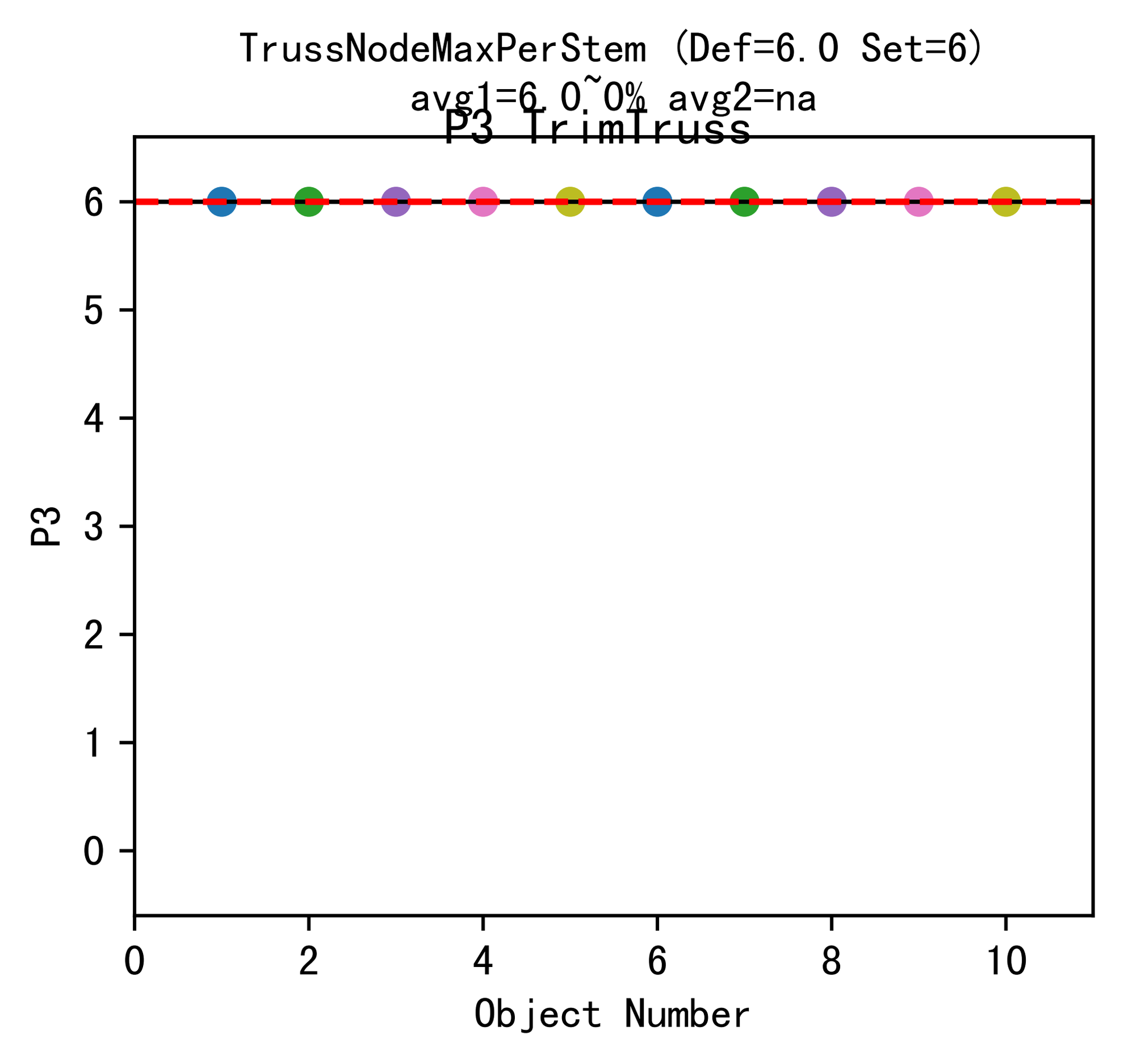
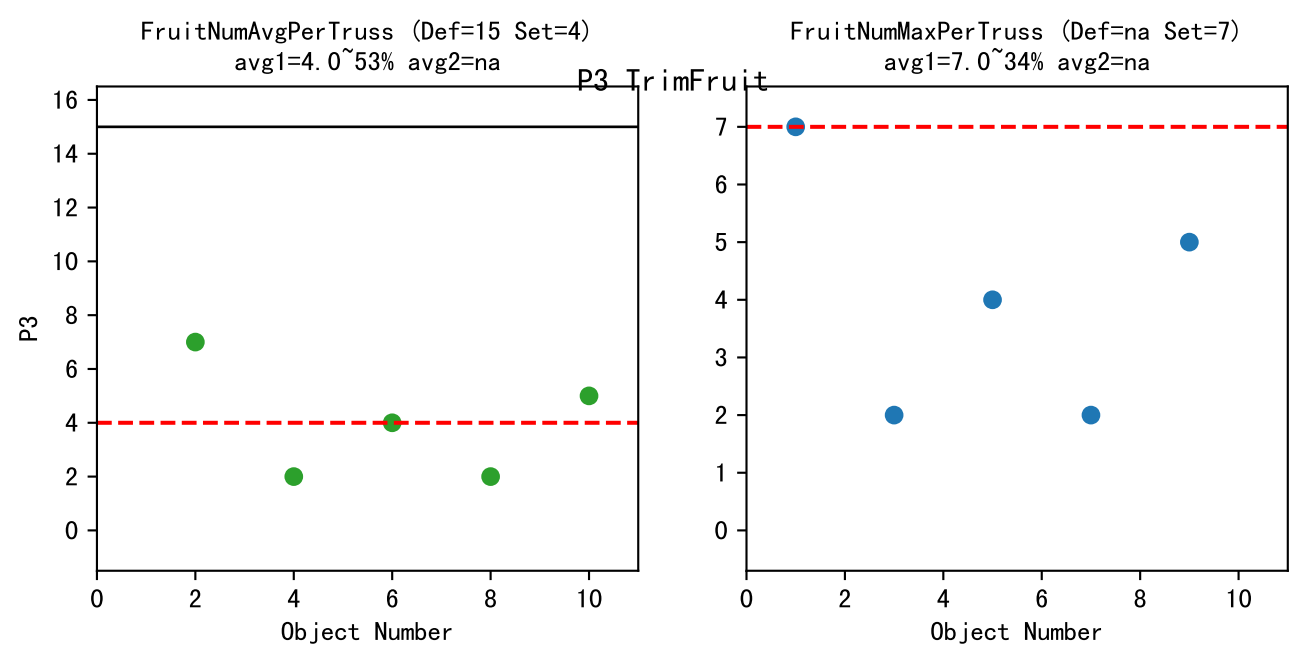
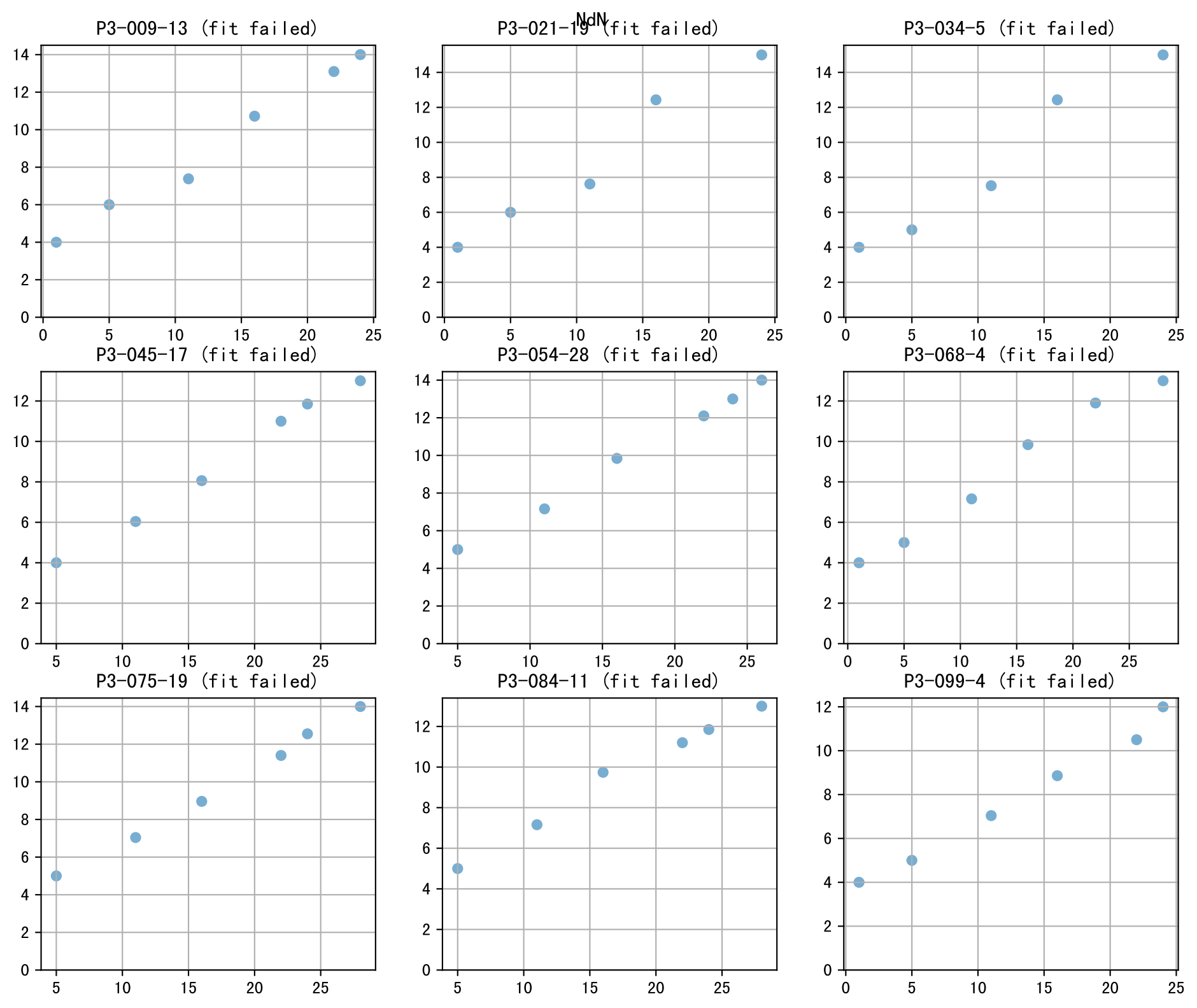
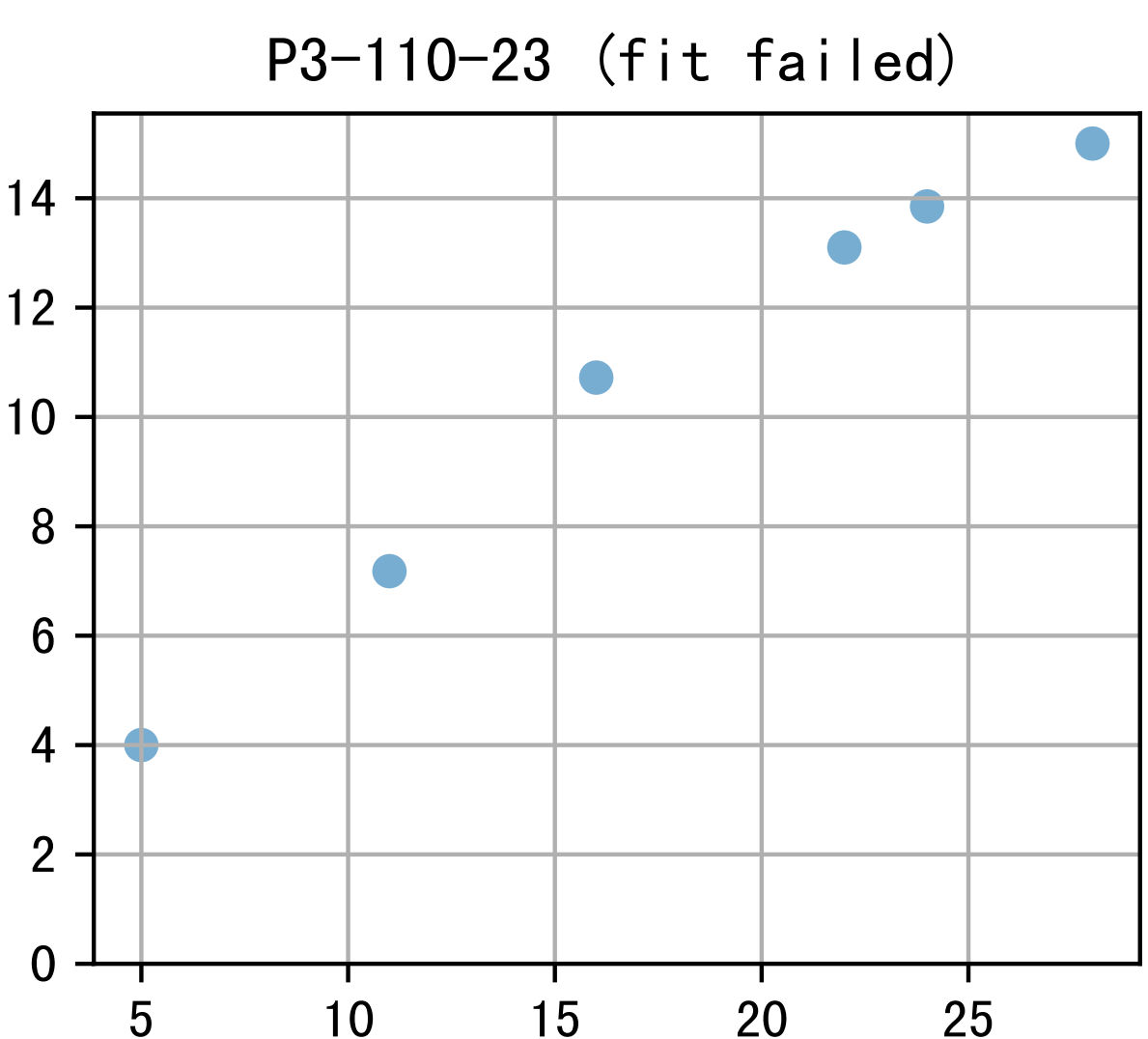
Phenotype Data Analysis Plots
PhenoData day range = 5 - 28
Analysis cutoff day = 28
NC11 P3
2025-05-05 (Day 30)

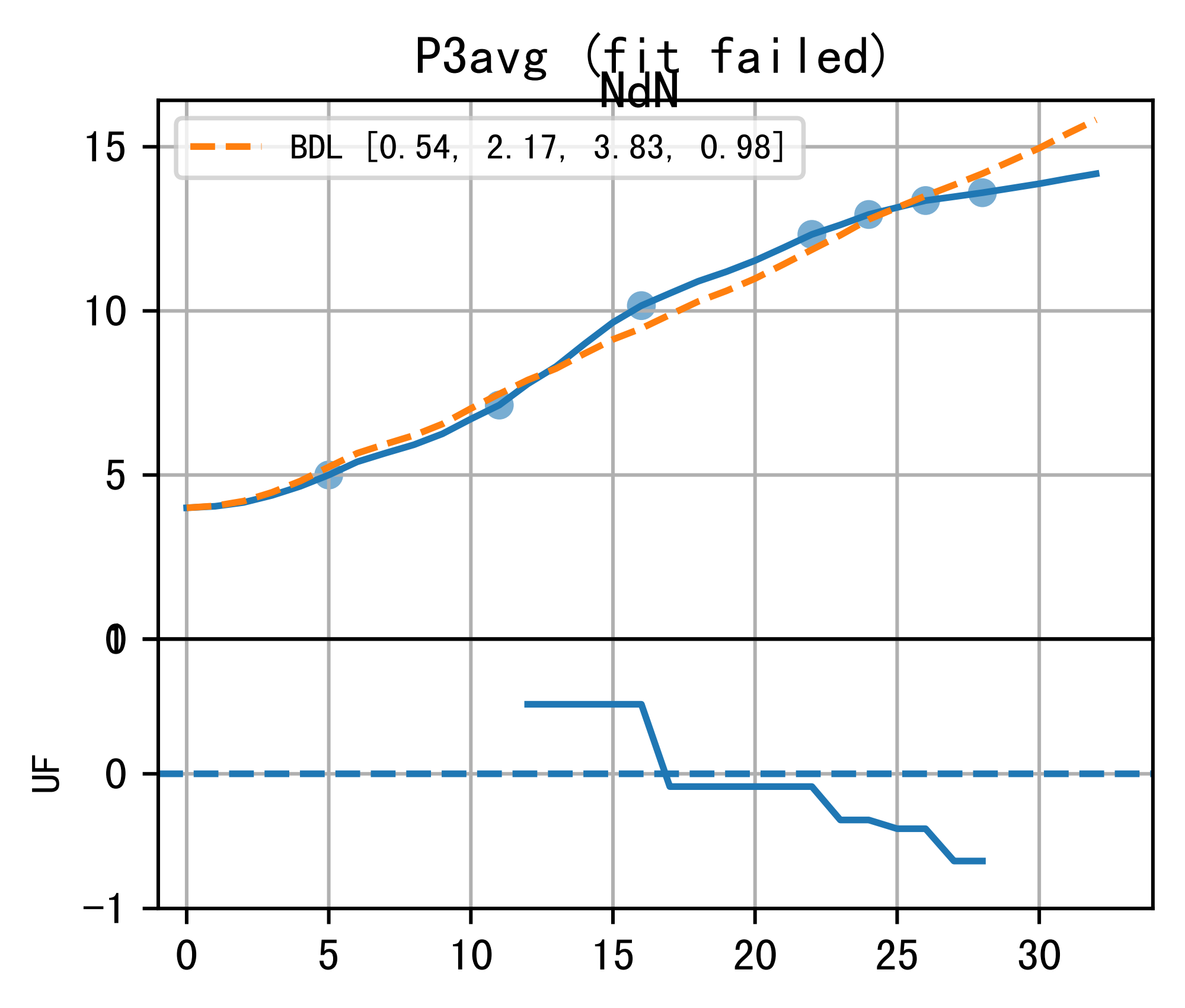

TrussNodeMaxPerStem (Def=6.0 Set=6)
avg1=6.0~0% avg2=na
P3 TrimTruss
P3
Object Number
0
1
2
3
4
5
6
0
2
4
6
8
10

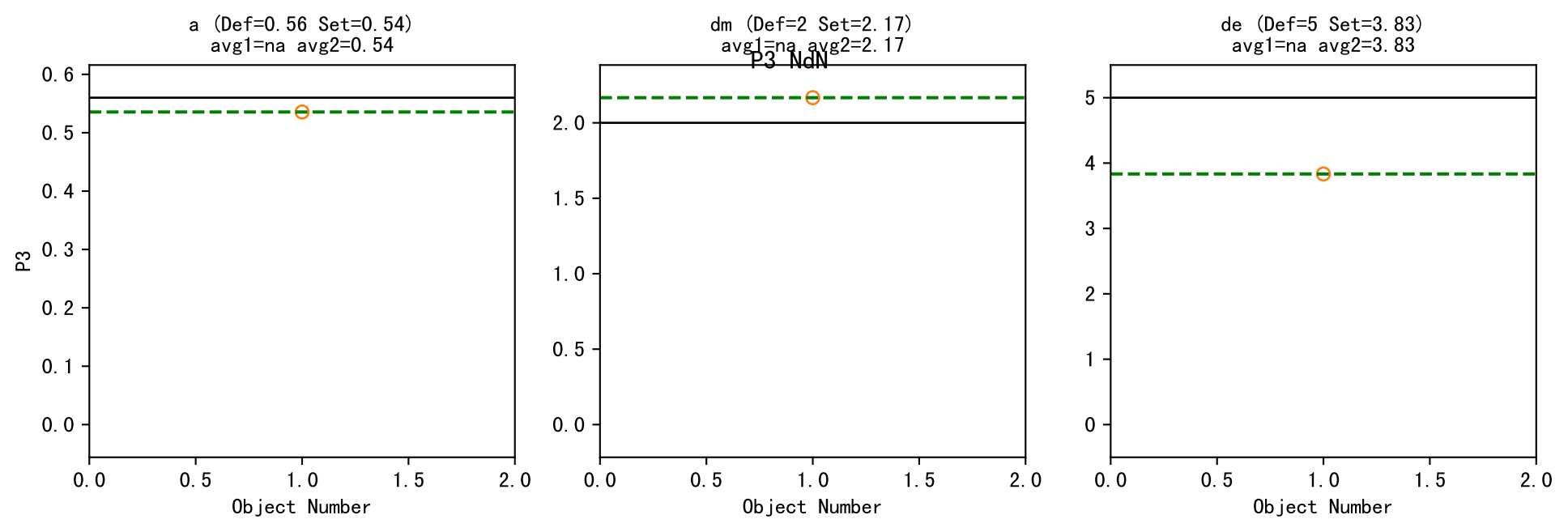

FruitNumAvgPerTruss (Def=15 Set=4)
avg1=4.0~53% avg2=na
FruitNumMaxPerTruss (Def=na Set=7)
avg1=7.0~34% avg2=na
P3 TrimFruit
P3
Object Number
Object Number

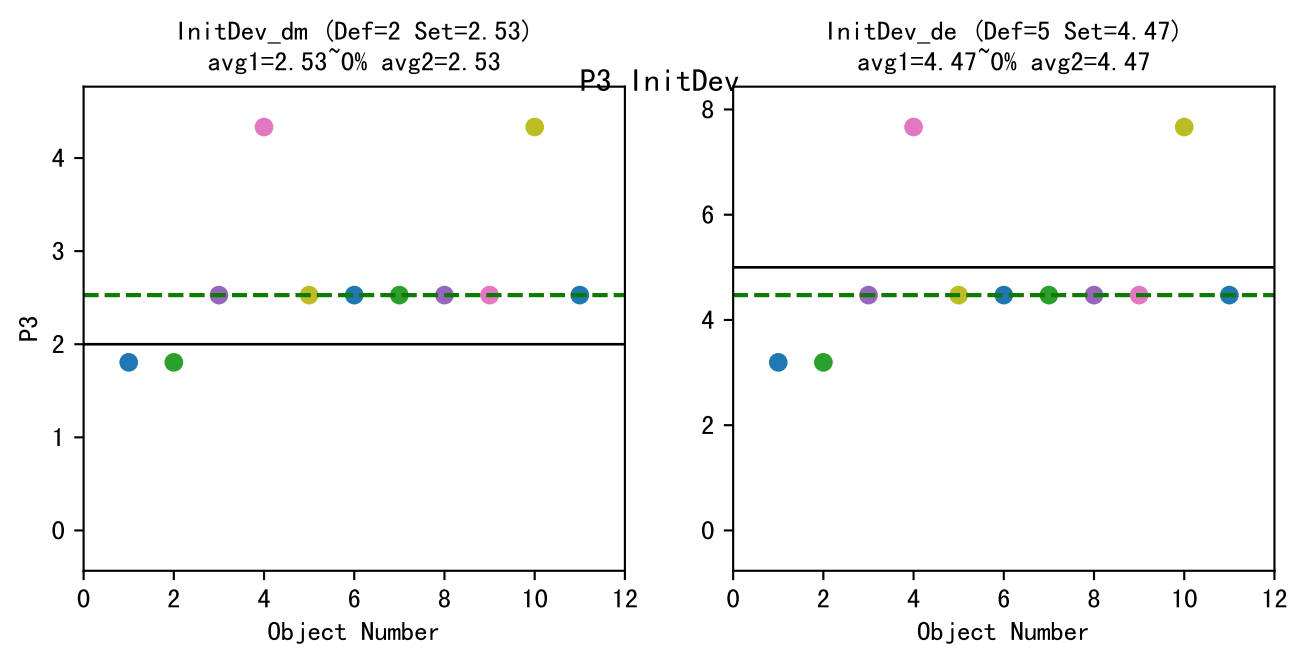

NdN
P3-009-13 (fit failed)
P3-021-19 (fit failed)
P3-034-5 (fit failed)
P3-045-17 (fit failed)
P3-054-28 (fit failed)
P3-068-4 (fit failed)
P3-075-19 (fit failed)
P3-084-11 (fit failed)
P3-099-4 (fit failed)

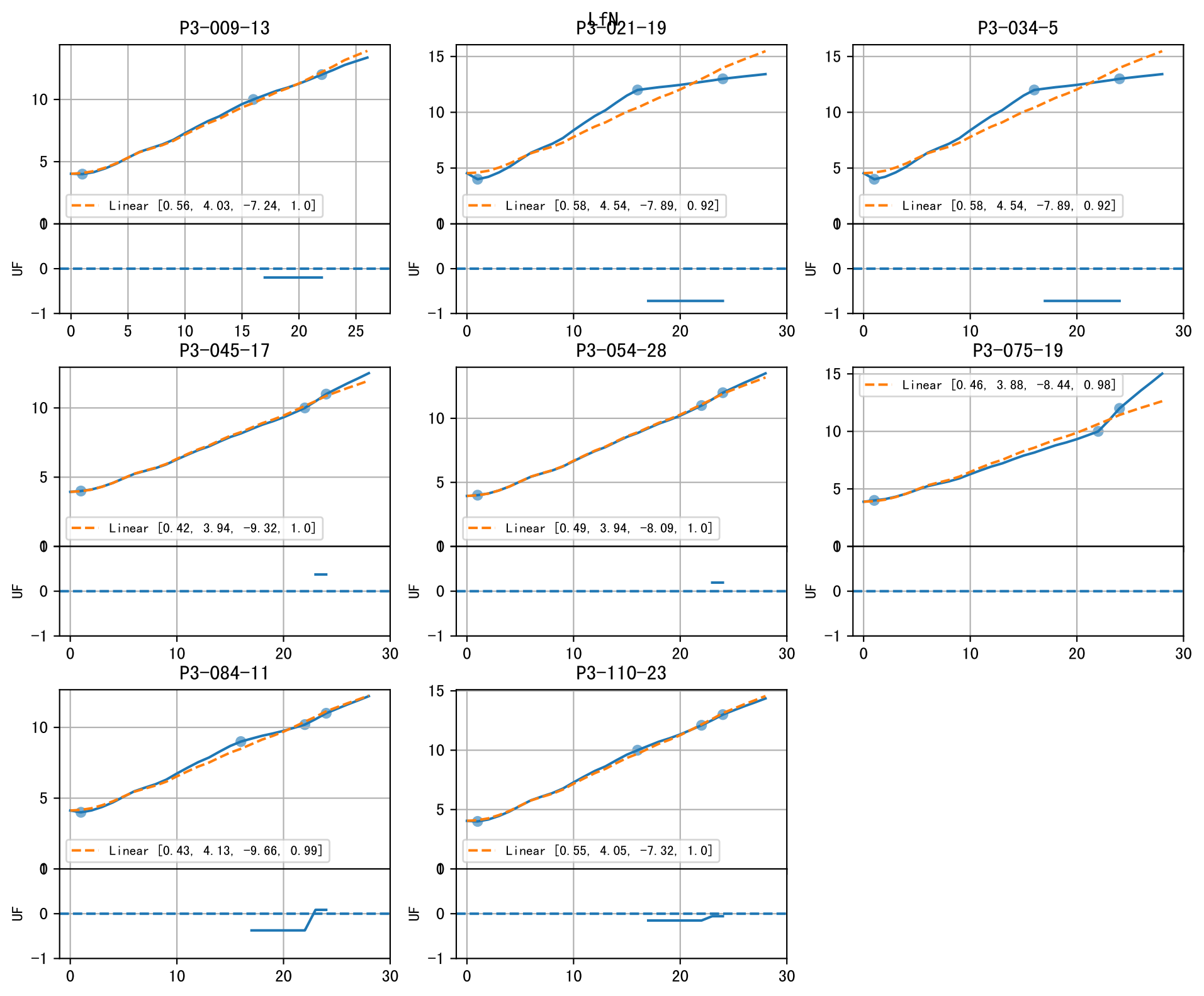


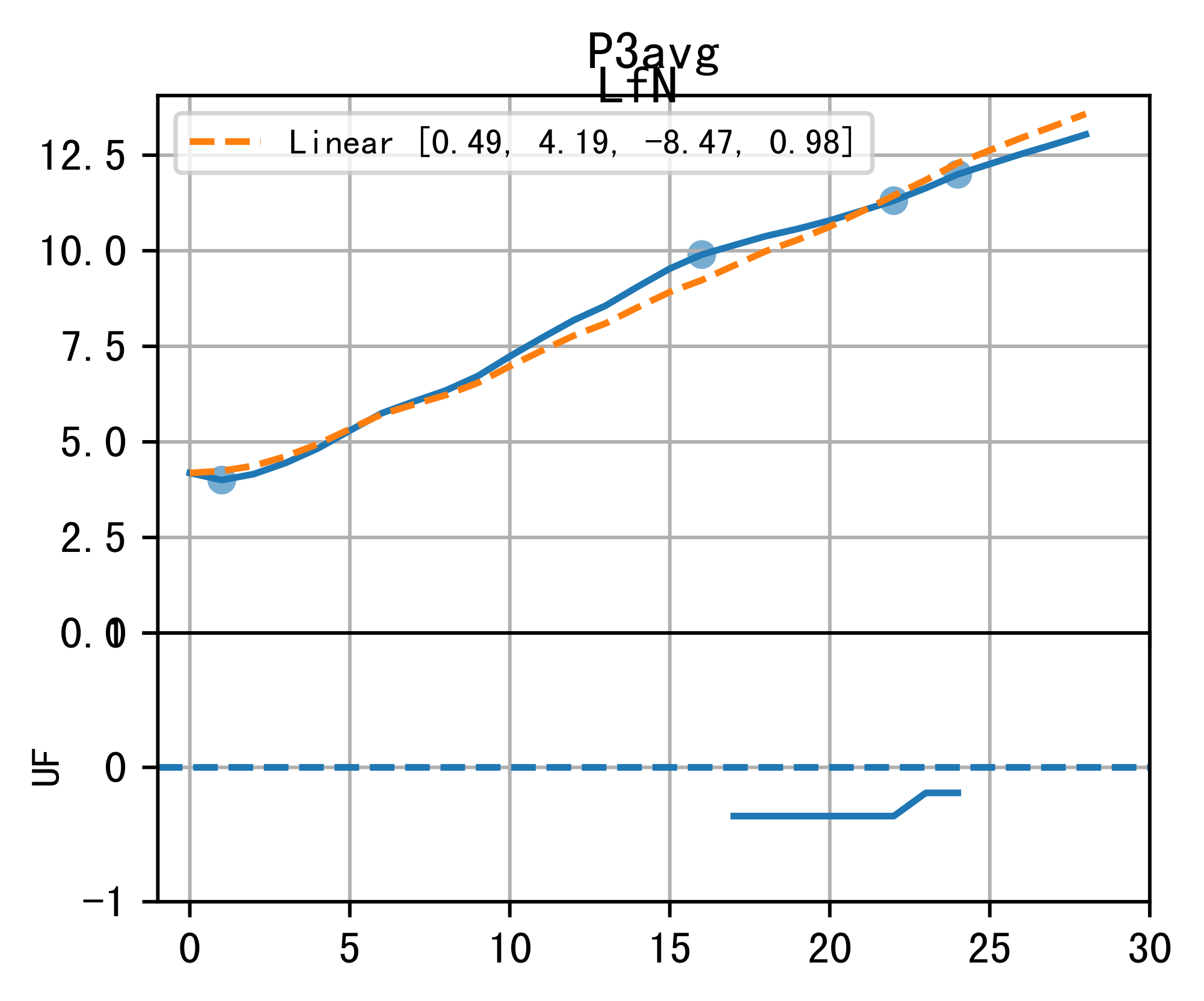
NdN

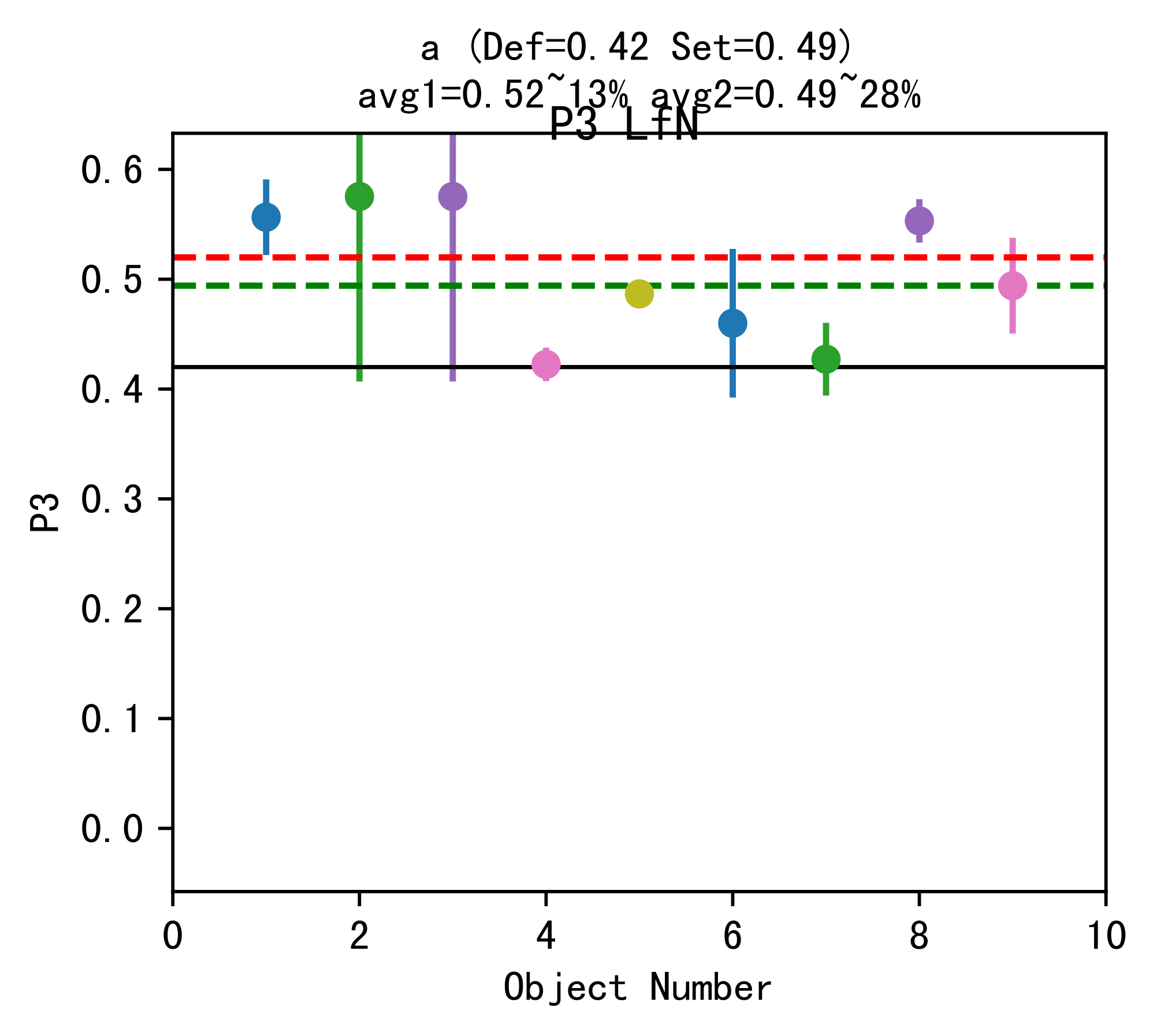

P3avg (fit failed)
NdN
BDL [0.54, 2.17, 3.83, 0.98]
15
10
5
0
0
−1
UF
0
5
10
15
20
25
30

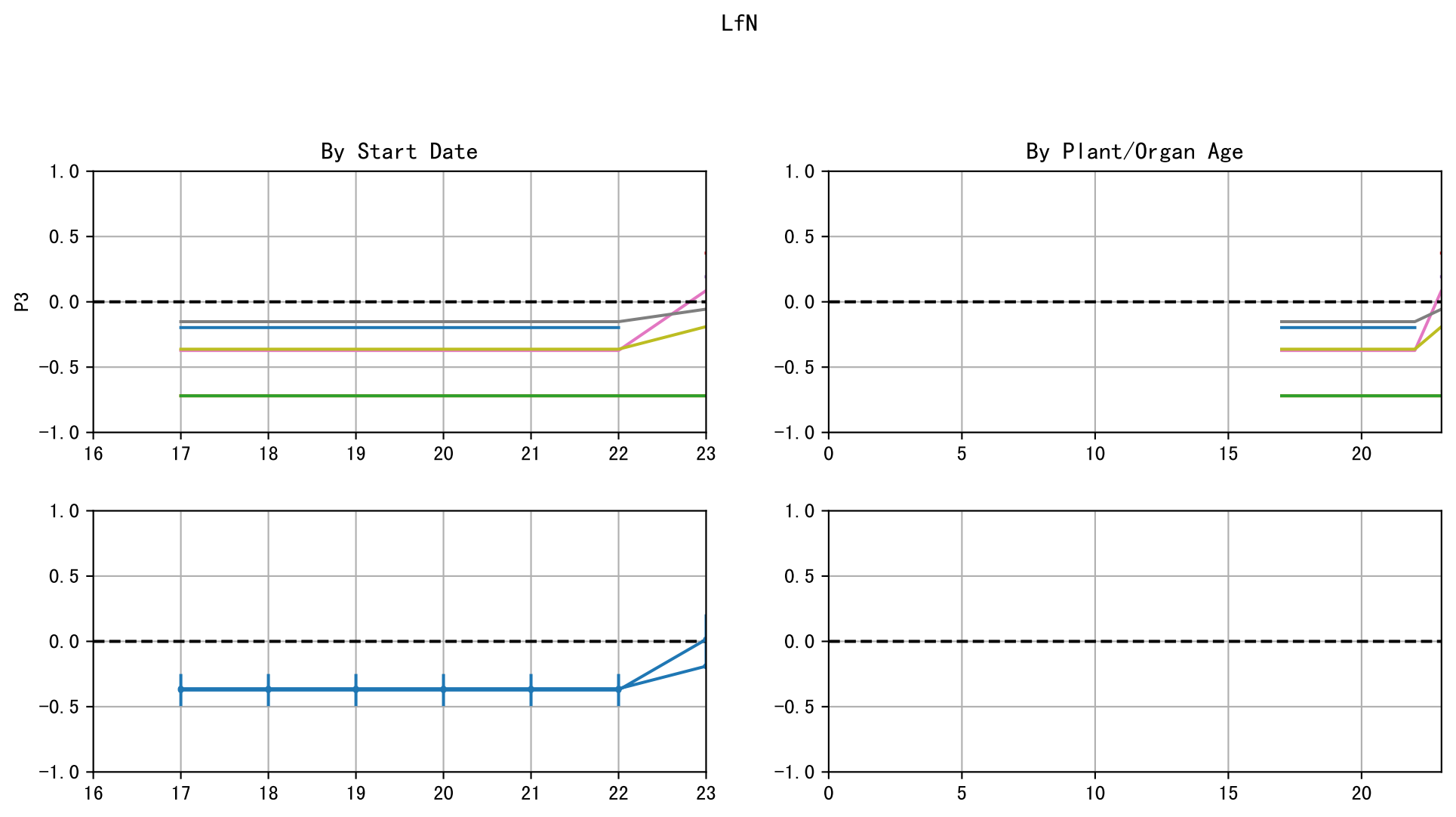

a (Def=0.56 Set=0.54)
avg1=na avg2=0.54
dm (Def=2 Set=2.17)
avg1=na avg2=2.17
de (Def=5 Set=3.83)
avg1=na avg2=3.83
P3 NdN
P3
Object Number
Object Number
Object Number

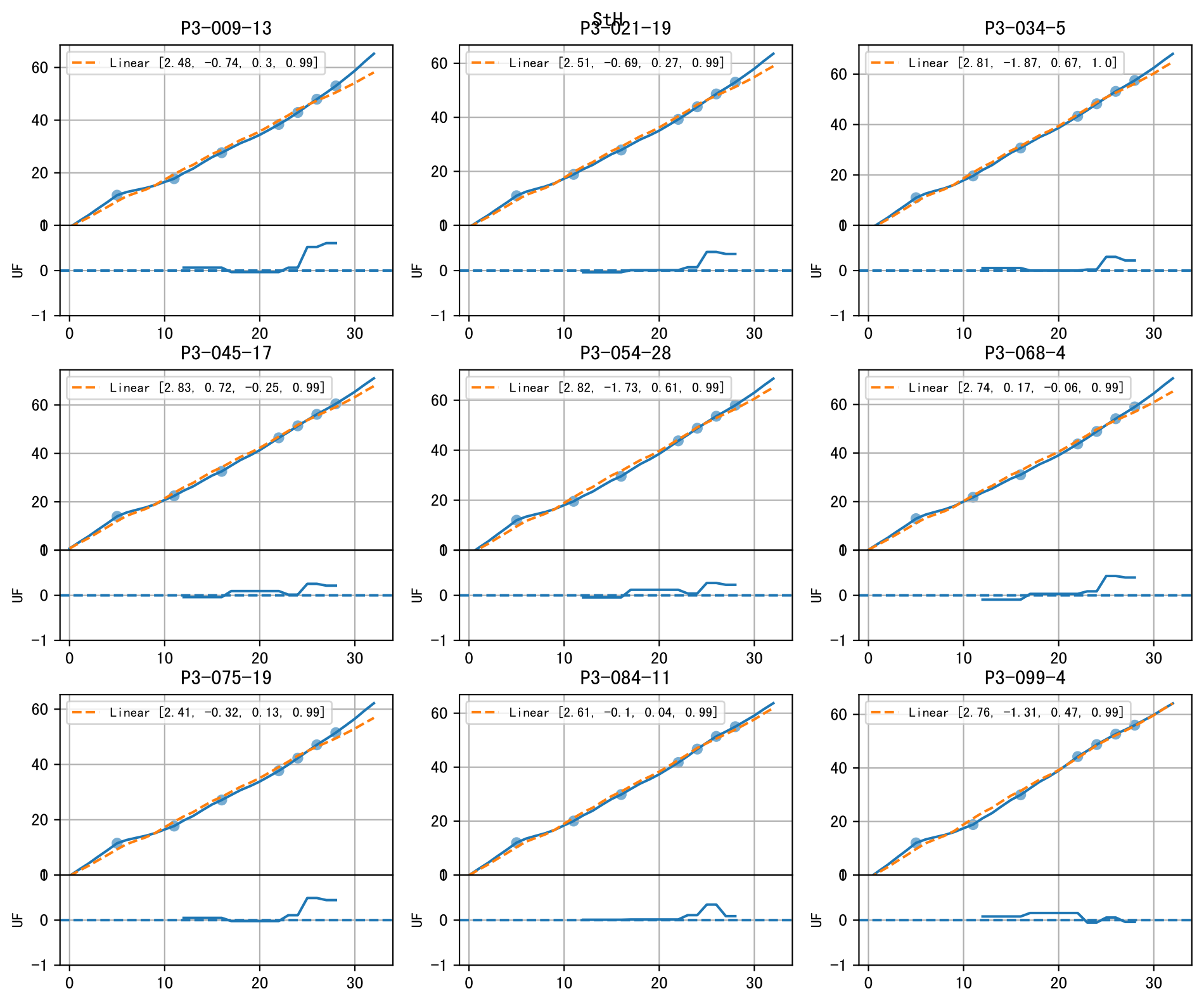

P3 InitDev
InitDev_dm (Def=2 Set=2.53)
avg1=2.53~0% avg2=2.53
InitDev_de (Def=5 Set=4.47)
avg1=4.47~0% avg2=4.47
P3
Object Number
Object Number


LfN
P3-009-13
Linear [0.56, 4.03, -7.24, 1.0]
P3-021-19
Linear [0.58, 4.54, -7.89, 0.92]
P3-034-5
Linear [0.58, 4.54, -7.89, 0.92]
P3-045-17
Linear [0.42, 3.94, -9.32, 1.0]
P3-054-28
Linear [0.49, 3.94, -8.09, 1.0]
P3-075-19
Linear [0.46, 3.88, -8.44, 0.98]
P3-084-11
Linear [0.43, 4.13, -9.66, 0.99]
P3-110-23
Linear [0.55, 4.05, -7.32, 1.0]
UF

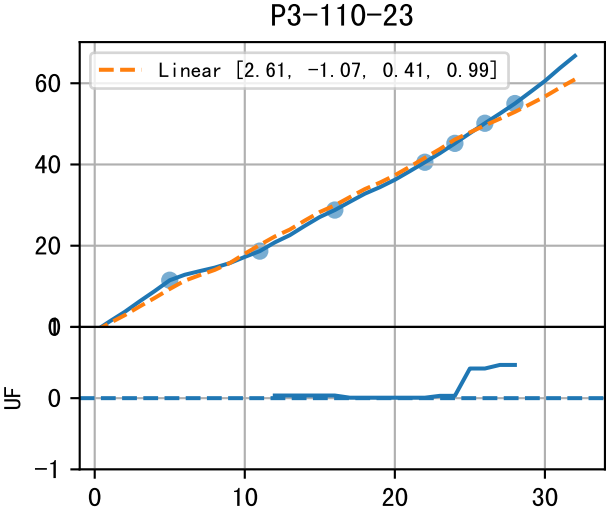

P3avg
LfN
Linear [0.49, 4.19, -8.47, 0.98]
12.5
10.0
7.5
5.0
2.5
0.0
UF
0
−1
0
5
10
15
20
25
30

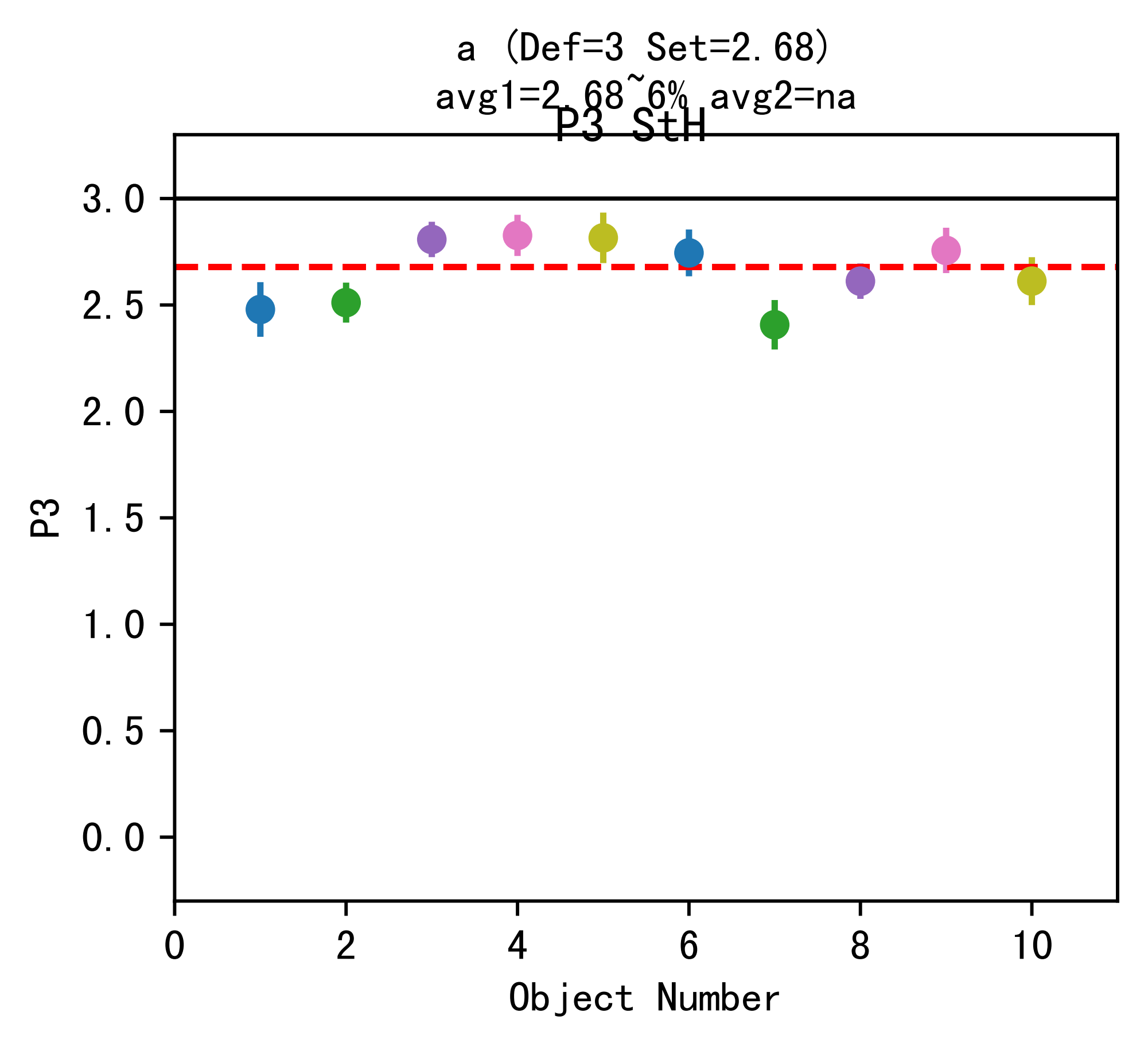

a (Def=0.42 Set=0.49)
avg1=0.52~13% avg2=0.49~28%
P3 LfN
P3
Object Number
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0
2
4
6
8
10

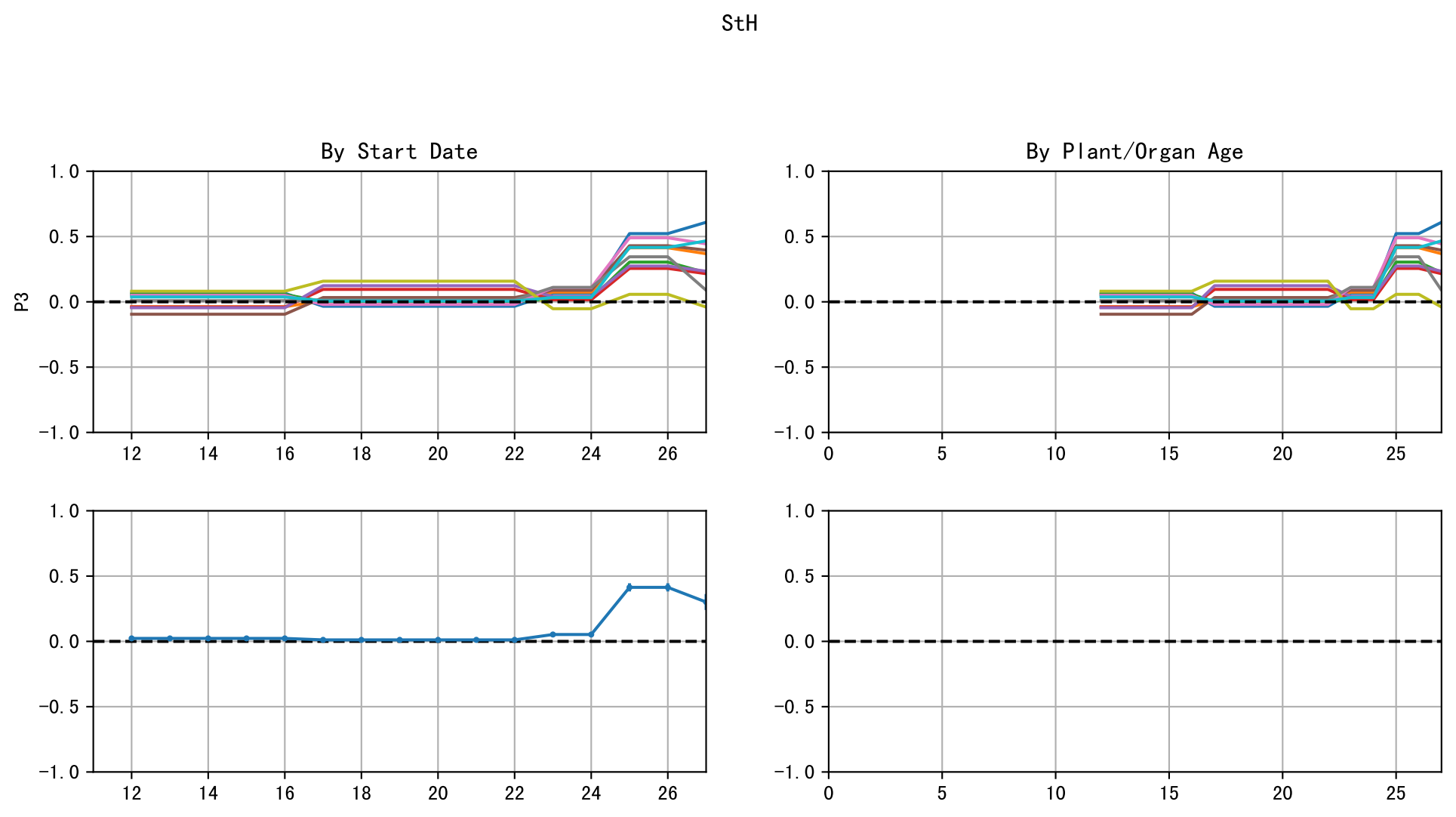

LfN
By Start Date
By Plant/Organ Age
P3
1.0
0.5
0.0
−0.5
−1.0
16
17
18
19
20
21
22
23
0
5
10
15
20

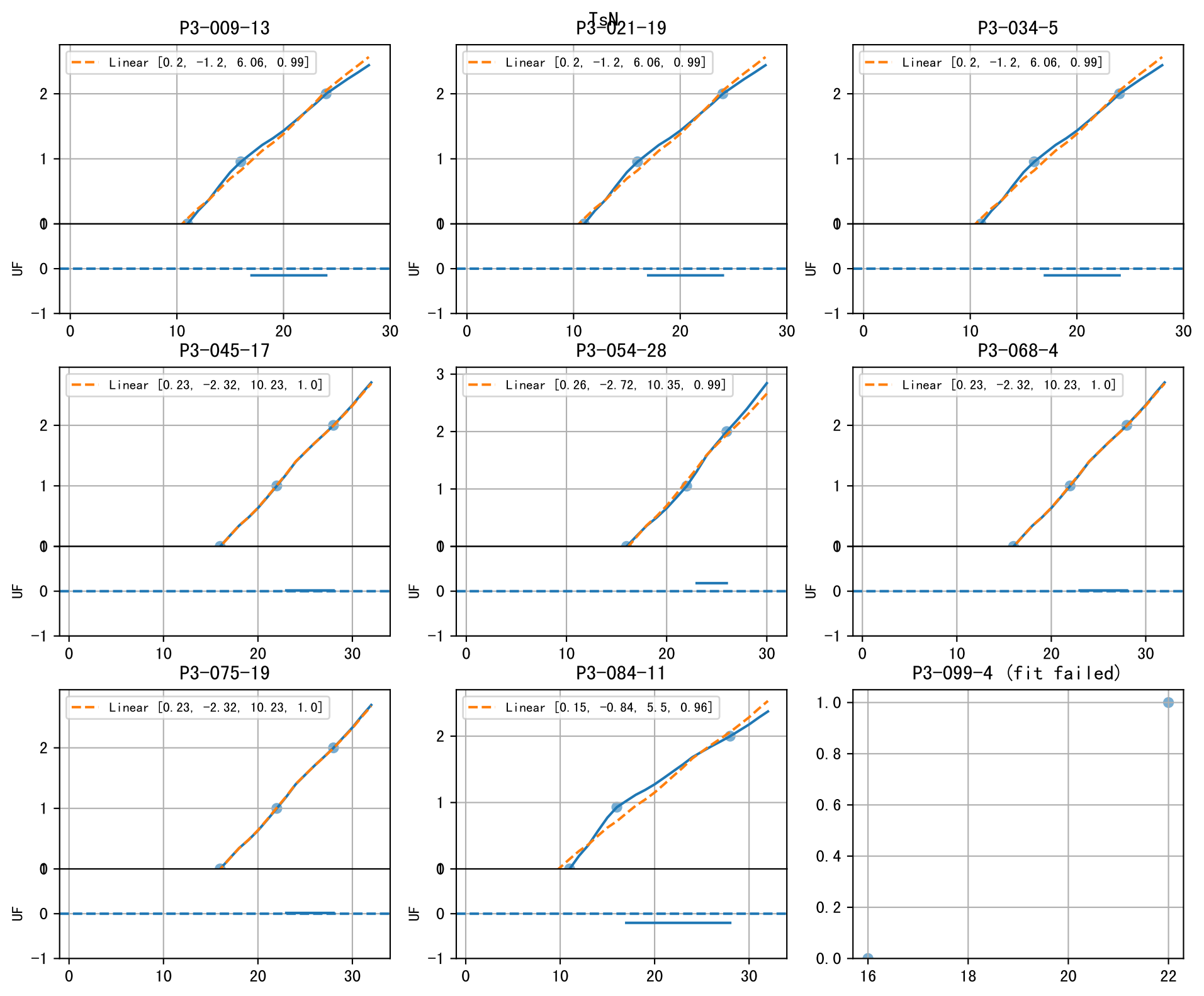

StH
P3-009-13
Linear [2.48, -0.74, 0.3, 0.99]
P3-021-19
Linear [2.51, -0.69, 0.27, 0.99]
P3-034-5
Linear [2.81, -1.87, 0.67, 1.0]
P3-045-17
Linear [2.83, 0.72, -0.25, 0.99]
P3-054-28
Linear [2.82, -1.73, 0.61, 0.99]
P3-068-4
Linear [2.74, 0.17, -0.06, 0.99]
P3-075-19
Linear [2.41, -0.32, 0.13, 0.99]
P3-084-11
Linear [2.61, -0.1, 0.04, 0.99]
P3-099-4
Linear [2.76, -1.31, 0.47, 0.99]
UF

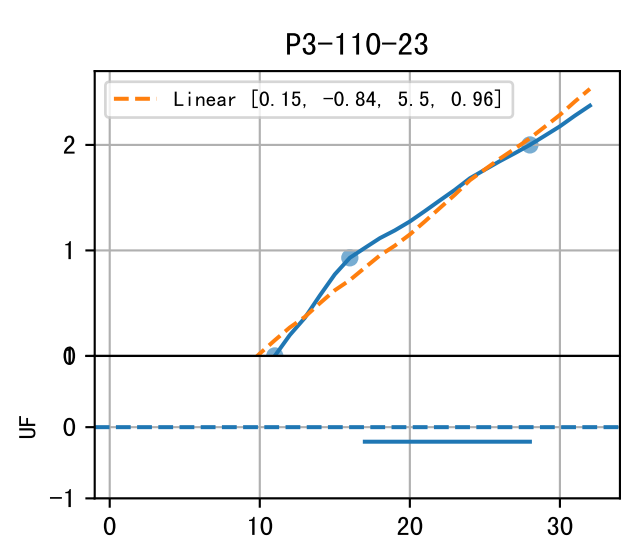
StH



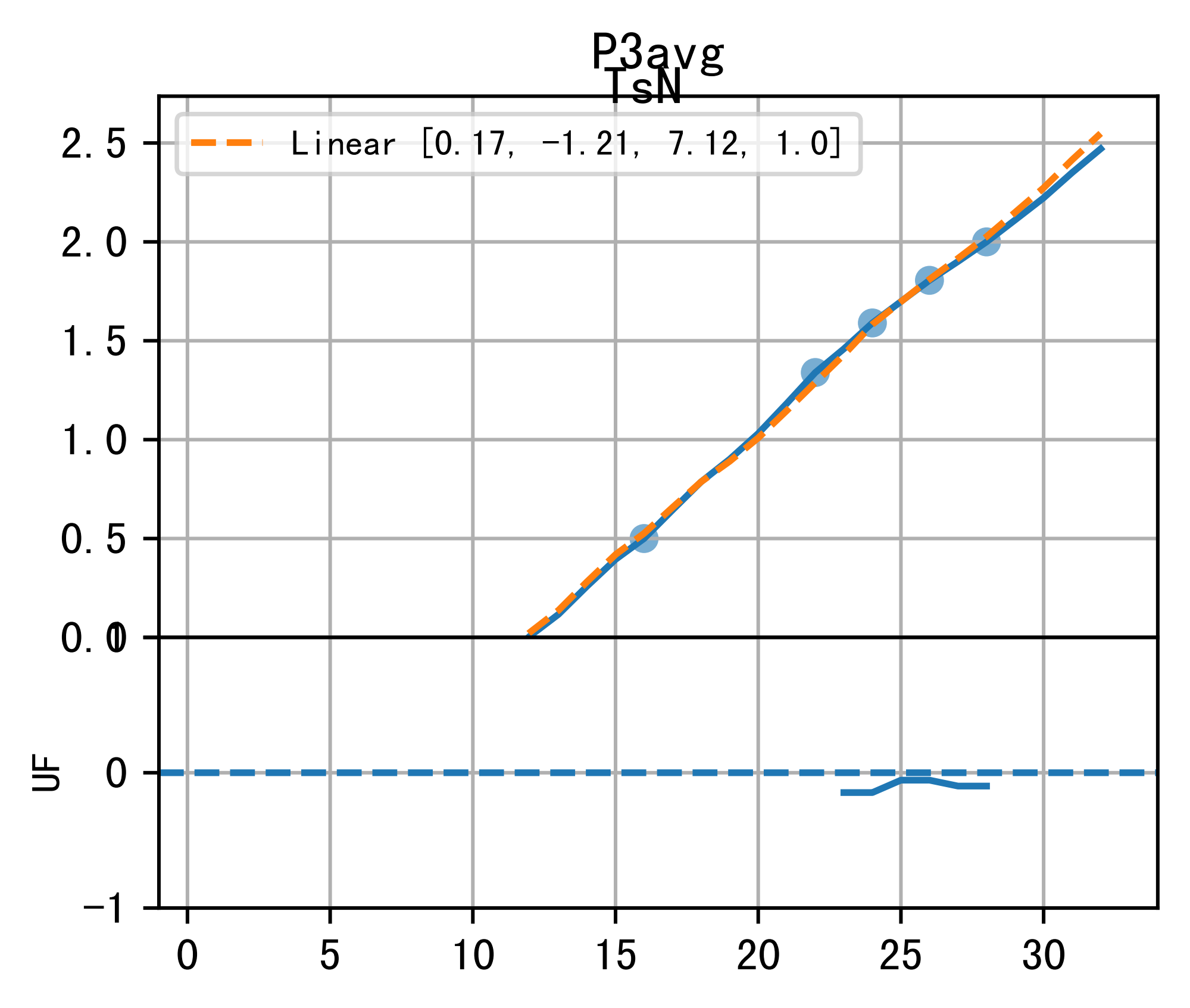

a (Def=3 Set=2.68)
avg1=2.68~6% avg2=na
P3 StH
3.0
2.5
2.0
1.5
1.0
0.5
0.0
P3
0
2
4
6
8
10
Object Number

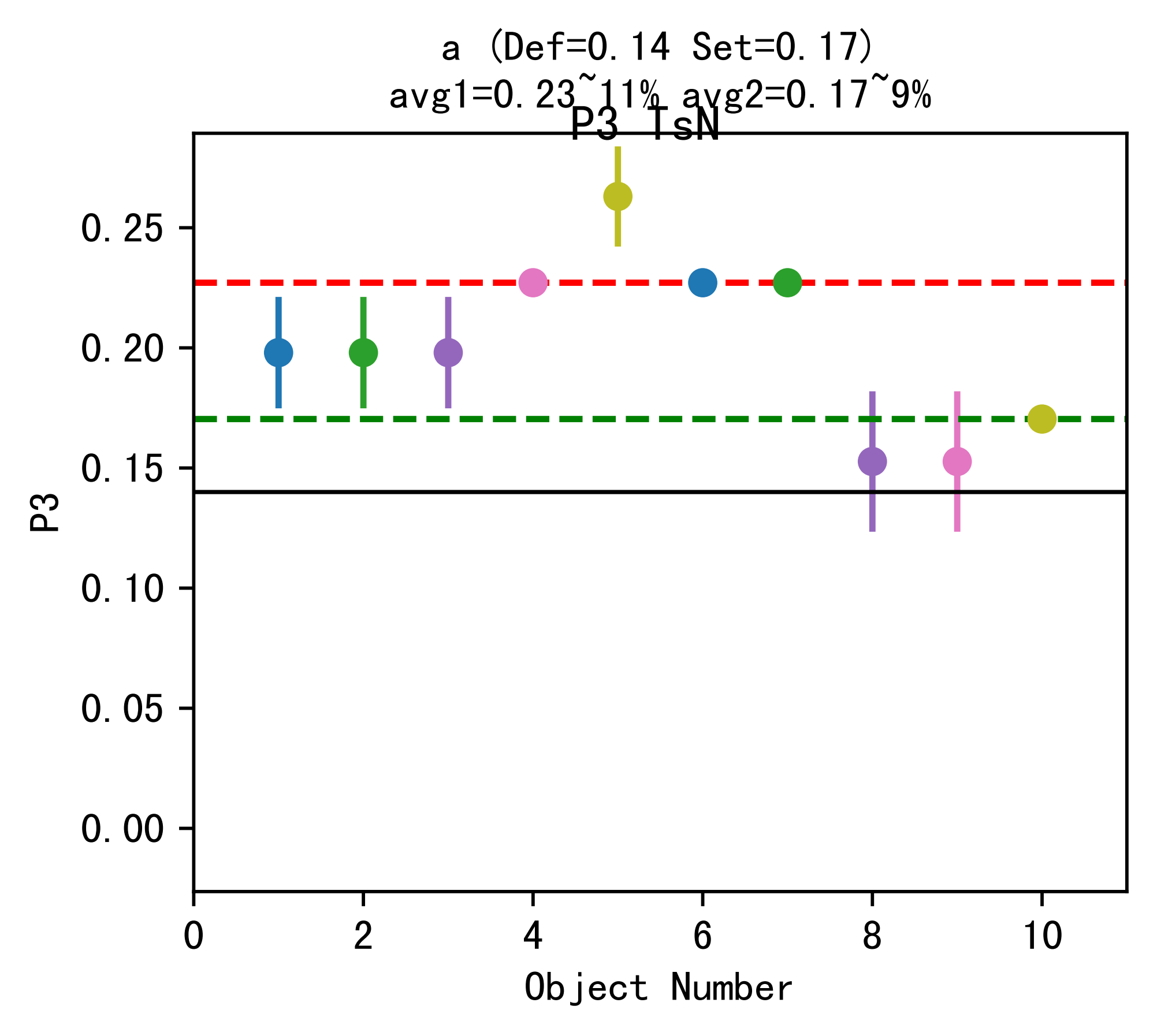

StH
By Start Date
By Plant/Organ Age
P3
1.0
0.5
0.0
−0.5
−1.0
12
14
16
18
20
22
24
26
0
5
10
15
20
25

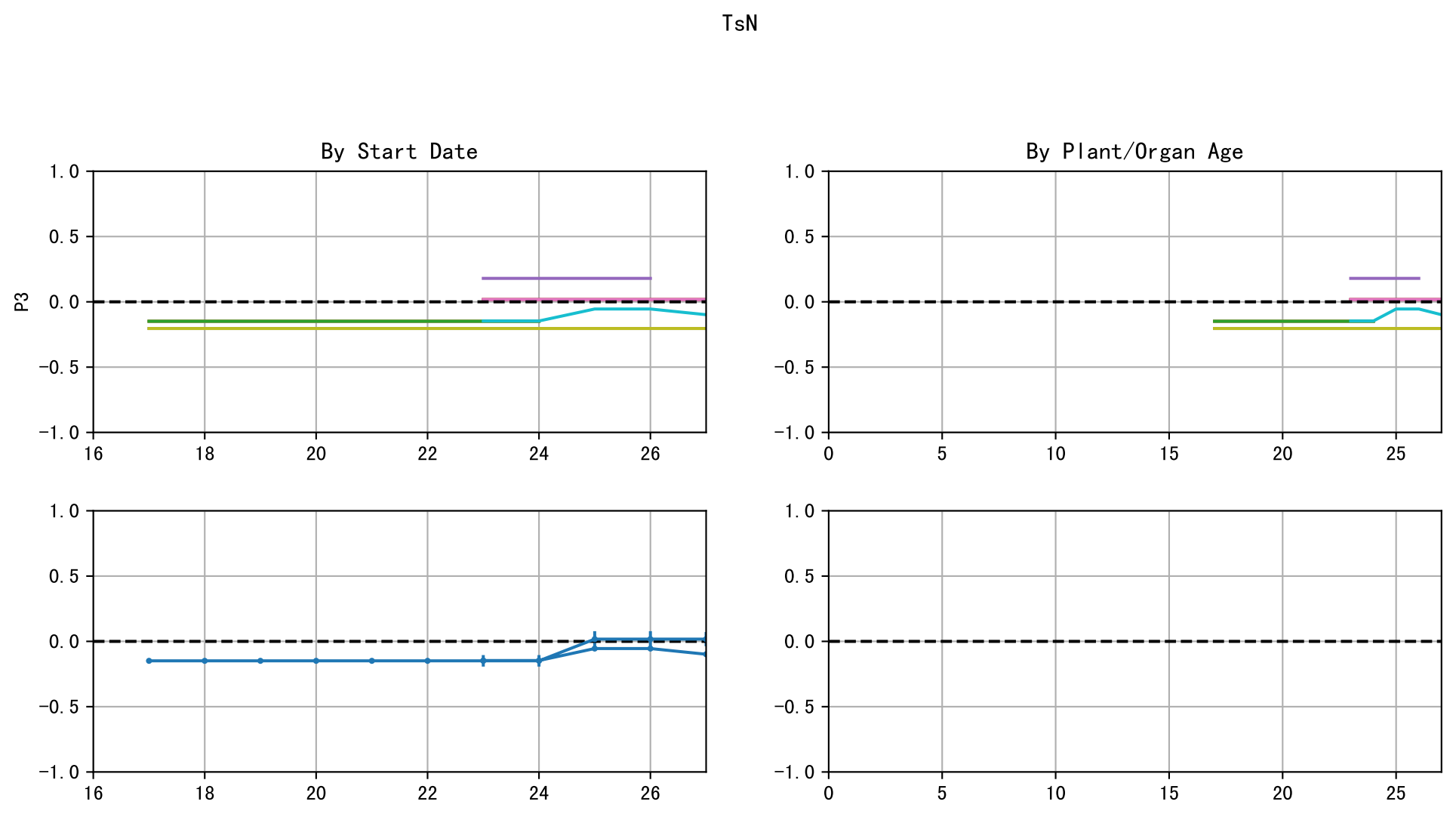

TsN
P3-009-13
Linear [0.2, -1.2, 6.06, 0.99]
P3-021-19
Linear [0.2, -1.2, 6.06, 0.99]
P3-034-5
Linear [0.2, -1.2, 6.06, 0.99]
P3-045-17
Linear [0.23, -2.32, 10.23, 1.0]
P3-054-28
Linear [0.26, -2.72, 10.35, 0.99]
P3-068-4
Linear [0.23, -2.32, 10.23, 1.0]
P3-075-19
Linear [0.23, -2.32, 10.23, 1.0]
P3-084-11
Linear [0.15, -0.84, 5.5, 0.96]
P3-099-4 (fit failed)
UF

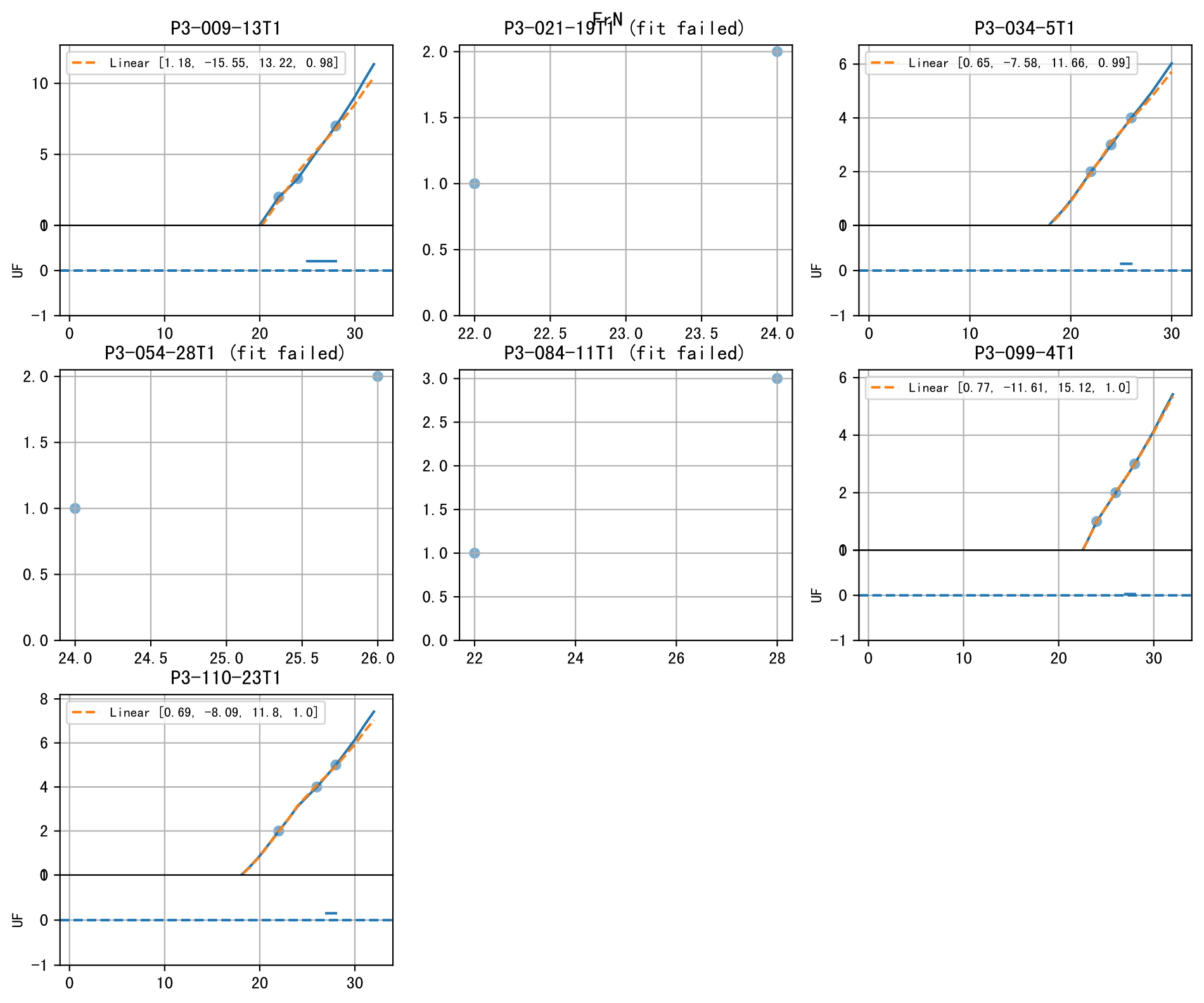


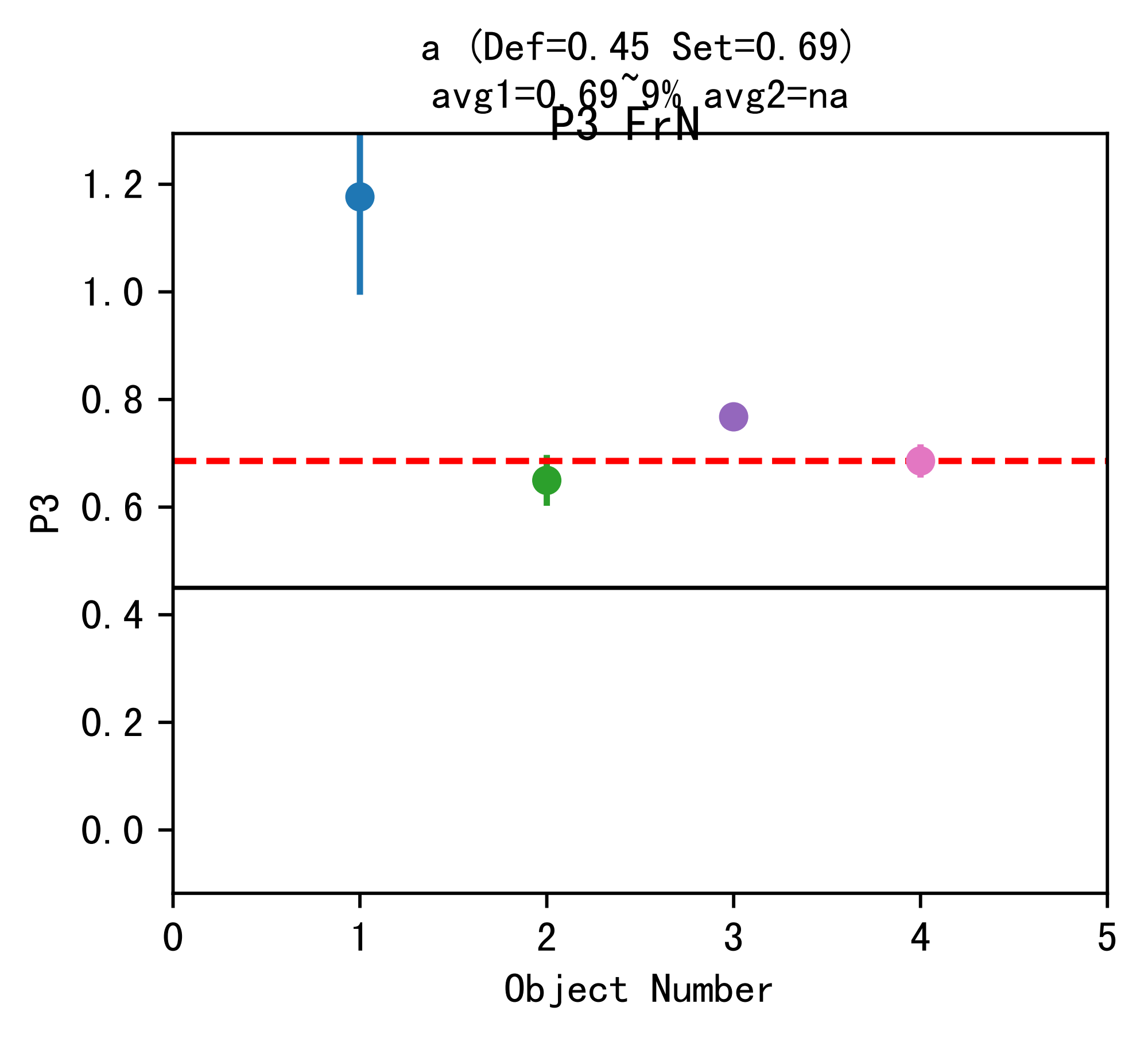
TsN


P3avg
TsN
Linear [0.17, -1.21, 7.12, 1.0]
2.5
2.0
1.5
1.0
0.5
0.0
UF
0
-1
0
5
10
15
20
25
30

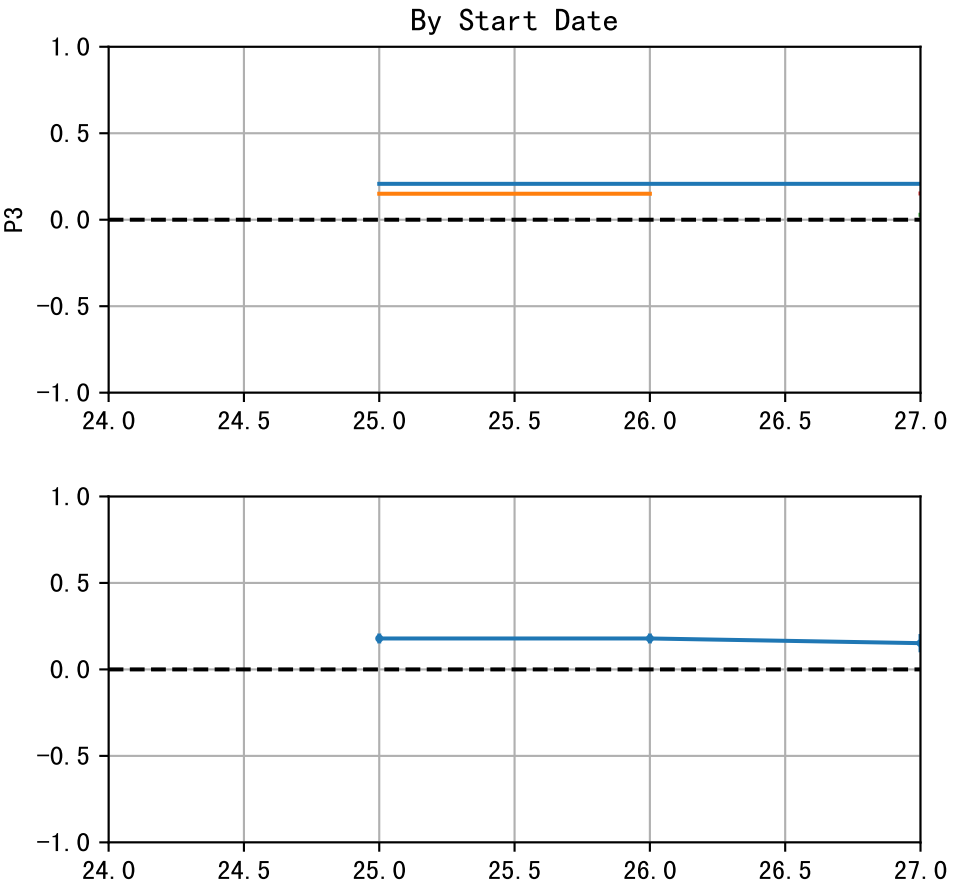

a (Def=0.14 Set=0.17)
avg1=0.23~11% avg2=0.17~9%
P3 TsN
0.25
0.20
0.15
0.10
0.05
0.00
P3
0
2
4
6
8
10
Object Number

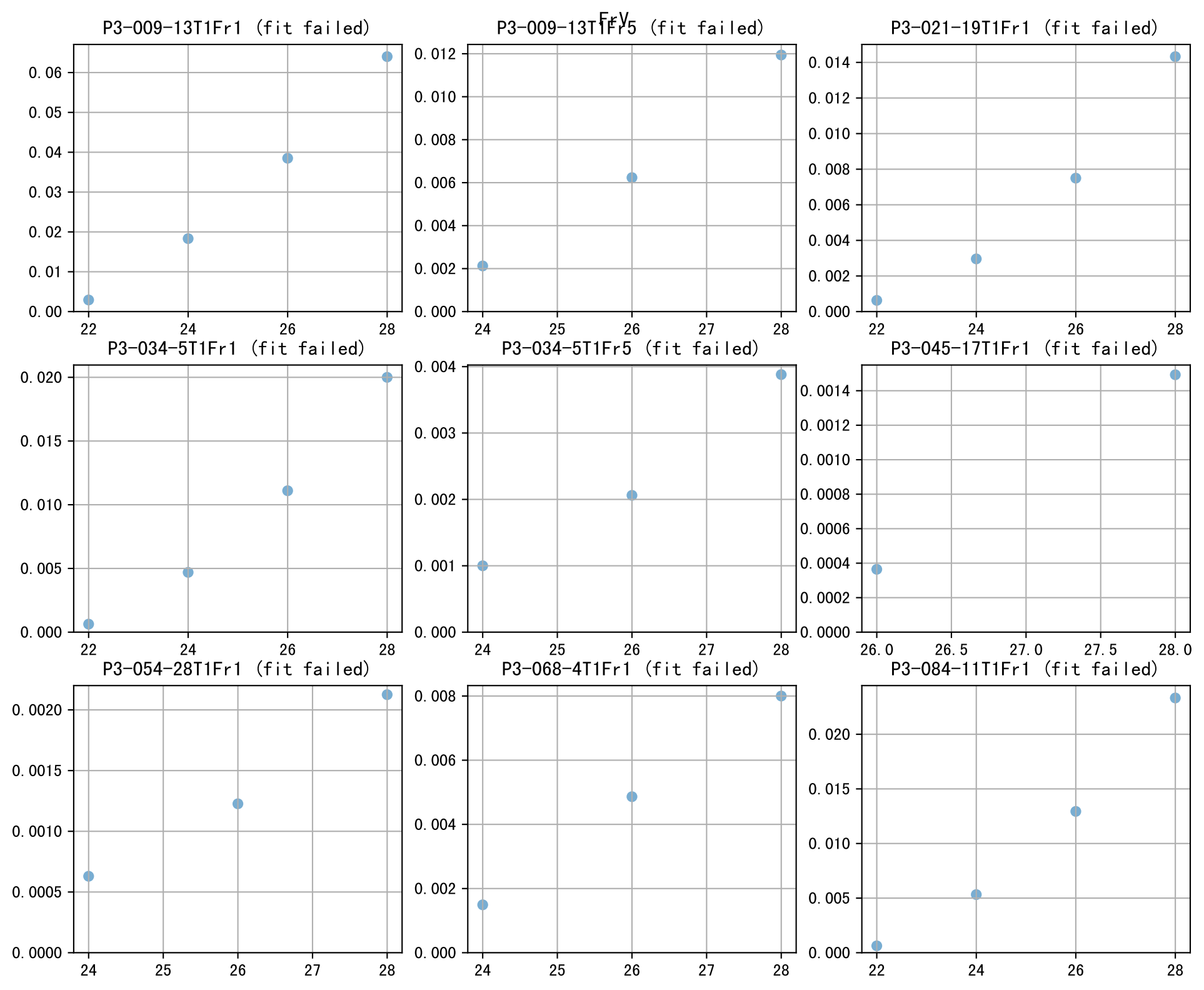

TsN
By Start Date
By Plant/Organ Age
P3
1.0
0.5
0.0
−0.5
−1.0
16
18
20
22
24
26
0
5
10
15
20
25

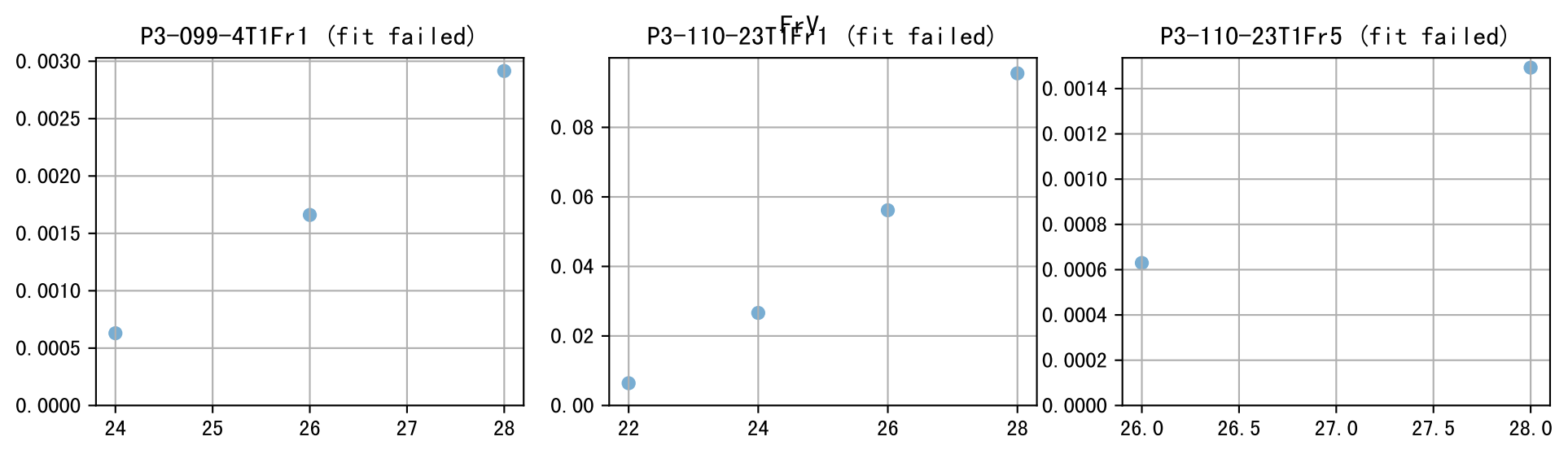

Fr_N
P3-009-13T1
Linear [1.18, -15.55, 13.22, 0.98]
P3-021-19T1 (fit failed)
P3-034-5T1
Linear [0.65, -7.58, 11.66, 0.99]
P3-054-28T1 (fit failed)
P3-084-11T1 (fit failed)
P3-099-4T1
Linear [0.77, -11.61, 15.12, 1.0]
P3-110-23T1
Linear [0.69, -8.09, 11.8, 1.0]
UF

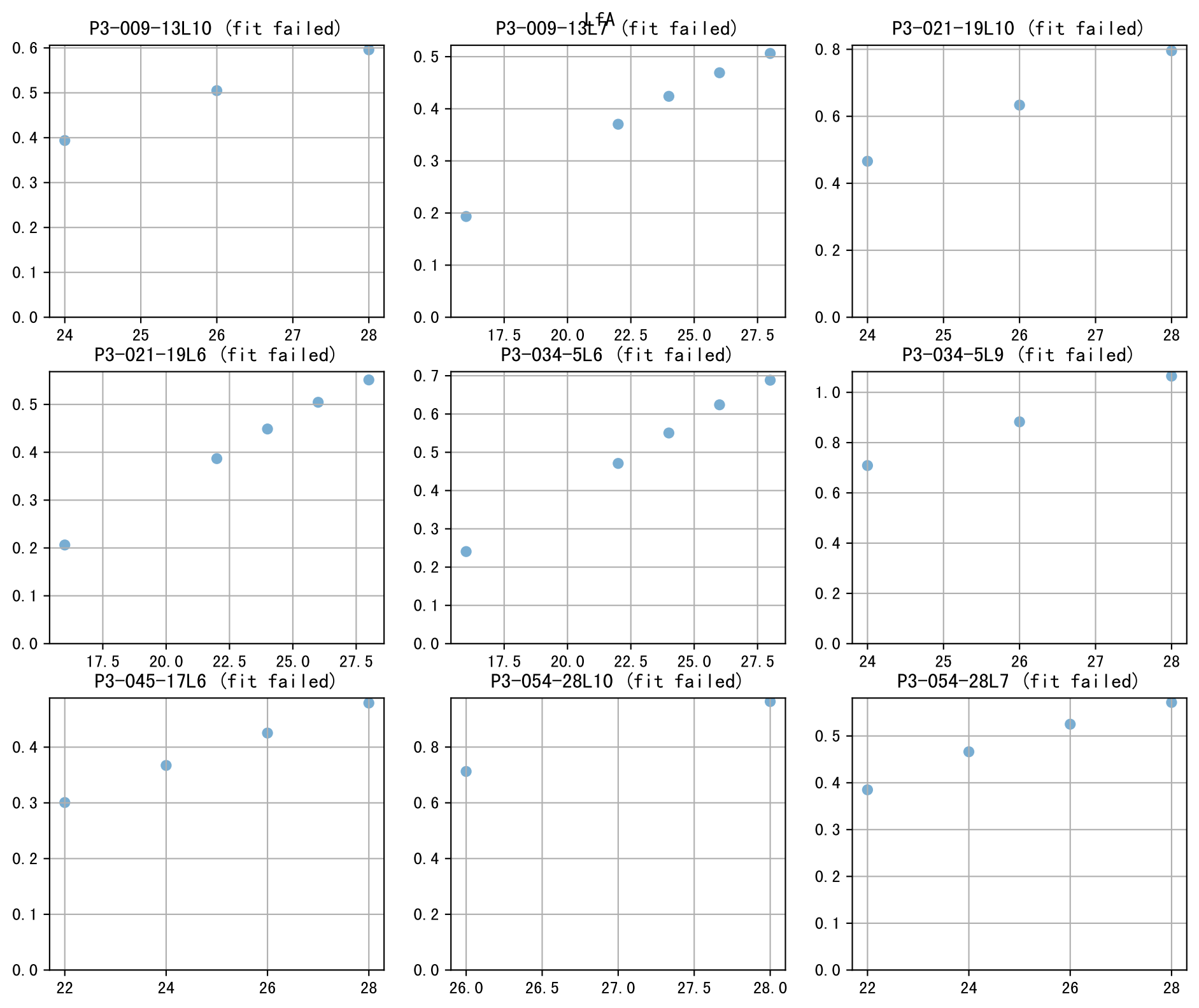

a (Def=0.45 Set=0.69)
avg1=0.69~9% avg2=na
P3 FrN
1.2
1.0
0.8
0.6
0.4
0.2
0.0
P3
0
1
2
3
4
5
Object Number

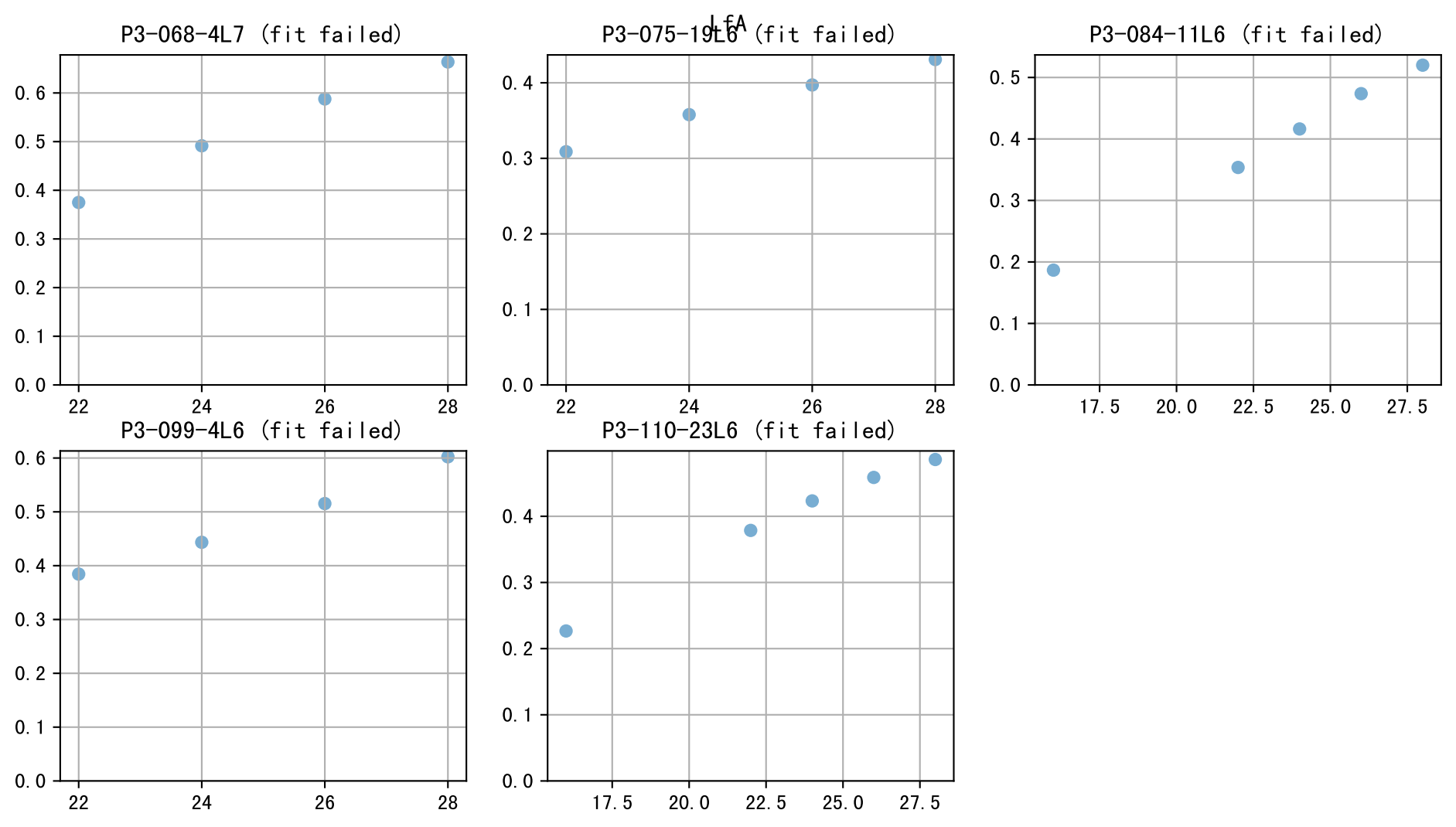
FrN

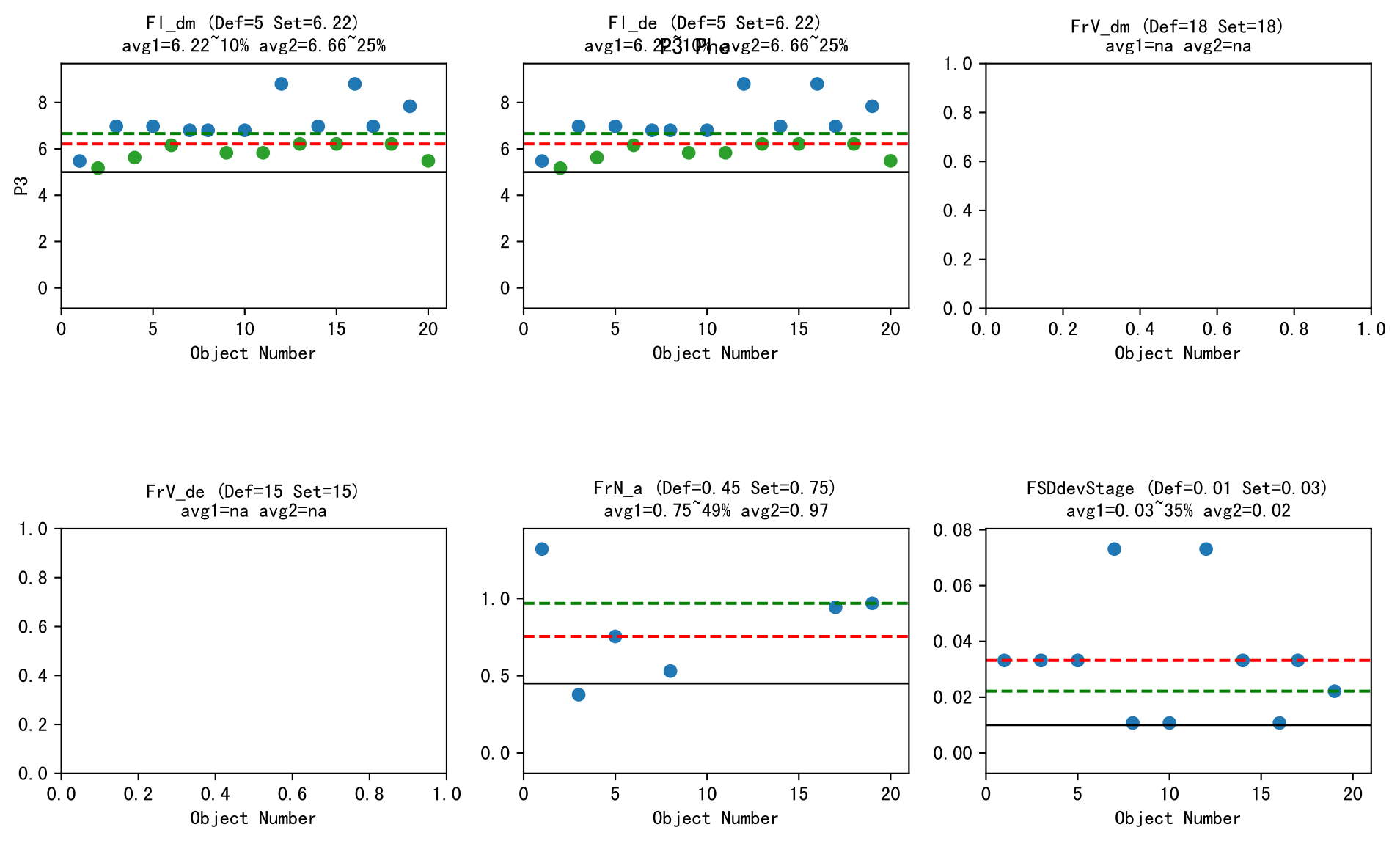

By Start Date
By Plant/Organ Age
P3
1.0
0.5
0.0
−0.5
−1.0
24.0
24.5
25.0
25.5
26.0
26.5
27.0
0
5
10
15
20
25
30

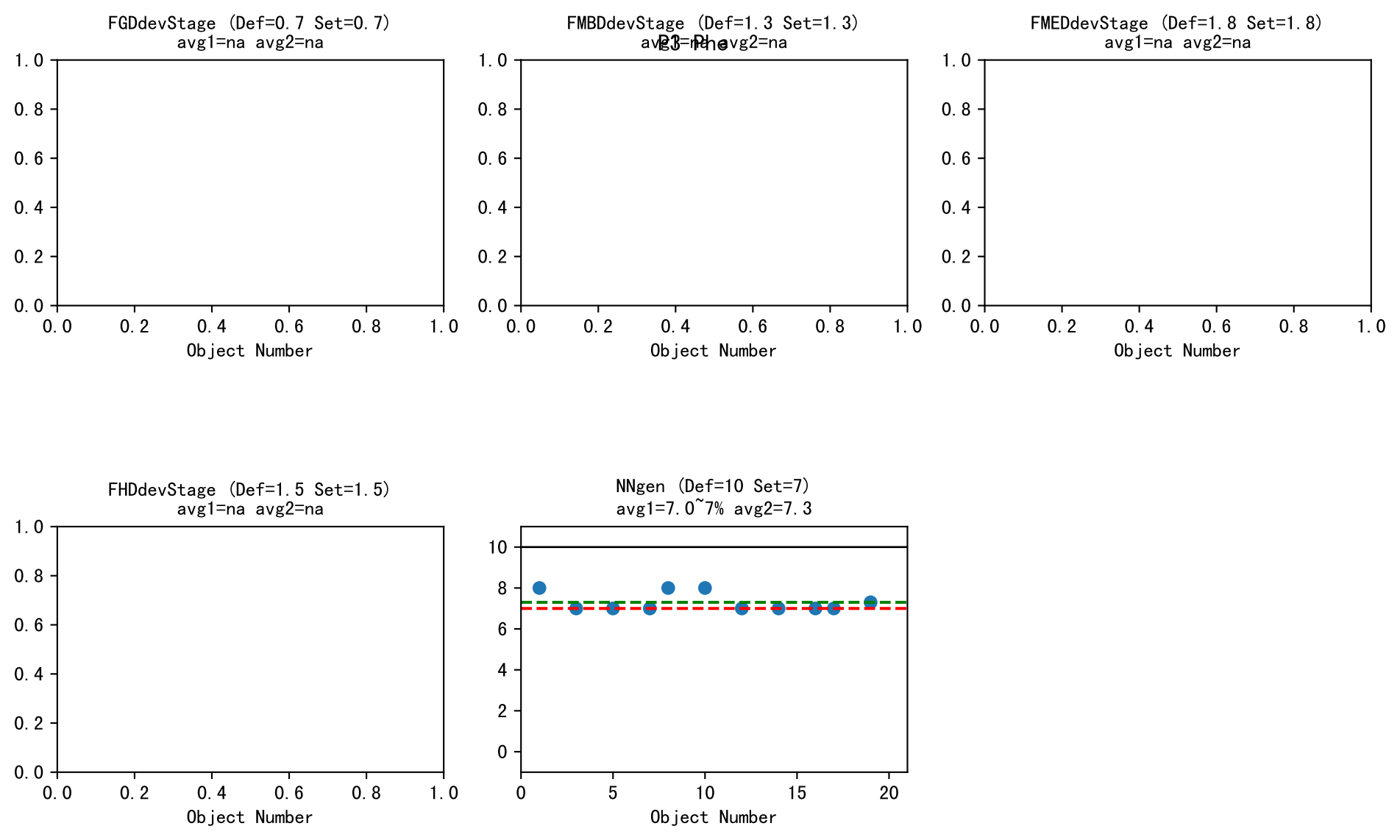

FrV
P3-009-13T1Fr1 (fit failed)
P3-009-13T1Fr5 (fit failed)
P3-021-19T1Fr1 (fit failed)
P3-034-5T1Fr1 (fit failed)
P3-034-5T1Fr5 (fit failed)
P3-045-17T1Fr1 (fit failed)
P3-054-28T1Fr1 (fit failed)
P3-068-4T1Fr1 (fit failed)
P3-084-11T1Fr1 (fit failed)

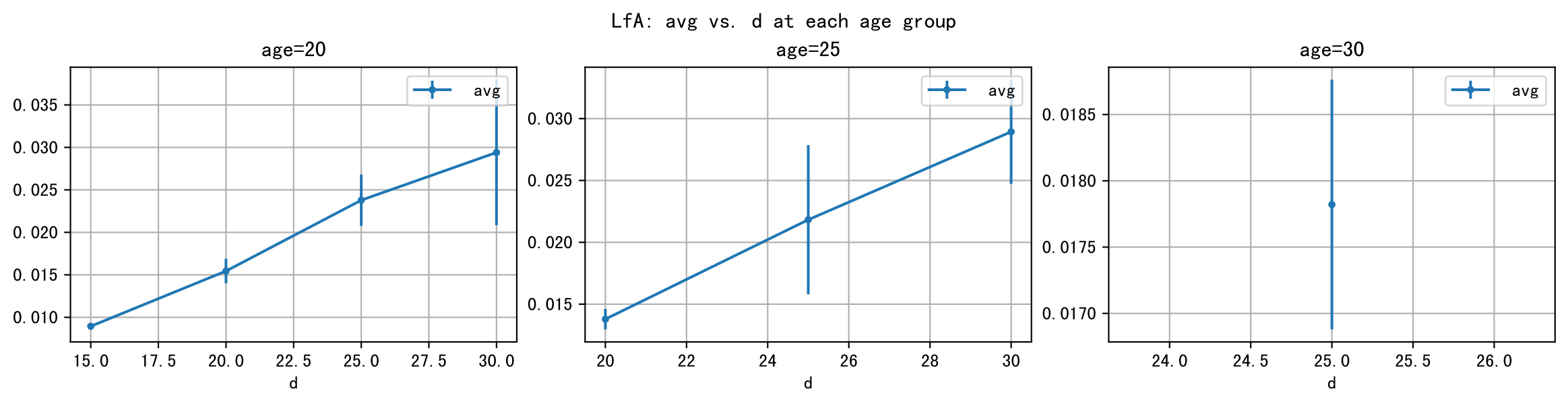

FrV
P3-099-4T1Fr1 (fit failed)
P3-110-23T1Fr1 (fit failed)
P3-110-23T1Fr5 (fit failed)
0.0030
0.0025
0.0020
0.0015
0.0010
0.0005
0.0000
24
25
26
27
28
0.08
0.06
0.04
0.02
0.00
22
24
26
28
0.0014
0.0012
0.0010
0.0008
0.0006
0.0004
0.0002
0.0000
26.0
26.5
27.0
27.5
28.0

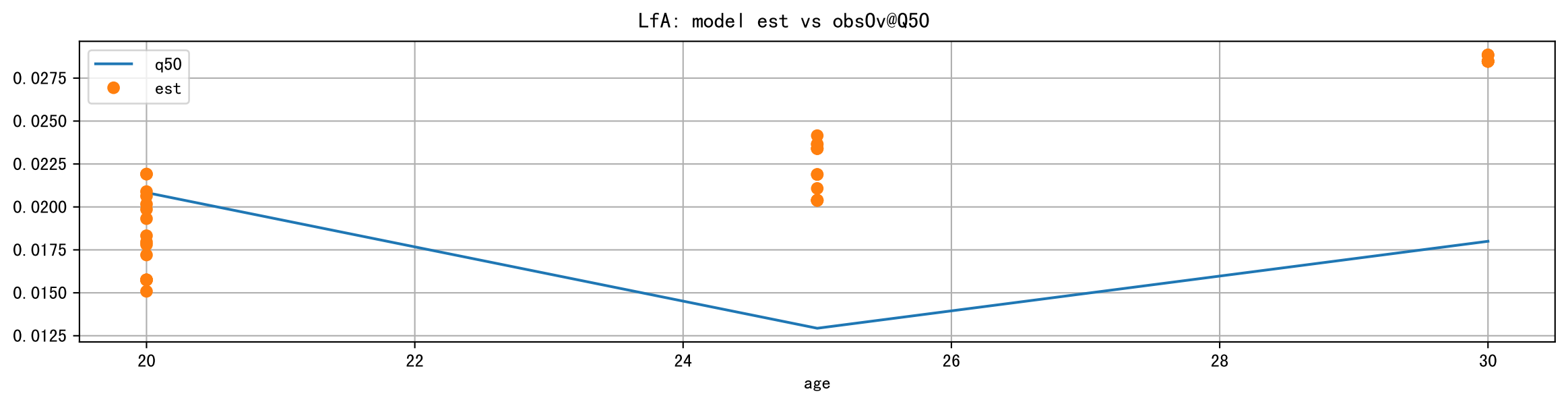

LfA
P3-009-13L10 (fit failed)
P3-009-13L7 (fit failed)
P3-021-19L10 (fit failed)
P3-021-19L6 (fit failed)
P3-034-5L6 (fit failed)
P3-034-5L9 (fit failed)
P3-045-17L6 (fit failed)
P3-054-28L10 (fit failed)
P3-054-28L7 (fit failed)

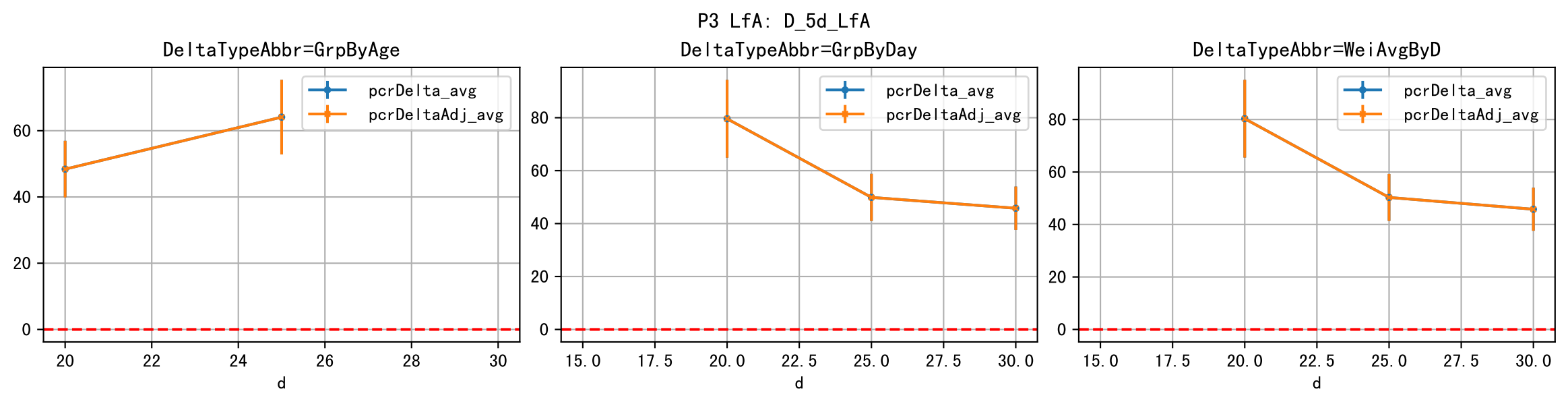

I fA
P3-068-4L7 (fit failed)
P3-075-19L6 (fit failed)
P3-084-11L6 (fit failed)
P3-099-4L6 (fit failed)
P3-110-23L6 (fit failed)

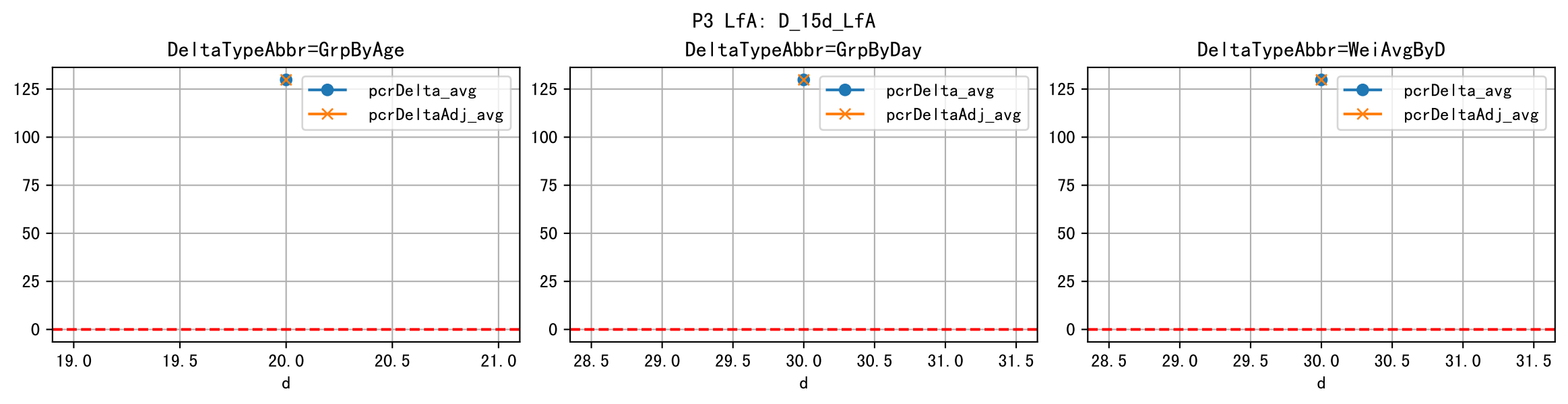

Fl_dm (Def=5 Set=6.22)
avg1=6.22~10% avg2=6.66~25%
P3
Object Number
Fl_de (Def=5 Set=6.22)
avg1=6.22~10% avg2=6.66~25%
Object Number
FrV_dm (Def=18 Set=18)
avg1=na avg2=na
Object Number
FrV_de (Def=15 Set=15)
avg1=na avg2=na
Object Number
FrN_a (Def=0.45 Set=0.75)
avg1=0.75~49% avg2=0.97
Object Number
FSDdevStage (Def=0.01 Set=0.03)
avg1=0.03~35% avg2=0.02
Object Number

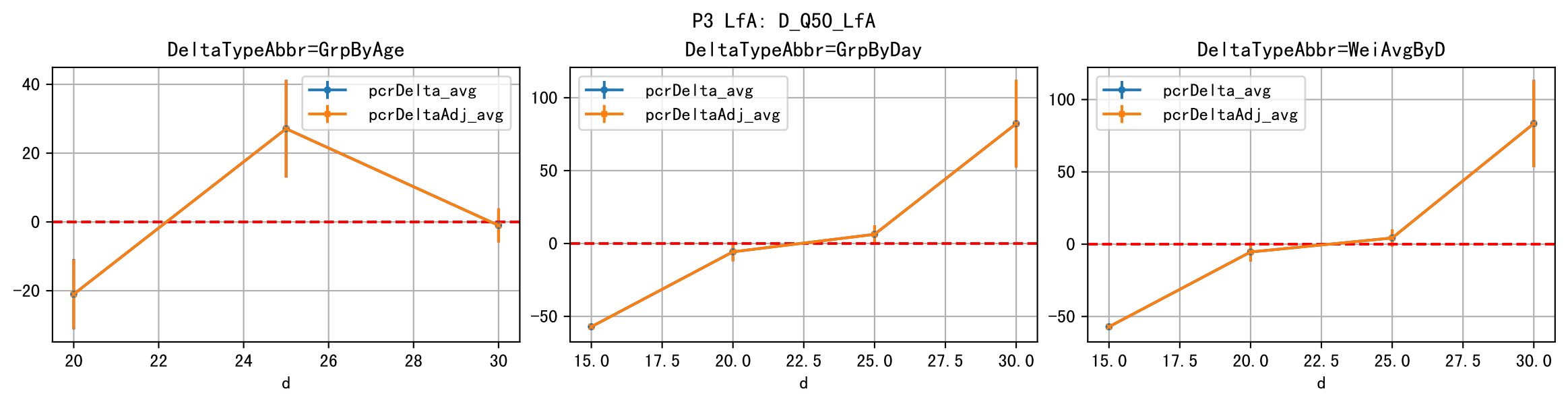

FGDdevStage (Def=0.7 Set=0.7)
avg1=na avg2=na
FMBDdevStage (Def=1.3 Set=1.3)
avg1=na avg2=na
FMEDdevStage (Def=1.8 Set=1.8)
avg1=na avg2=na
FHDdevStage (Def=1.5 Set=1.5)
avg1=na avg2=na
NNgen (Def=10 Set=7)
avg1=7.0~7% avg2=7.3
Object Number

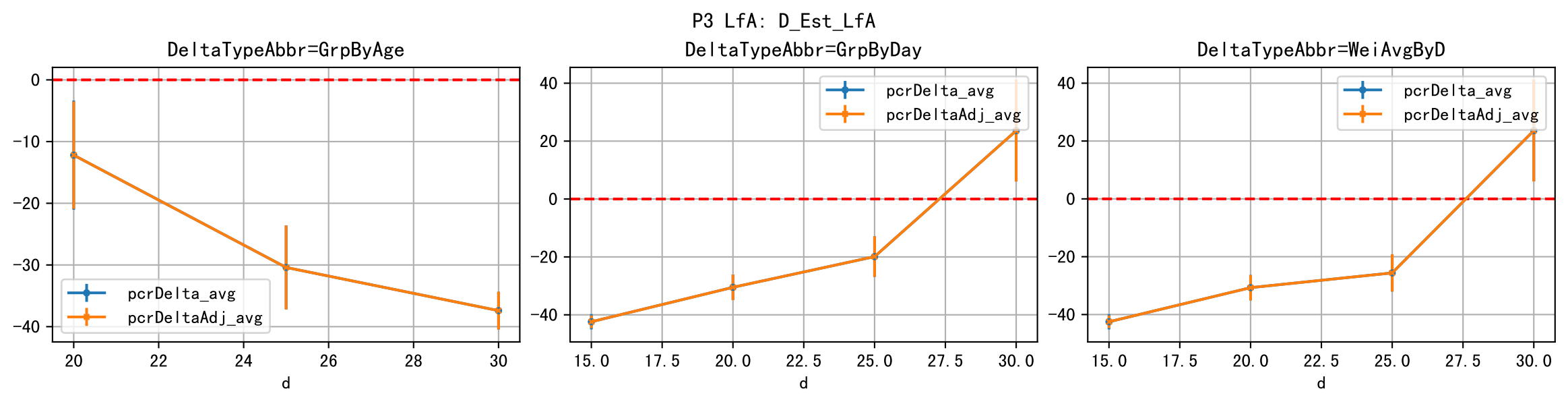

LfA: avg vs. d at each age group
age=20
age=25
age=30
avg
d
0.035
0.030
0.025
0.020
0.015
0.010
15.0
17.5
20.0
22.5
25.0
27.5
30.0
0.030
0.025
0.020
0.015
20
22
24
26
28
30
0.0185
0.0180
0.0175
0.0170
24.0
24.5
25.0
25.5
26.0

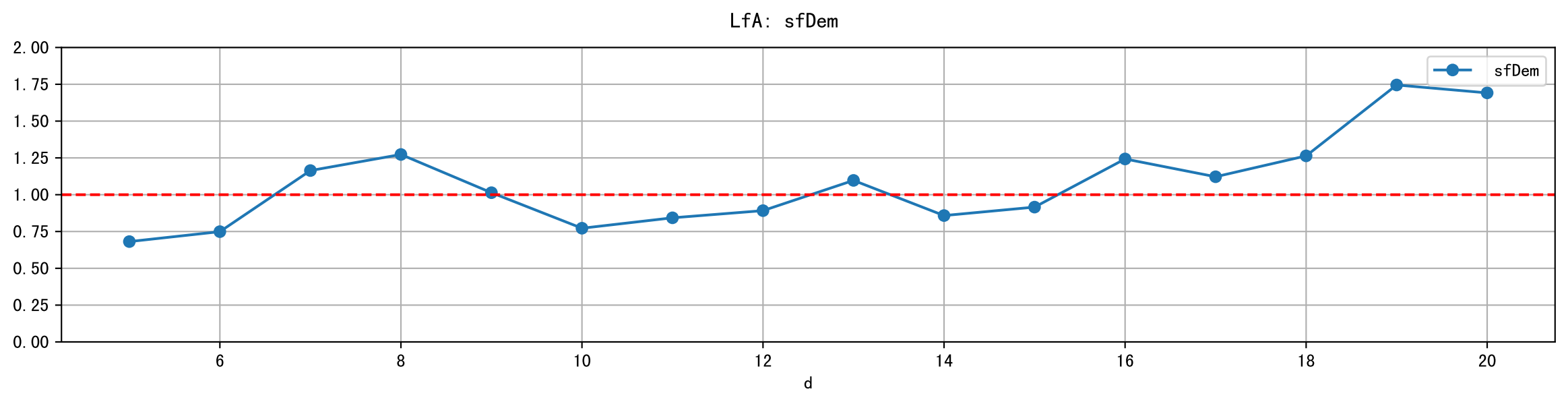

LfA: model est vs obsOv@Q50
q50
est
0.0275
0.0250
0.0225
0.0200
0.0175
0.0150
0.0125
20
22
24
26
28
30
age


P3 LfA: D_5d_LfA
DeltaTypeAbbr=GrpByAge
DeltaTypeAbbr=GrpByDay
DeltaTypeAbbr=WeiAvgByD
pcrDelta_avg
pcrDeltaAdj_avg
d

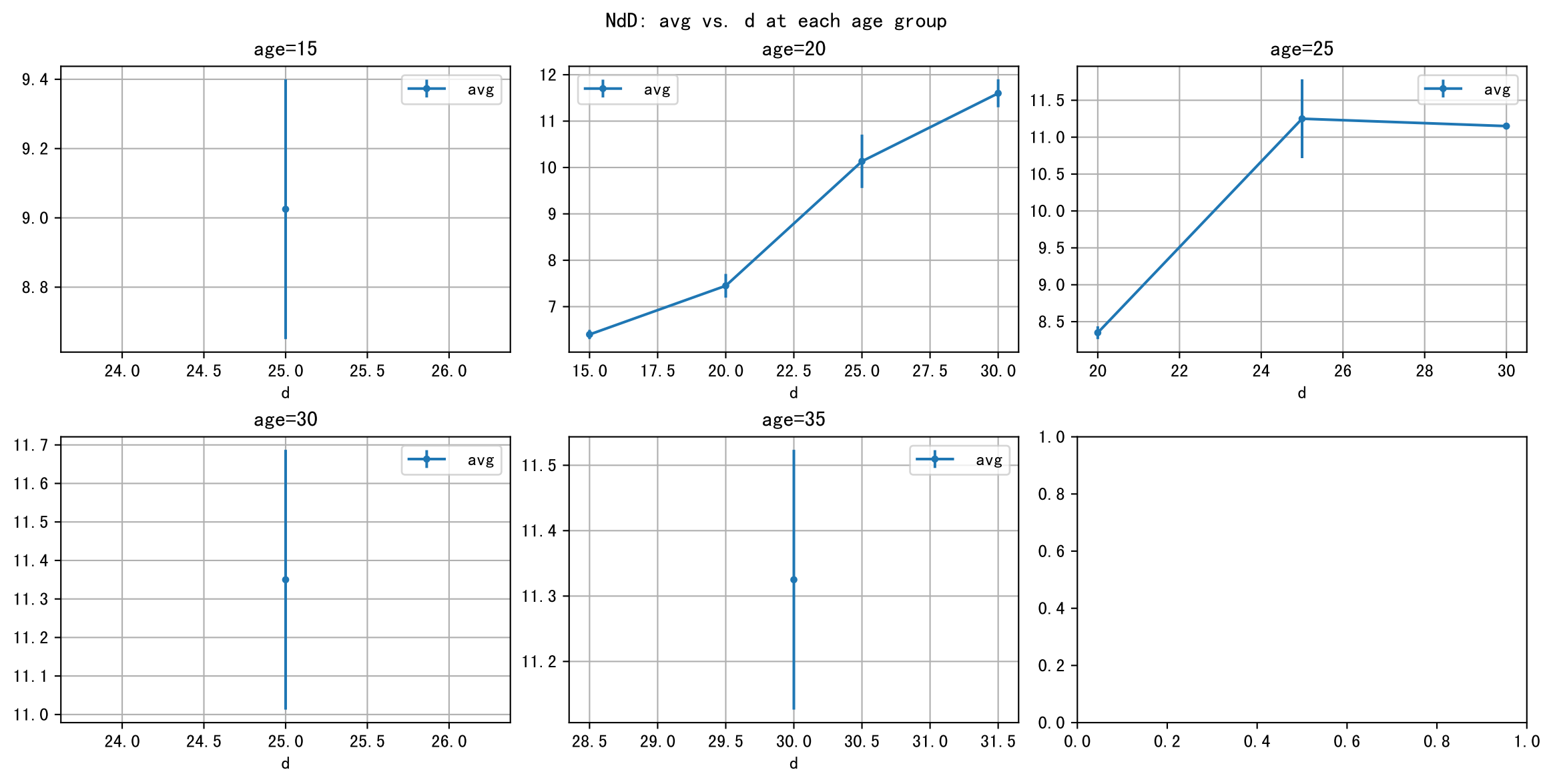

P3 LfA: D_15d_LfA
DeltaTypeAbbr=GrpByAge
DeltaTypeAbbr=GrpByDay
DeltaTypeAbbr=WeiAvgByD
pcrDelta_avg
pcrDeltaAdj_avg
125
100
75
50
25
0
19.0
19.5
20.0
20.5
21.0
28.5
29.0
29.5
30.0
30.5
31.0
31.5
d

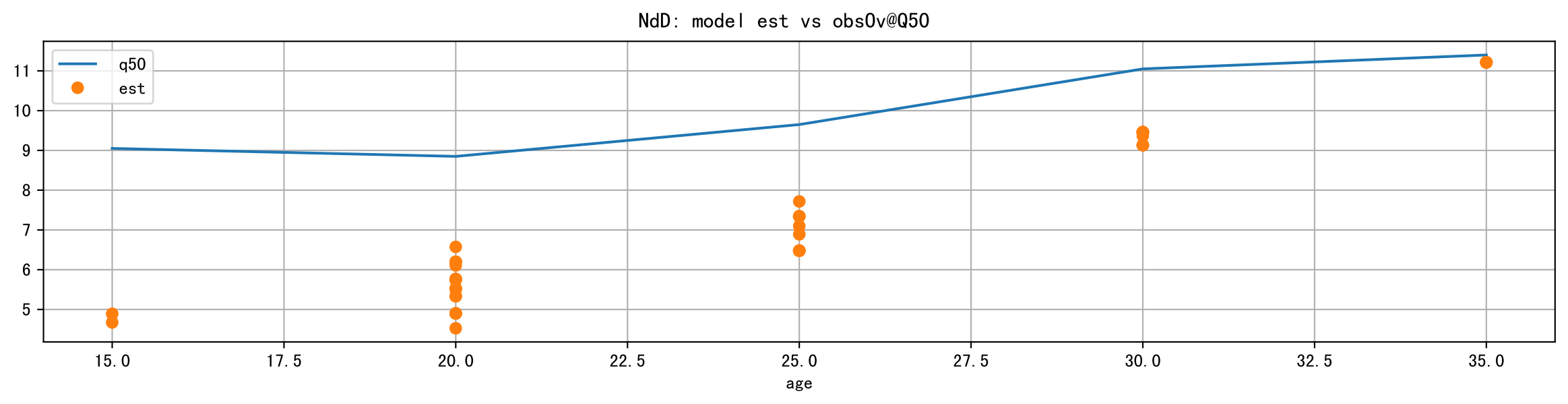

P3 LfA: D_Q50_LfA
DeltaTypeAbbr=GrpByAge
DeltaTypeAbbr=GrpByDay
DeltaTypeAbbr=WeiAvgByD
pcrDelta_avg
pcrDeltaAdj_avg
d

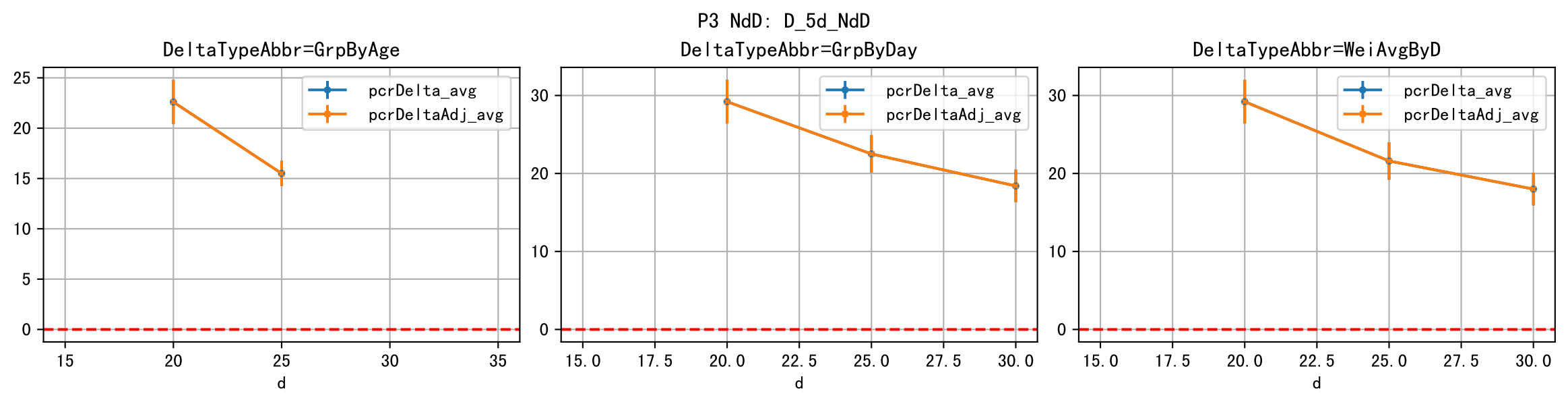

P3 LfA: D_Est_LfA
DeltaTypeAbbr=GrpByAge
DeltaTypeAbbr=GrpByDay
DeltaTypeAbbr=WeiAvgByD
pcrDelta_avg
pcrDeltaAdj_avg
d

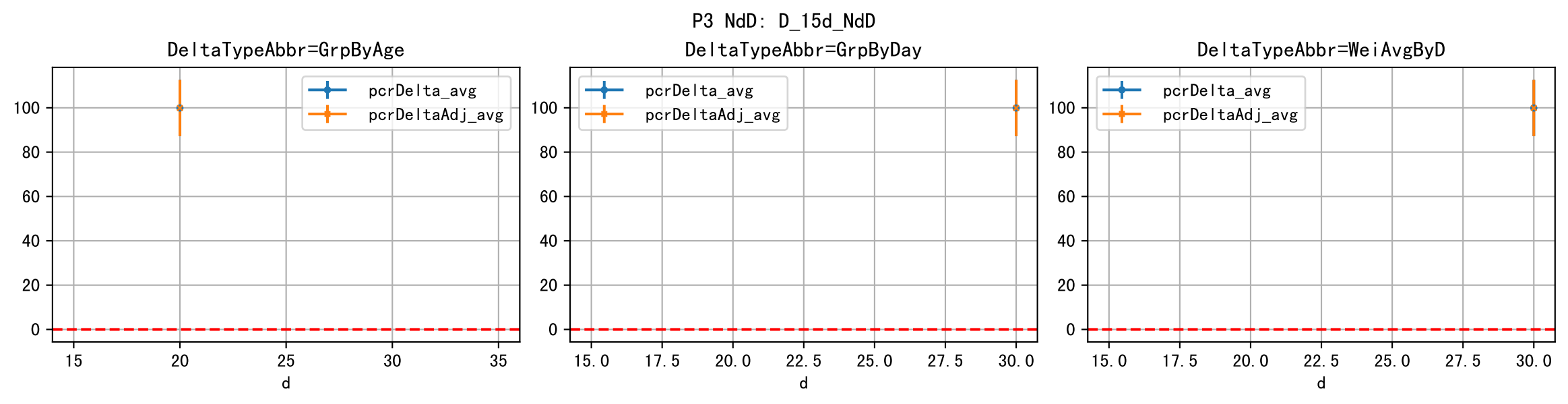

LfA: sfDem
2.00
1.75
1.50
1.25
1.00
0.75
0.50
0.25
0.00
6
8
10
12
14
16
18
20
d
sfDem

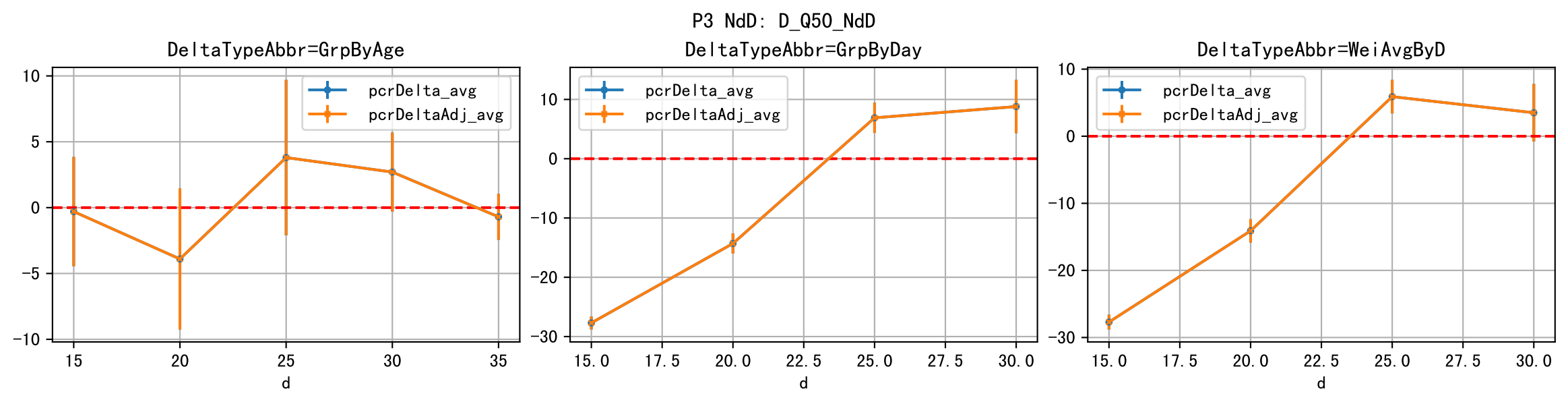

d
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
40
20
0
−20
−40

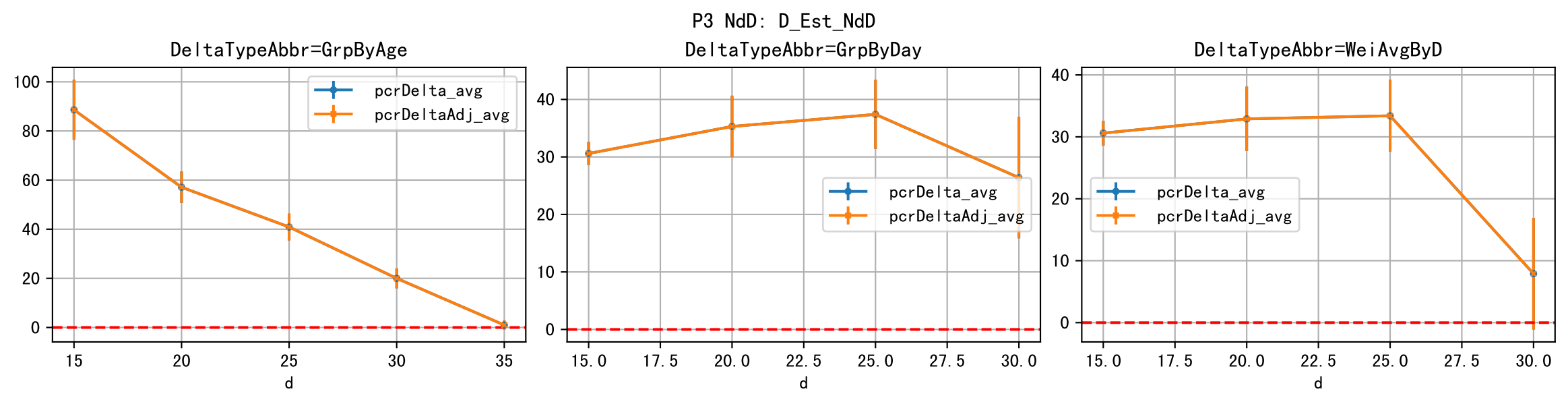

NdD: avg vs. d at each age group
age=15
age=20
age=25
age=30
age=35
avg
d

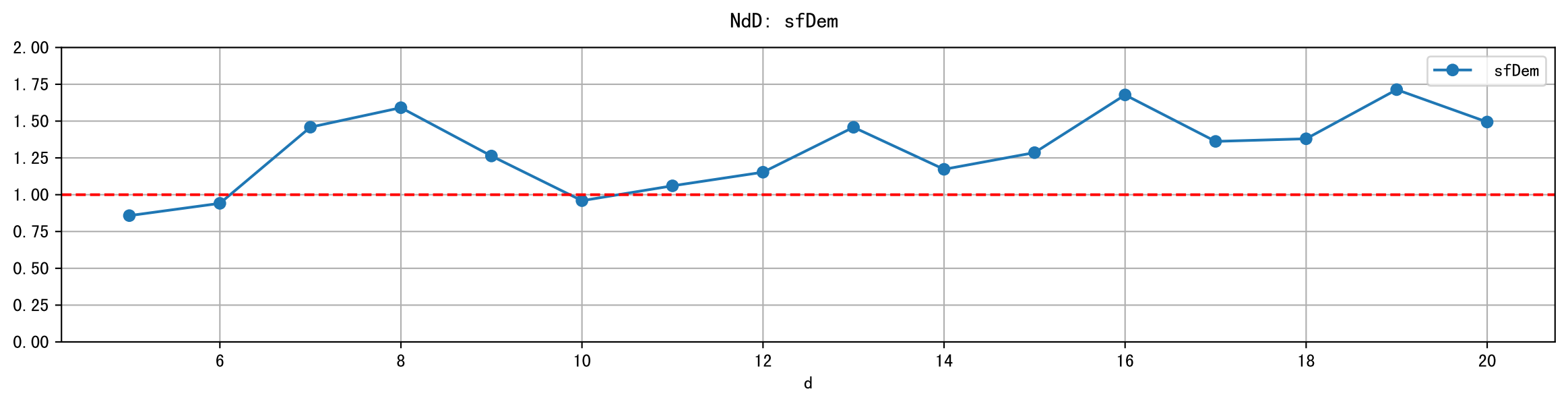

NdD: model est vs obsOv@Q50
q50
est
11
10
9
8
7
6
5
15.0
17.5
20.0
22.5
25.0
27.5
30.0
32.5
35.0
age


P3 NdD: D_5d_NdD
DeltaTypeAbbr=GrpByAge
DeltaTypeAbbr=GrpByDay
DeltaTypeAbbr=WeiAvgByD
pcrDelta_avg
pcrDeltaAdj_avg
d

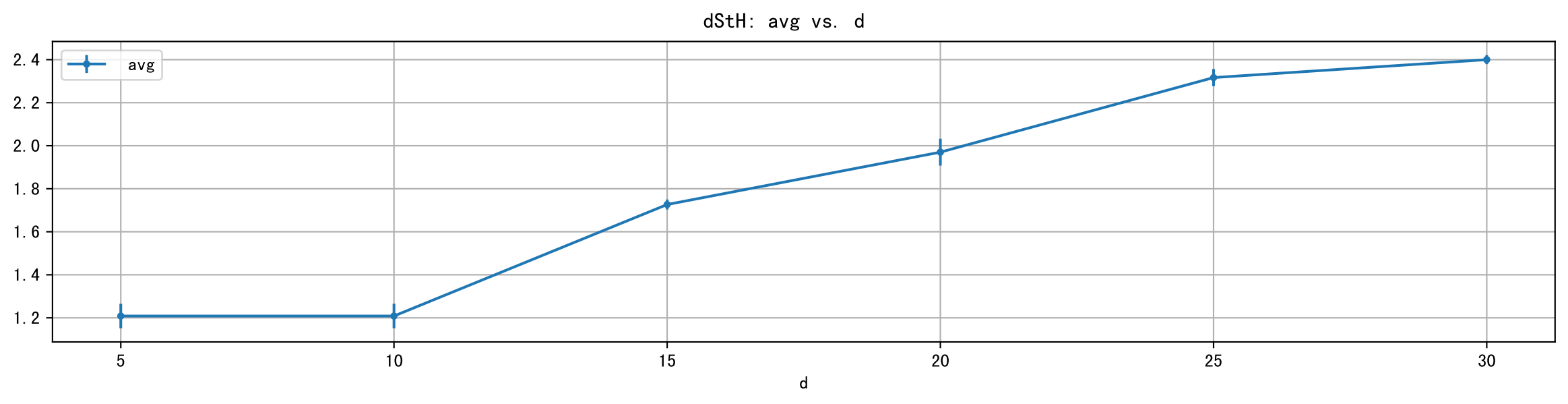

P3 NdD: D_15d_NdD
DeltaTypeAbbr=GrpByAge
DeltaTypeAbbr=GrpByDay
DeltaTypeAbbr=WeiAvgByD
pcrDelta_avg
pcrDeltaAdj_avg
100
80
60
40
20
0
15
20
25
30
35
15.0
17.5
20.0
22.5
25.0
27.5
30.0
d

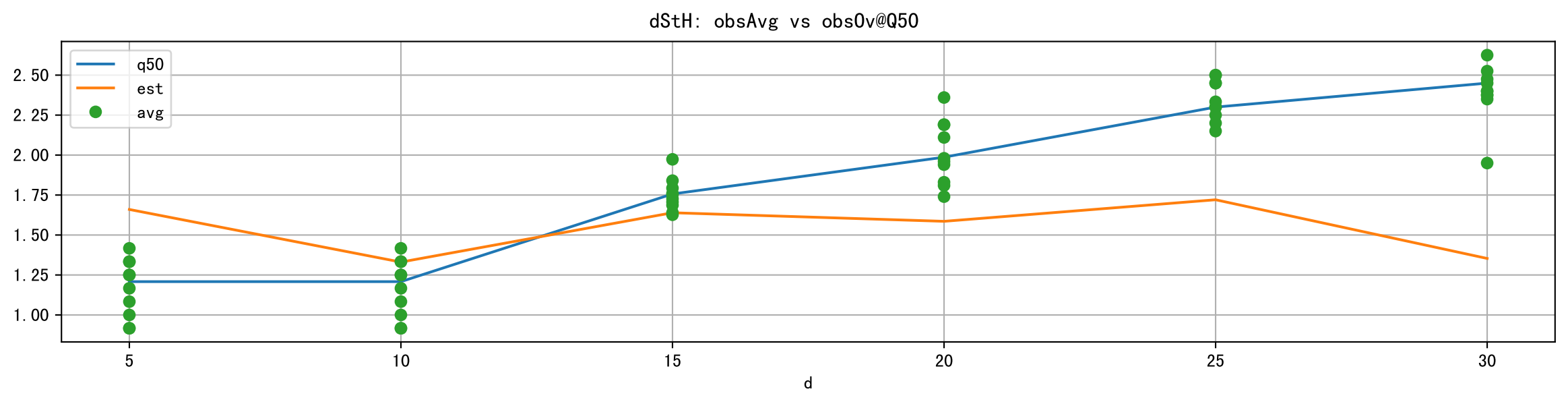

P3 NdD: D_Q50_NdD
DeltaTypeAbbr=GrpByAge
DeltaTypeAbbr=GrpByDay
DeltaTypeAbbr=WeiAvgByD
pcrDelta_avg
pcrDeltaAdj_avg
d

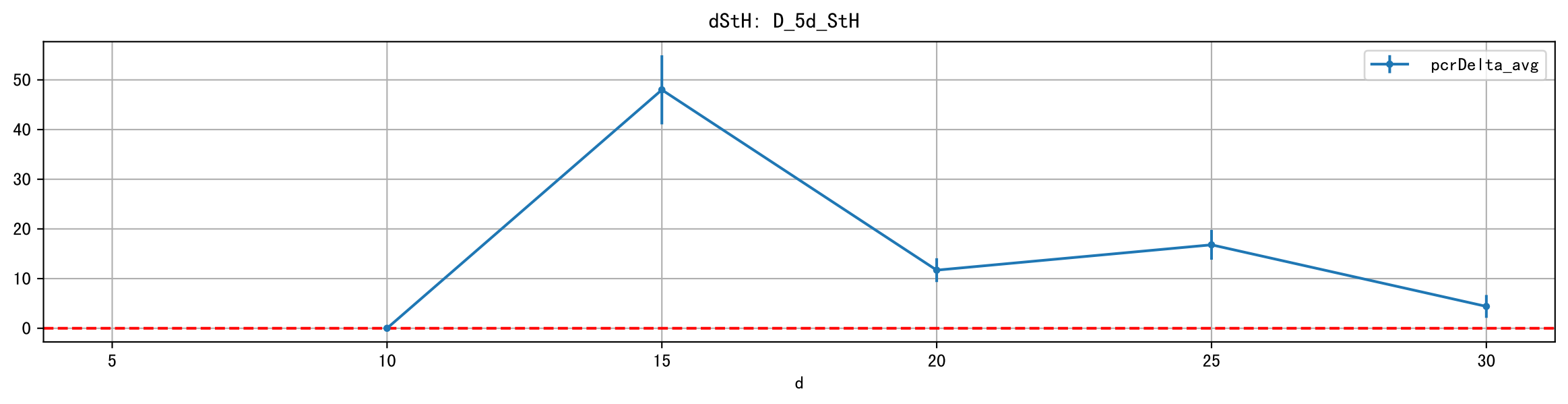

P3 NdD: D_Est_NdD
DeltaTypeAbbr=GrpByAge
DeltaTypeAbbr=GrpByDay
DeltaTypeAbbr=WeiAvgByD
pcrDelta_avg
pcrDeltaAdj_avg
d

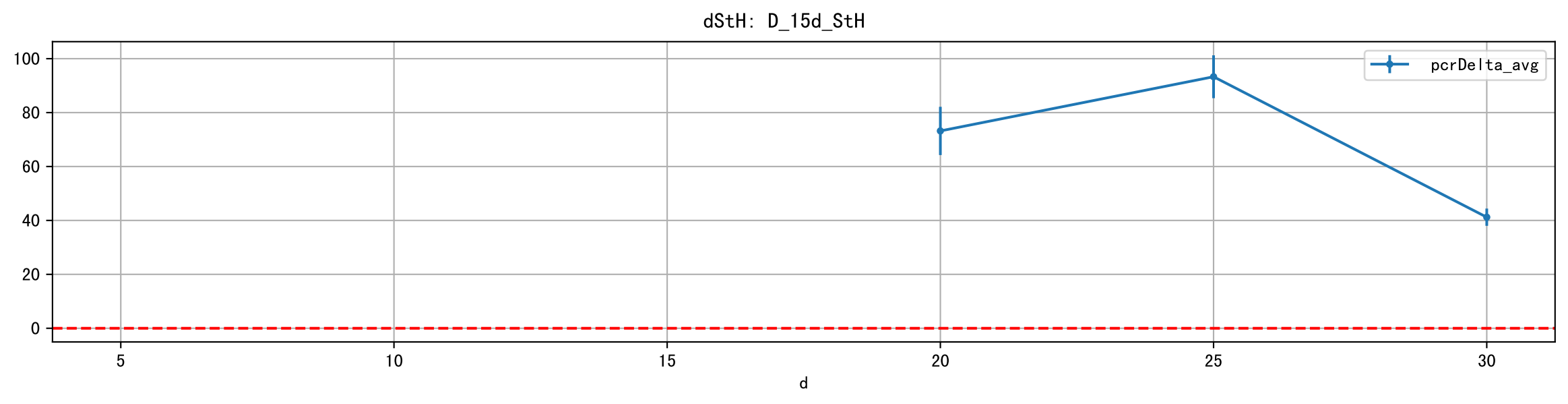

NdD: sfDem
2.00
1.75
1.50
1.25
1.00
0.75
0.50
0.25
0.00
6
8
10
12
14
16
18
20
d
sfDem

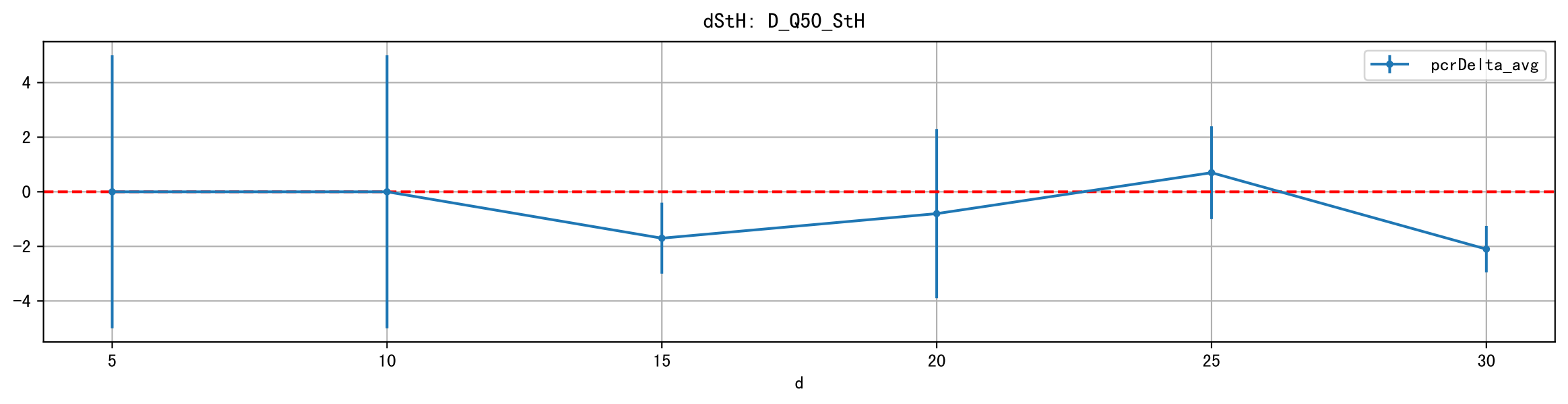

d
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
40
20
0
−20
−40

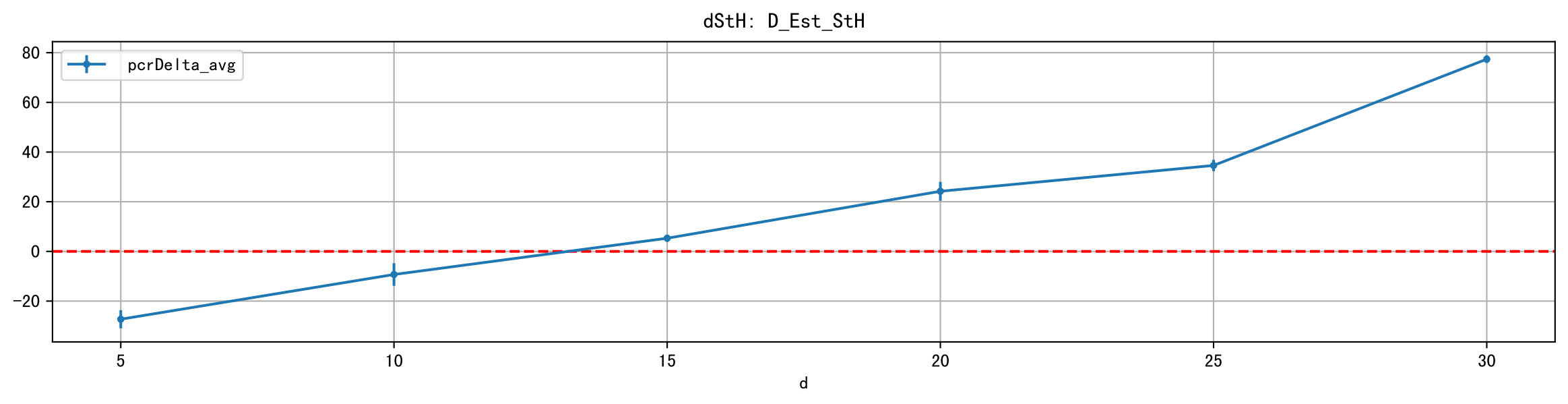

dStH: avg vs. d
avg
2.4
2.2
2.0
1.8
1.6
1.4
1.2
5
10
15
20
25
30
d

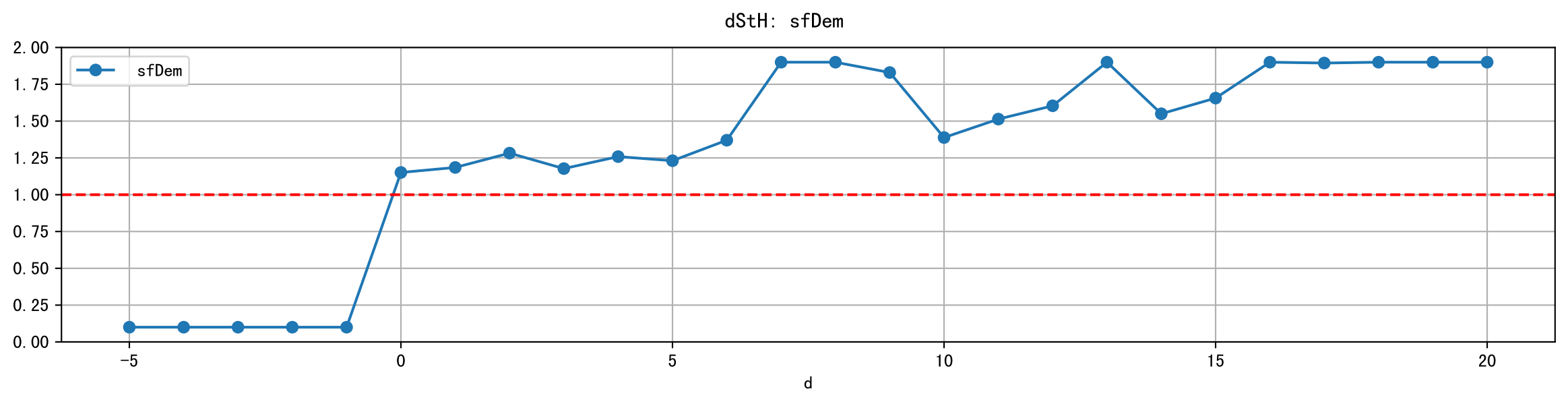

dStH: obsAvg vs obsOv@Q50
q50
est
avg
2.50
2.25
2.00
1.75
1.50
1.25
1.00
5
10
15
20
25
30
d

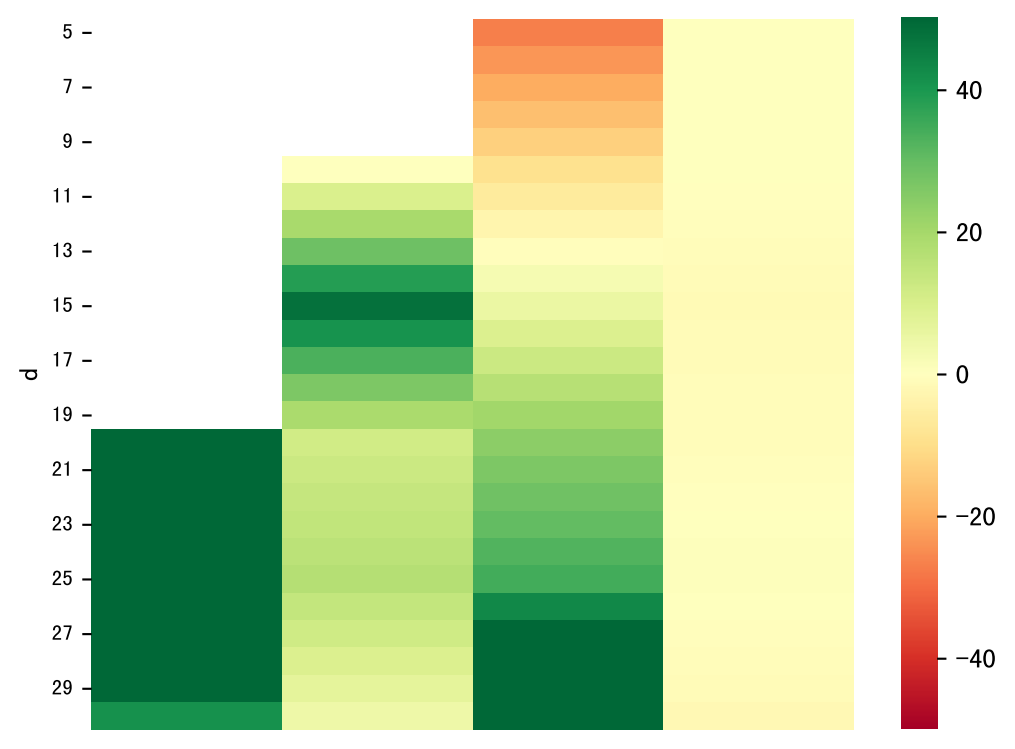

dStH: D_5d_StH
pcrDelta_avg
50
40
30
20
10
0
5
10
15
20
25
30
d

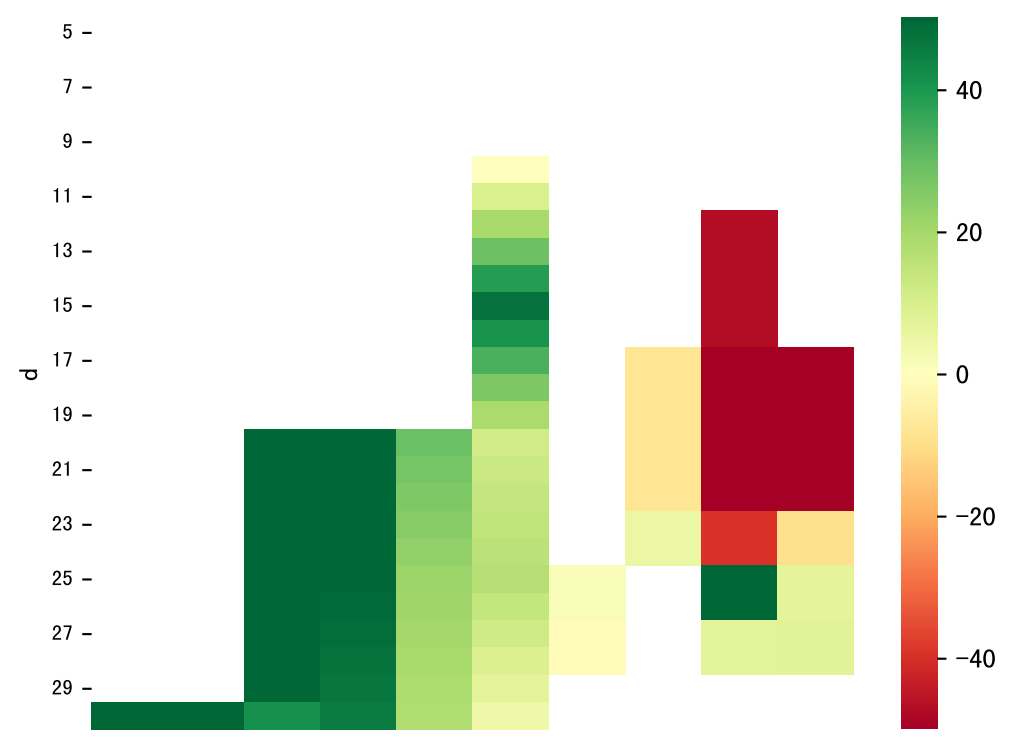

dStH: D_15d_StH
pcrDelta_avg
100
80
60
40
20
0
5
10
15
20
25
30
d


dStH: D_Q50_StH
pcrDelta_avg
4
2
0
−2
−4
5
10
15
20
25
30
d


dStH: D_Est_StH
pcrDelta_avg
80
60
40
20
0
-20
5
10
15
20
25
30
d


dStH: sfDem
sfDem
2.00
1.75
1.50
1.25
1.00
0.75
0.50
0.25
0.00
-5
0
5
10
15
20
d


d
5
7
9
11
13
15
17
19
21
23
25
27
29
40
20
0
−20
−40


d
5
7
9
11
13
15
17
19
21
23
25
27
29
40
20
0
−20
−40