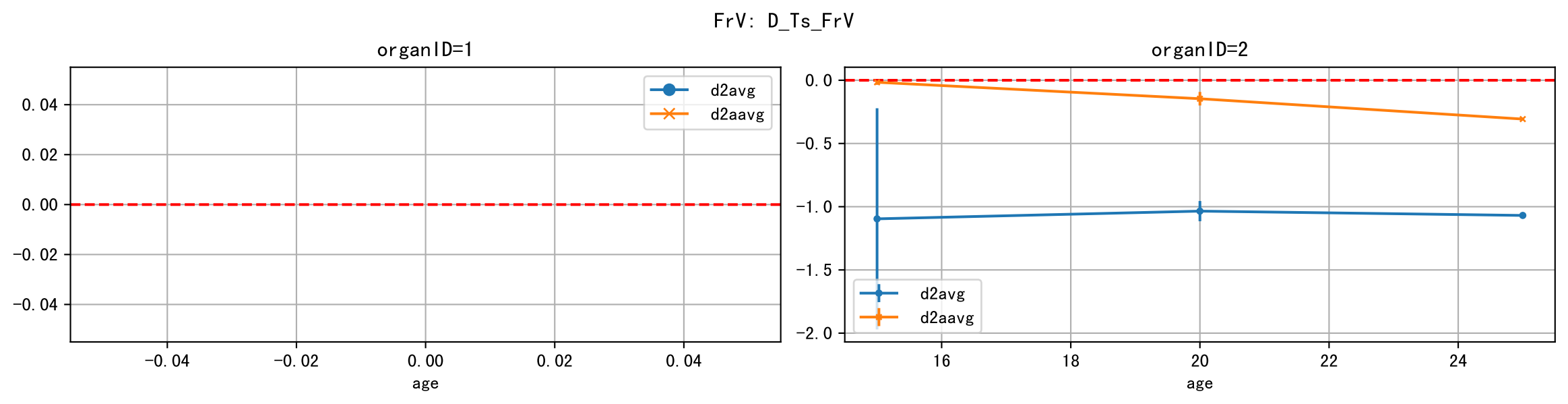

FrV trend at each age
age=15
age=20
age=25
Fr01avg
Fr05avg
T01
T02
organID

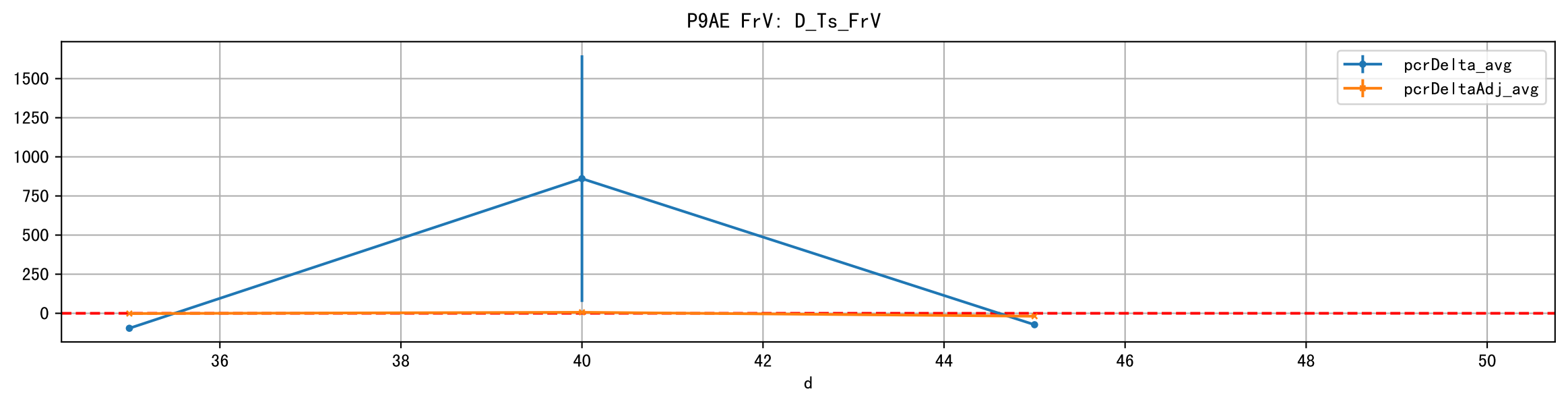

FrV: model Est vs obsFrV at Q90
q50
Fr01_est
Fr05_est
175
150
125
100
75
50
25
0
16
18
20
22
24
age

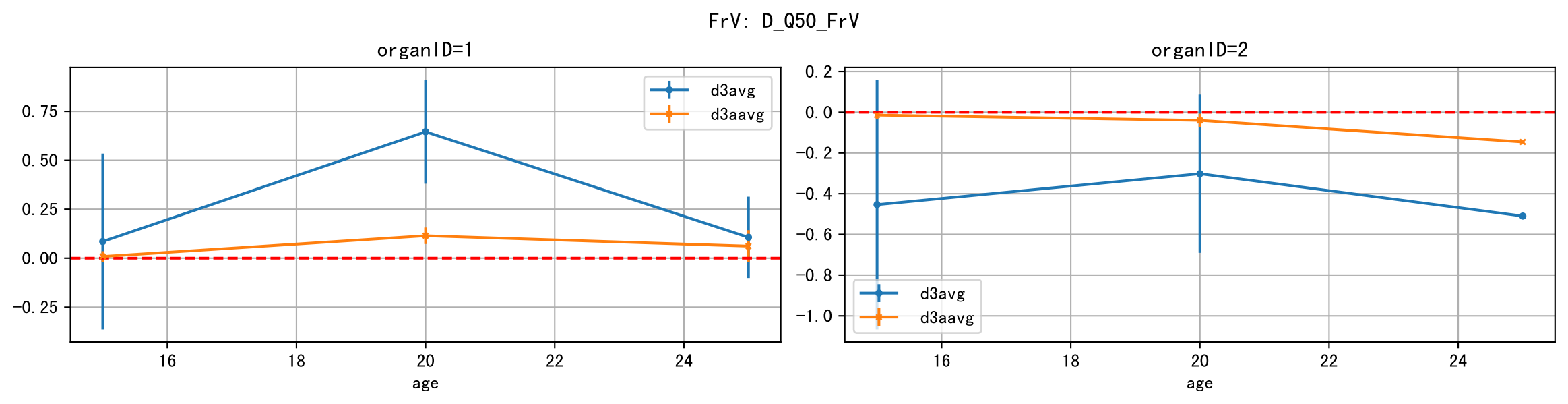

FrV: obsFrV vs obsFrV@Q90
30
25
20
15
10
5
0
16
18
20
22
24
age
q50
Fr01_avg
Fr05_avg

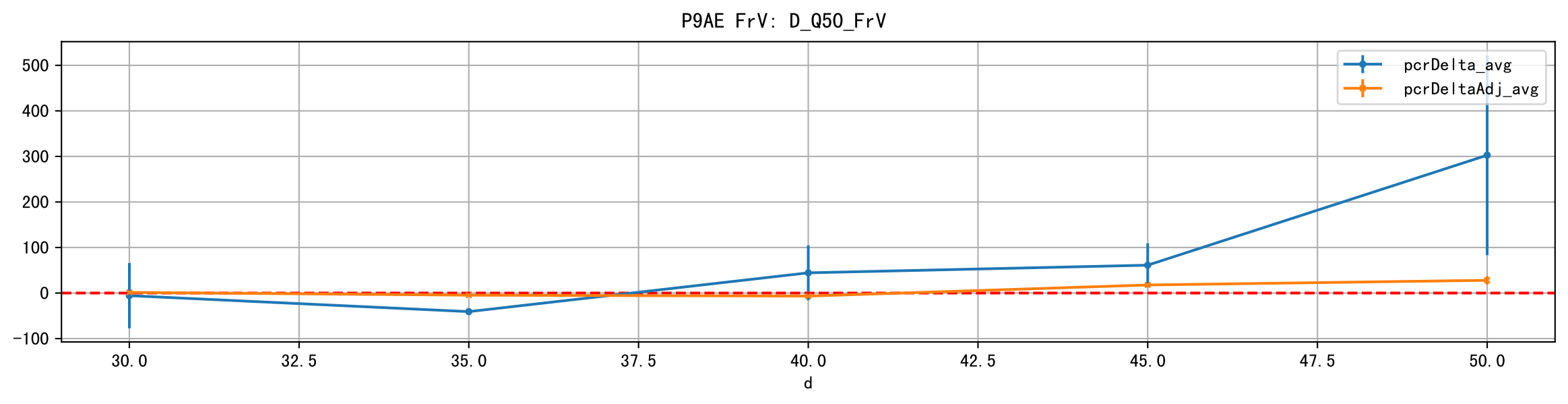

FrV: D_Fr1_FrV
organID=1
organID=2
d1avg
d1aavg
age
2.5
2.0
1.5
1.0
0.5
0.0
−0.5
−1.0
−1.5
16
18
20
22
24

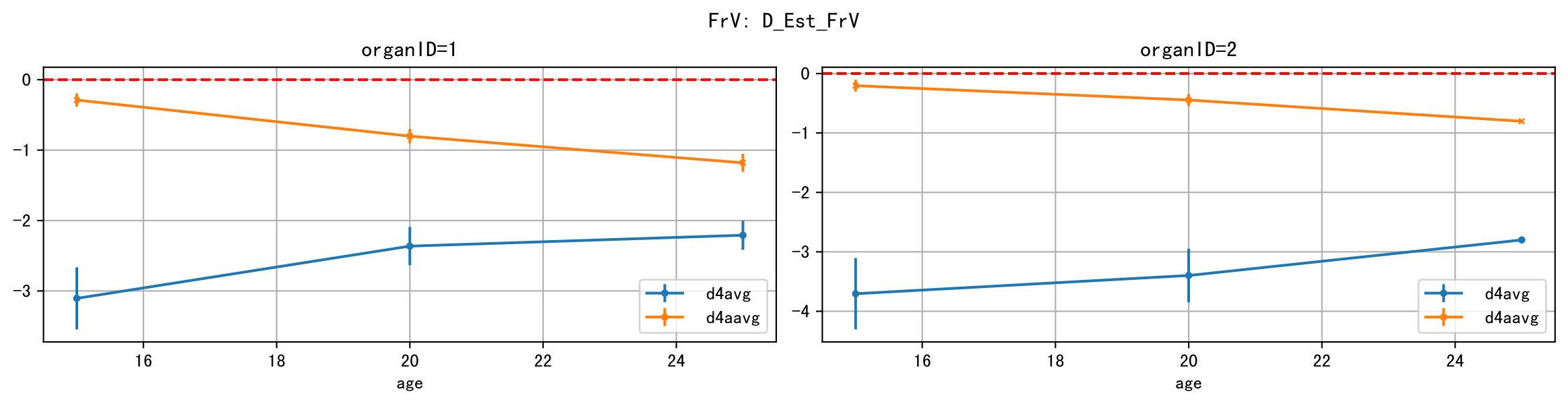

P9AE FrV: D_Fr1_FrV
pcrDelta_avg
pcrDeltaAdj_avg
500
400
300
200
100
0
30
32
34
36
38
40
42
44
d


FrV: D_Ts_FrV
organID=1
organID=2
d2avg
d2aavg
0.04
0.02
0.00
−0.02
−0.04
−0.04
−0.02
0.00
0.02
0.04
age
0.0
−0.5
−1.0
−1.5
−2.0
16
18
20
22
24
age

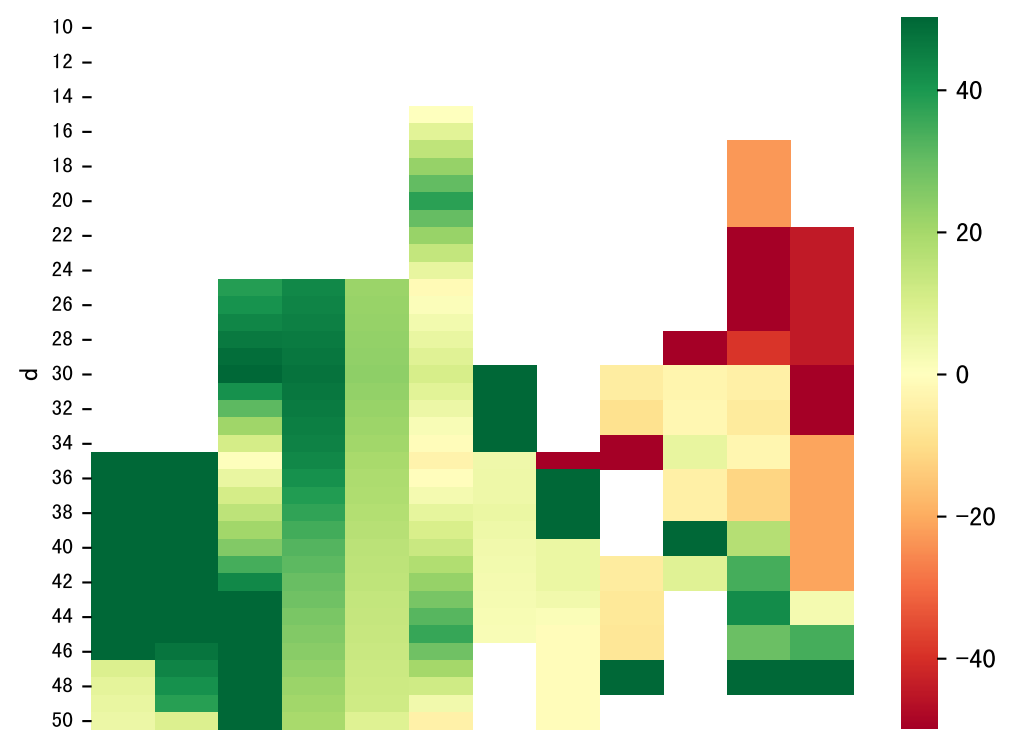

P9AE FrV: D_Ts_FrV
pcrDelta_avg
pcrDeltaAdj_avg
1500
1250
1000
750
500
250
0
36
38
40
42
44
46
48
50
d


FrV: D_Q50_FrV
organID=1
organID=2
d3avg
d3aavg
0.75
0.50
0.25
0.00
−0.25
0.2
0.0
−0.2
−0.4
−0.6
−0.8
−1.0
16
18
20
22
24
age


P9AE FrV: D_Q5O_FrV
pcrDelta_avg
pcrDeltaAdj_avg
500
400
300
200
100
0
−100
30.0
32.5
35.0
37.5
40.0
42.5
45.0
47.5
50.0
d


FrV: D_Est_FrV
organID=1
organID=2
0
−1
−2
−3
−4
16
18
20
22
24
age
d4avg
d4aavg


d
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
40
20
0
−20
−40


d
10
12
14
16
18
20
22
24
26
28
30
32
34
36
38
40
42
44
46
48
50
40
20
0
−20
−40