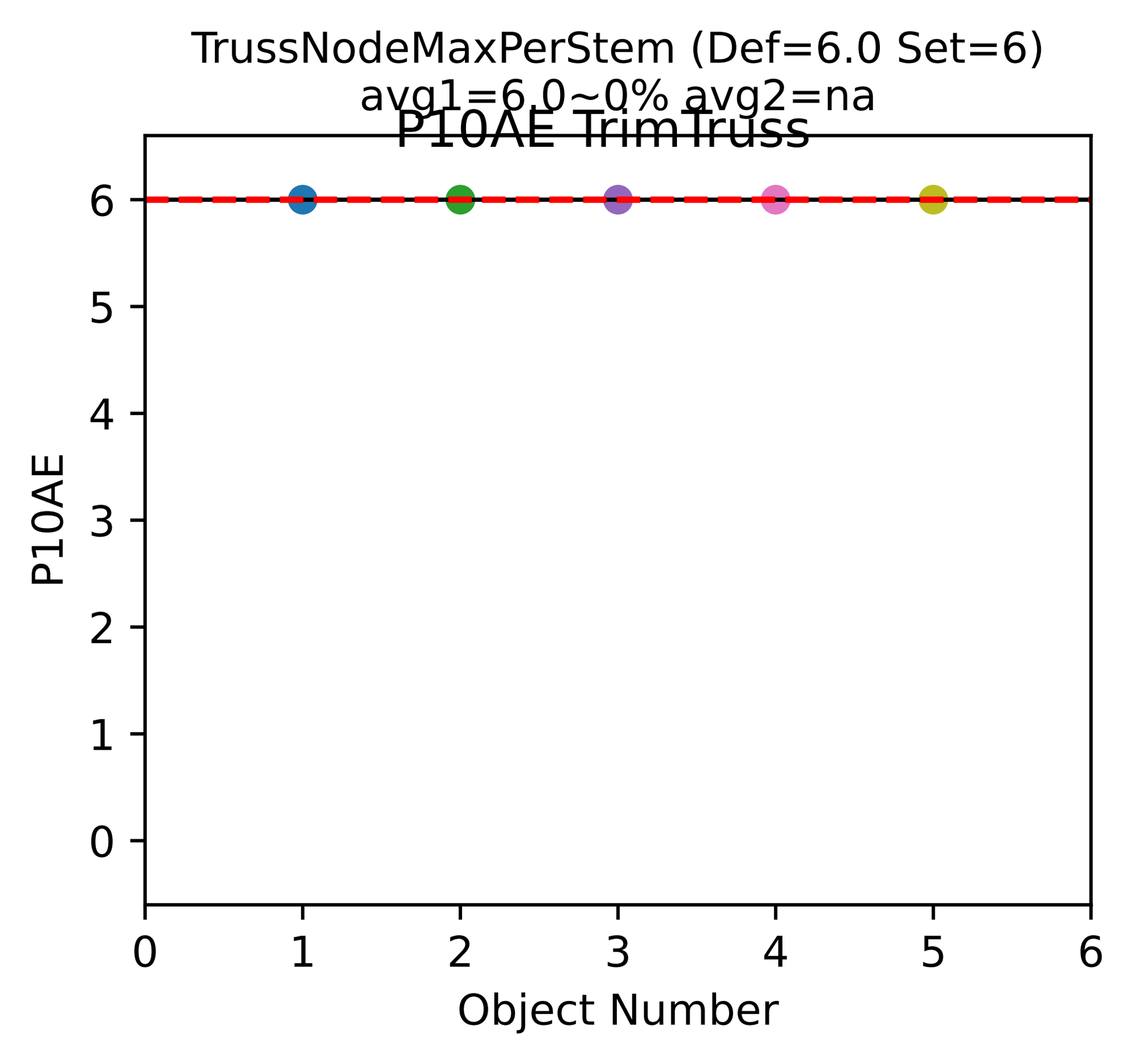
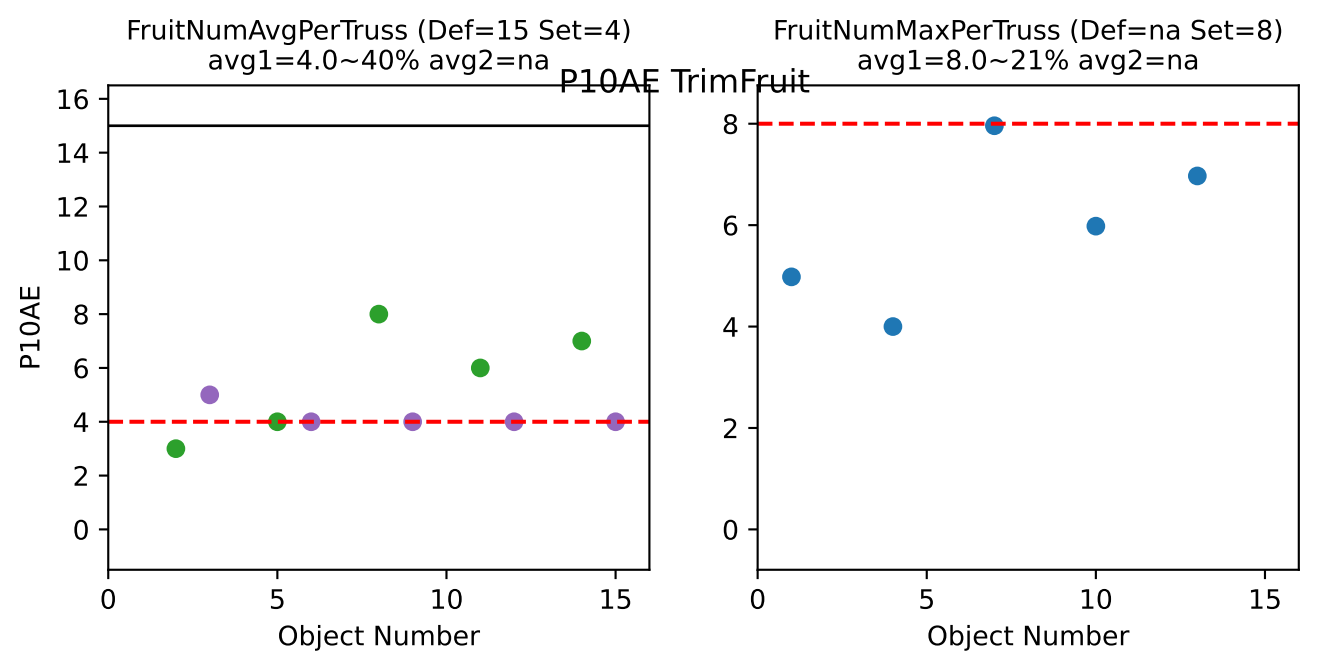
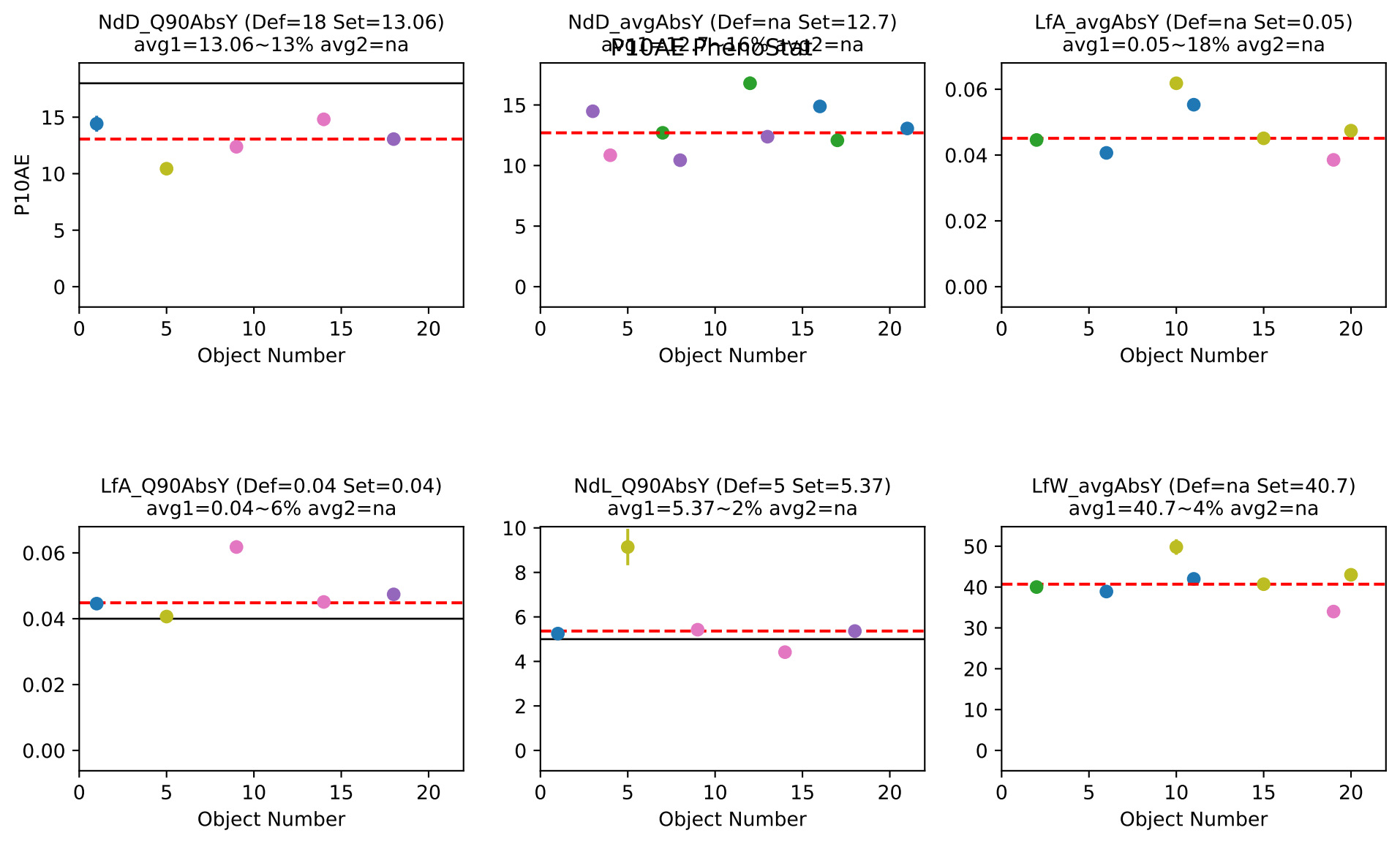
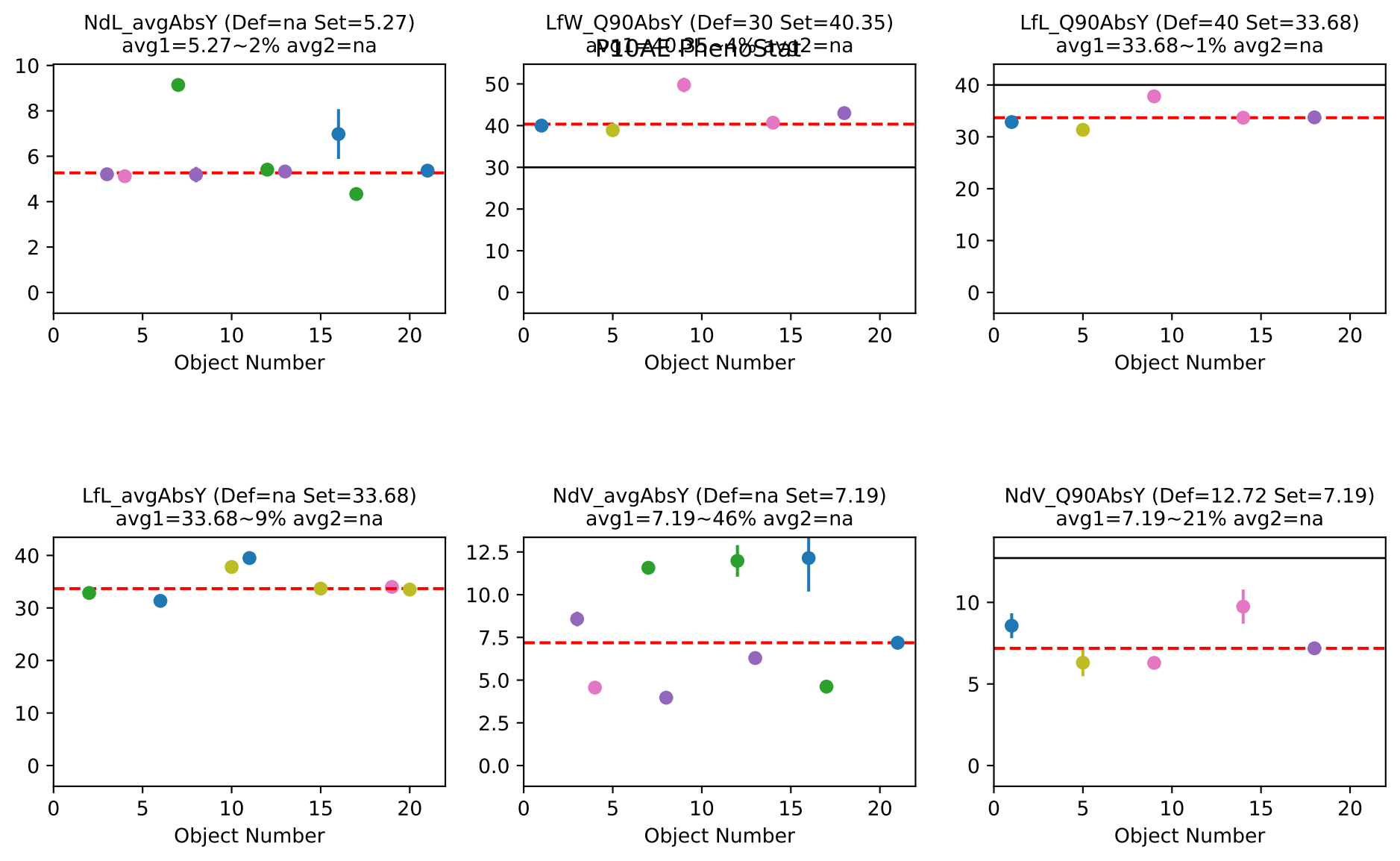
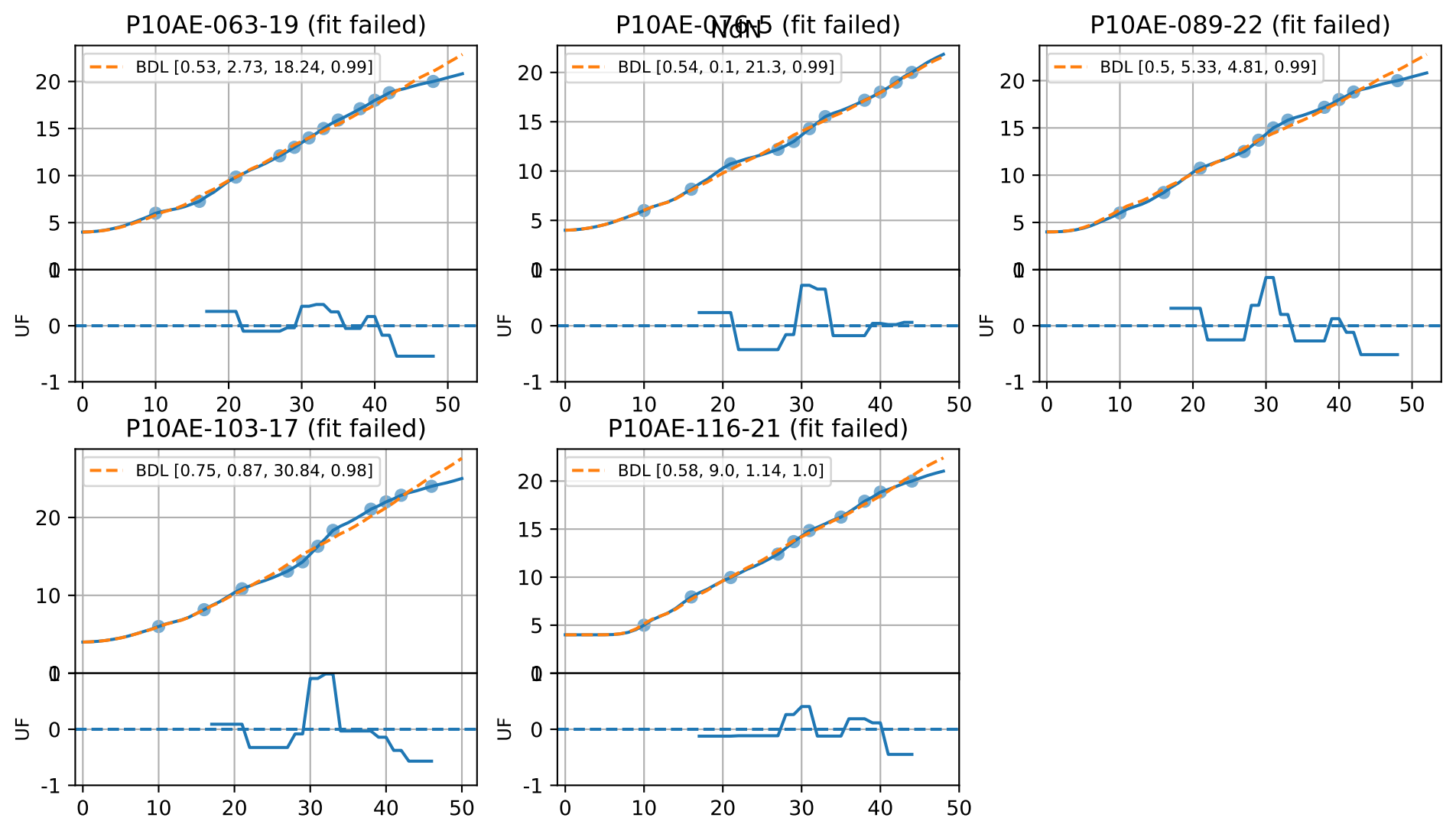
Phenotype Data Analysis Plots
PhenoData day range = 10 - 48
Analysis cutoff day = 48
NC11 P10
2025-05-19 (Day 49)

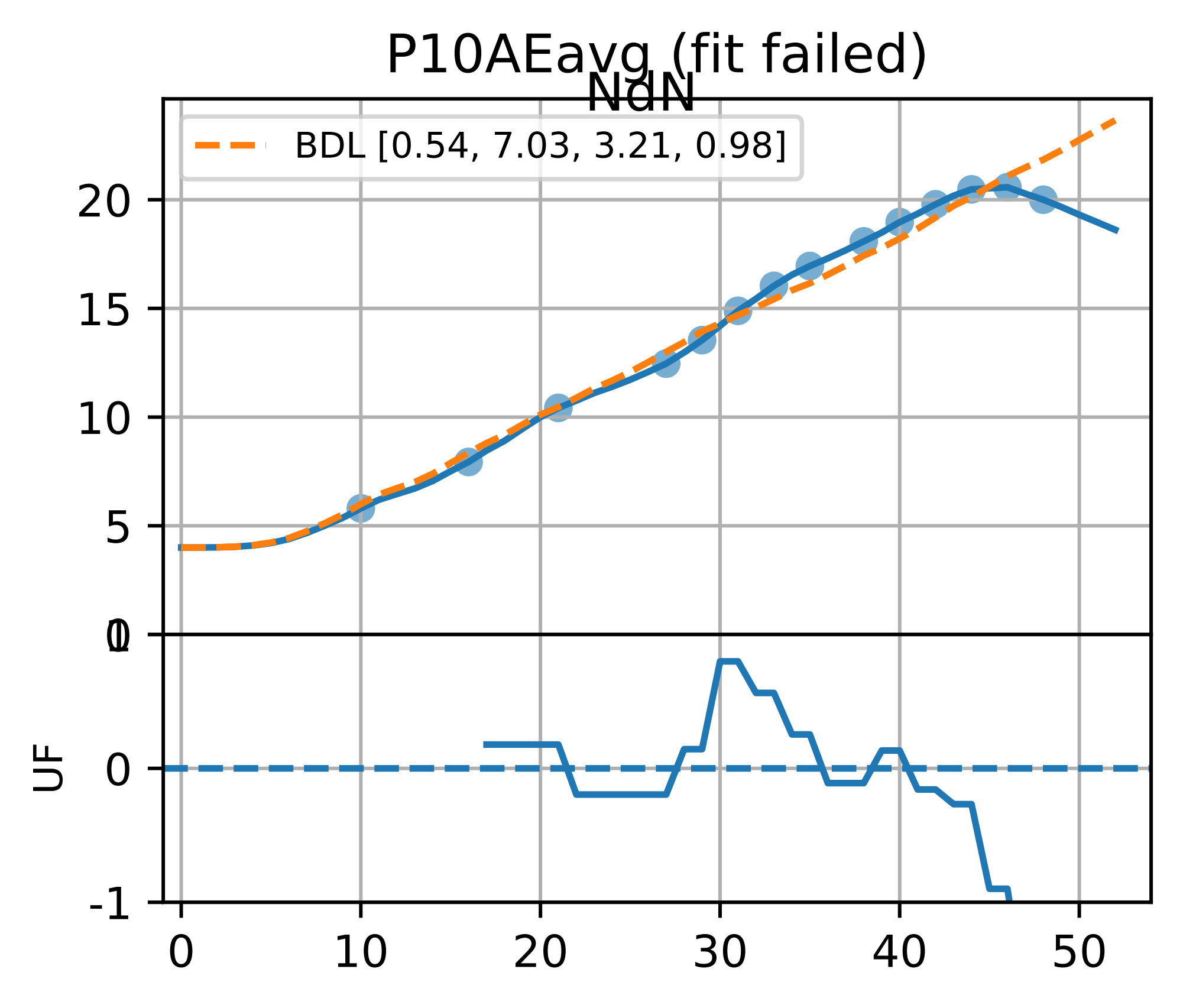

TrussNodeMaxPerStem (Def=6.0 Set=6)
avg1=6.0~0% avg2=na
P10AE TrimTruss
P10AE
Object Number
0
1
2
3
4
5
6

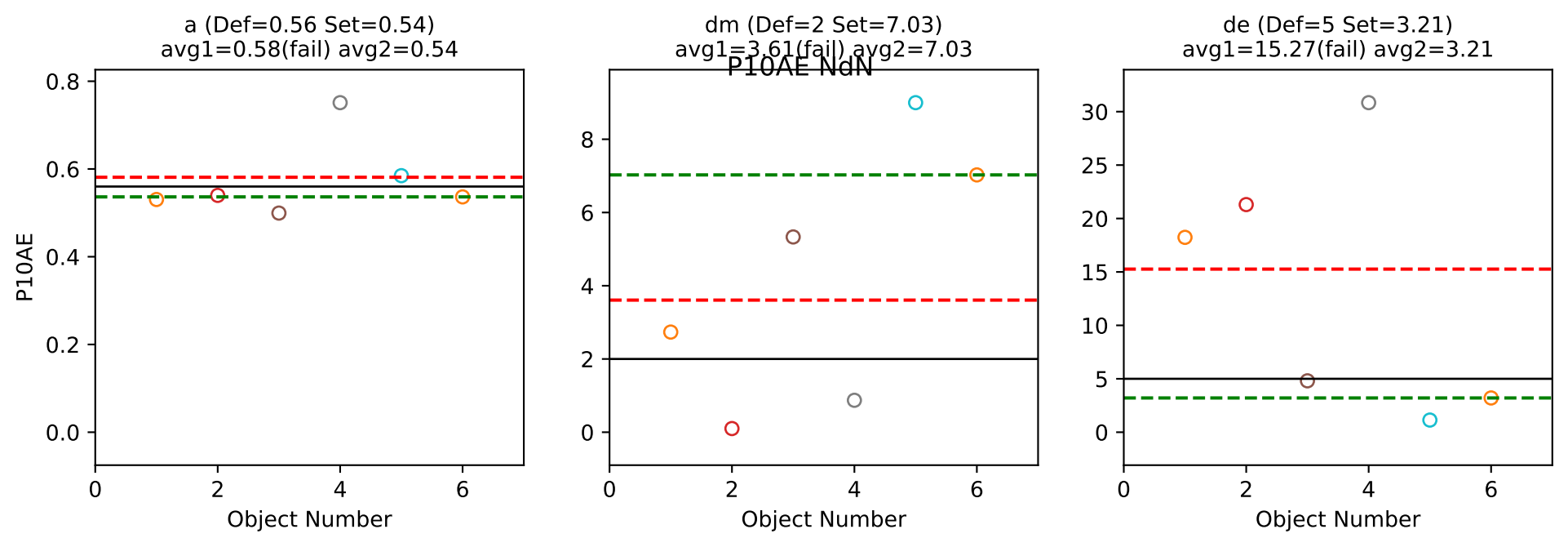

P10AE TrimFruit
FruitNumAvgPerTruss (Def=15 Set=4)
avg1=4.0~40% avg2=na
FruitNumMaxPerTruss (Def=na Set=8)
avg1=8.0~21% avg2=na
P10AE
Object Number
Object Number
0
2
4
6
8
10
12
14
16
0
5
10
15

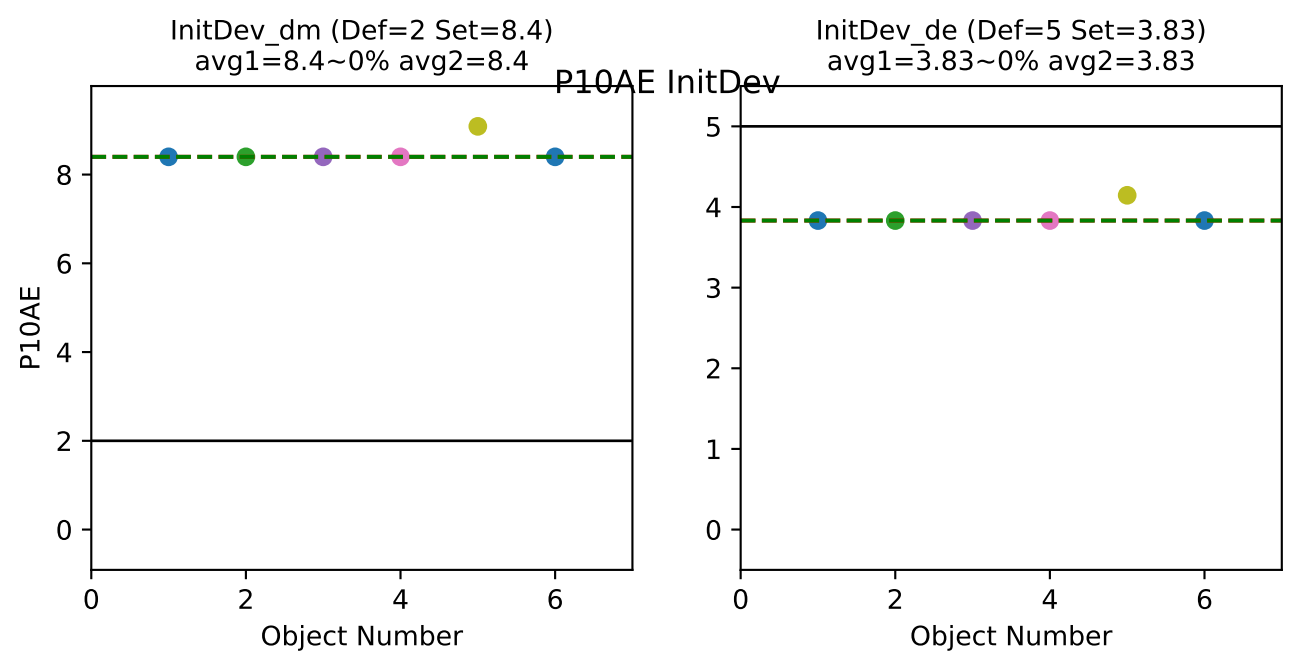

NdD_Q90AbsY (Def=18 Set=13.06)
avg1=13.06~13% avg2=na
NdD_avgAbsY (Def=na Set=12.7)
avg1=12.7~16% avg2=na
P10AE PhenoStat
LfA_avgAbsY (Def=na Set=0.05)
avg1=0.05~18% avg2=na
LfA_Q90AbsY (Def=0.04 Set=0.04)
avg1=0.04~6% avg2=na
NdL_Q90AbsY (Def=5 Set=5.37)
avg1=5.37~2% avg2=na
LfW_avgAbsY (Def=na Set=40.7)
avg1=40.7~4% avg2=na
P10AE
Object Number

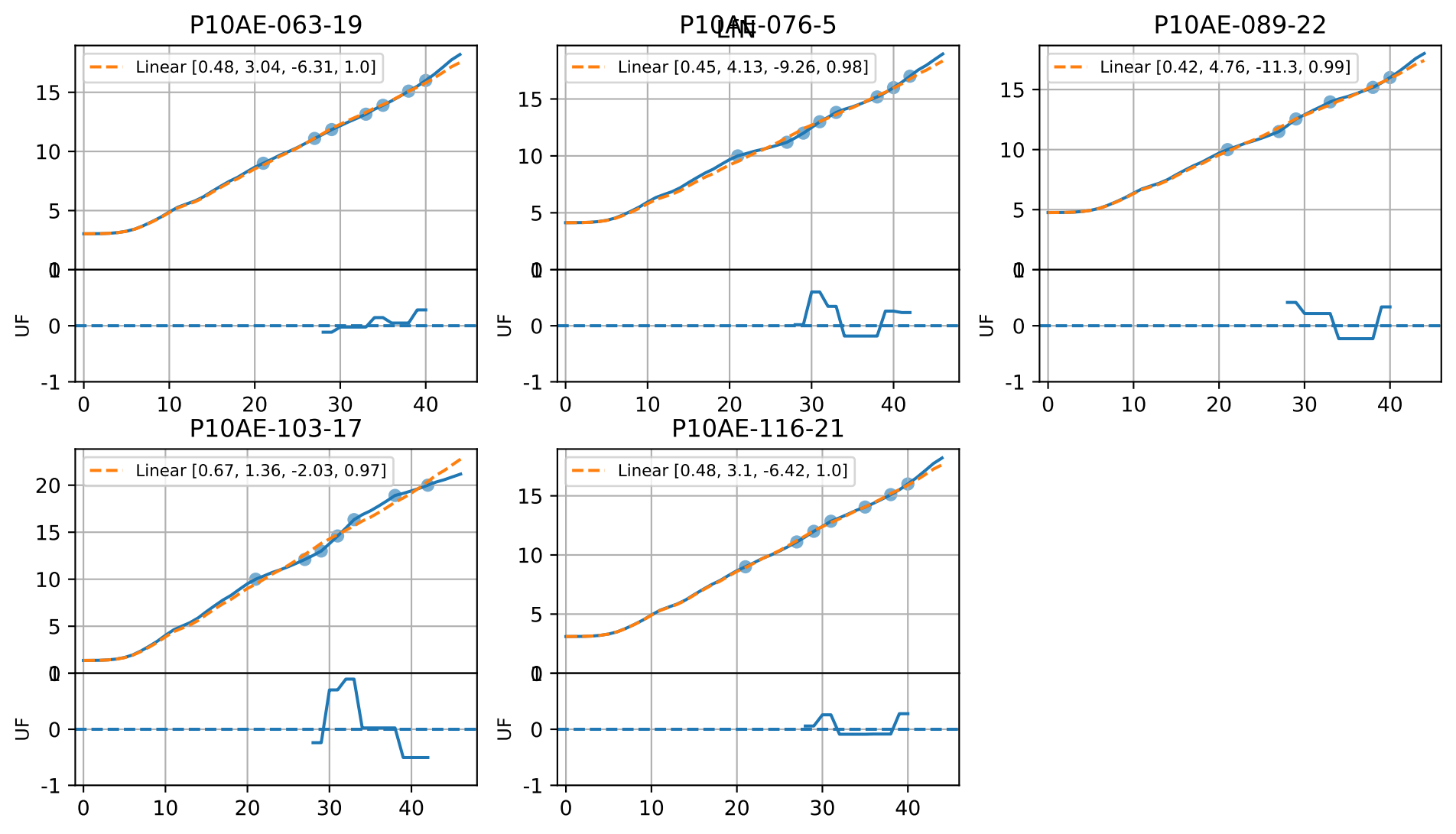

NdL_avgAbsY (Def=na Set=5.27)
avg1=5.27~2% avg2=na
LfW_Q90AbsY (Def=30 Set=40.35)
avg1=40.35~4% avg2=na
LfL_Q90AbsY (Def=40 Set=33.68)
avg1=33.68~1% avg2=na
LfL_avgAbsY (Def=na Set=33.68)
avg1=33.68~9% avg2=na
NdV_avgAbsY (Def=na Set=7.19)
avg1=7.19~46% avg2=na
NdV_Q90AbsY (Def=12.72 Set=7.19)
avg1=7.19~21% avg2=na
Object Number

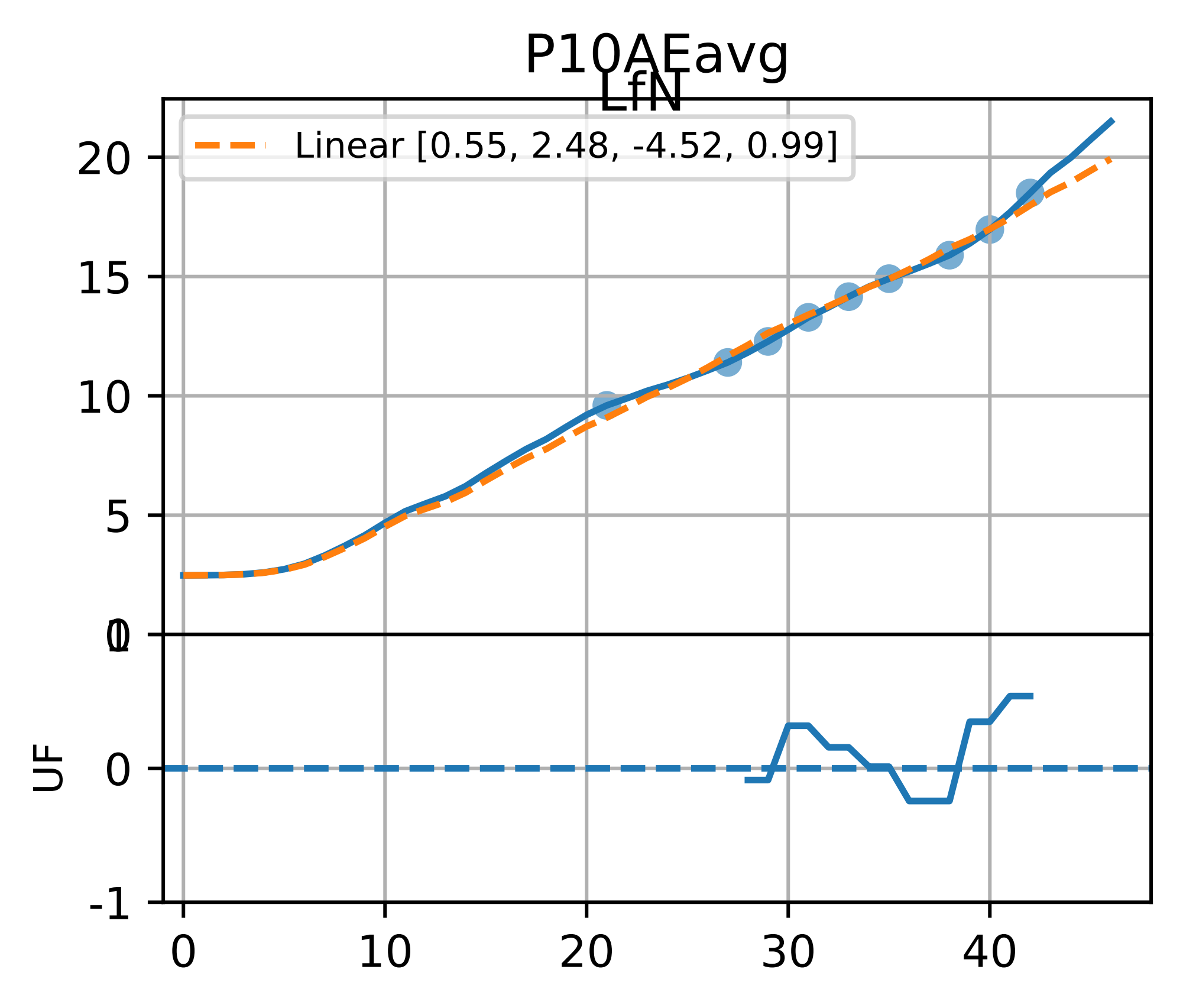

P10AE-063-19 (fit failed)
BDL [0.53, 2.73, 18.24, 0.99]
P10AE-076-5 (fit failed)
NaN
BDL [0.54, 0.1, 21.3, 0.99]
P10AE-089-22 (fit failed)
BDL [0.5, 5.33, 4.81, 0.99]
P10AE-103-17 (fit failed)
BDL [0.75, 0.87, 30.84, 0.98]
P10AE-116-21 (fit failed)
BDL [0.58, 9.0, 1.14, 1.0]
UF

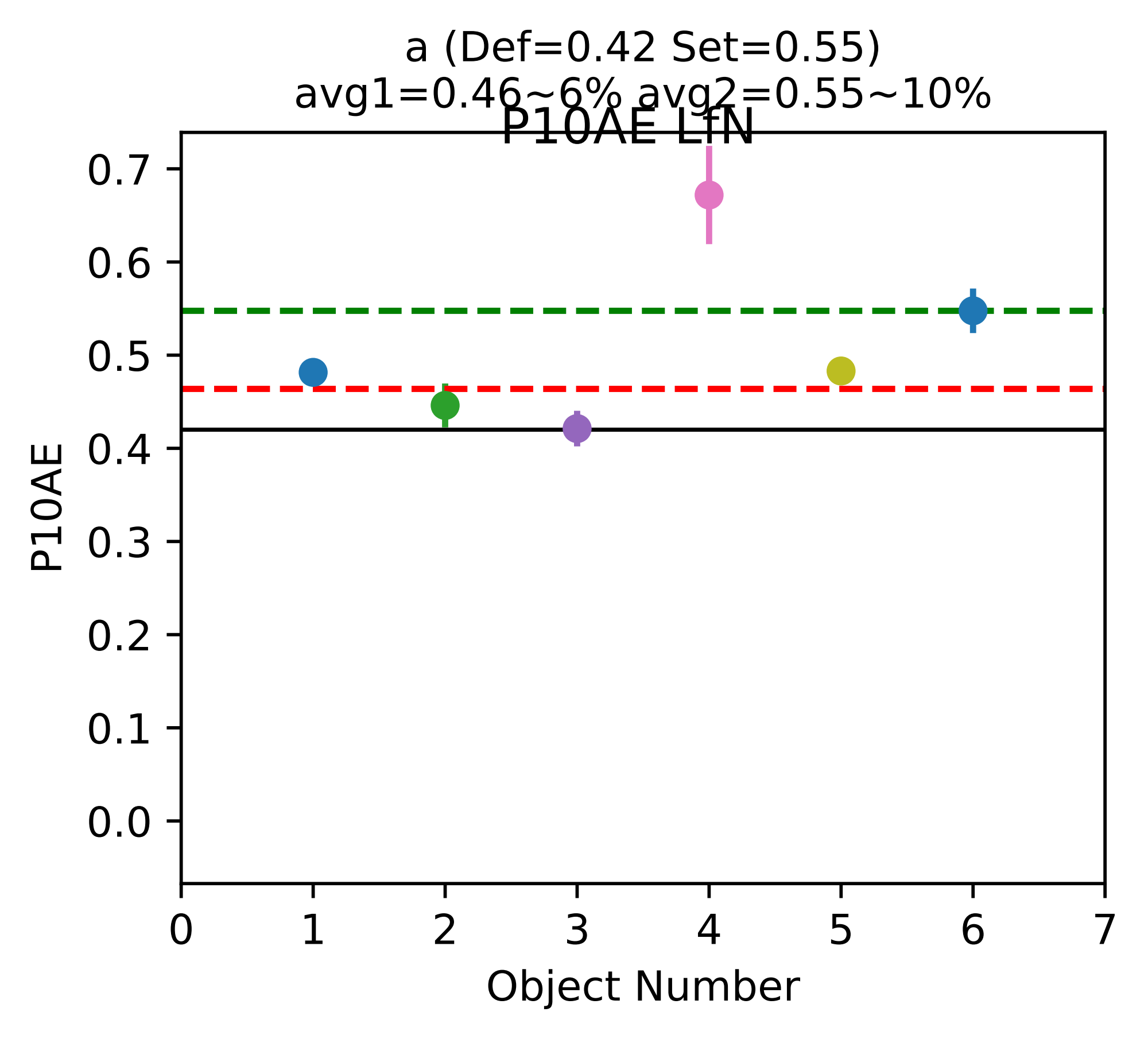

P10AEavg (fit failed)
NdN
BDL [0.54, 7.03, 3.21, 0.98]
20
15
10
5
0
UF
0
-1
0
10
20
30
40
50

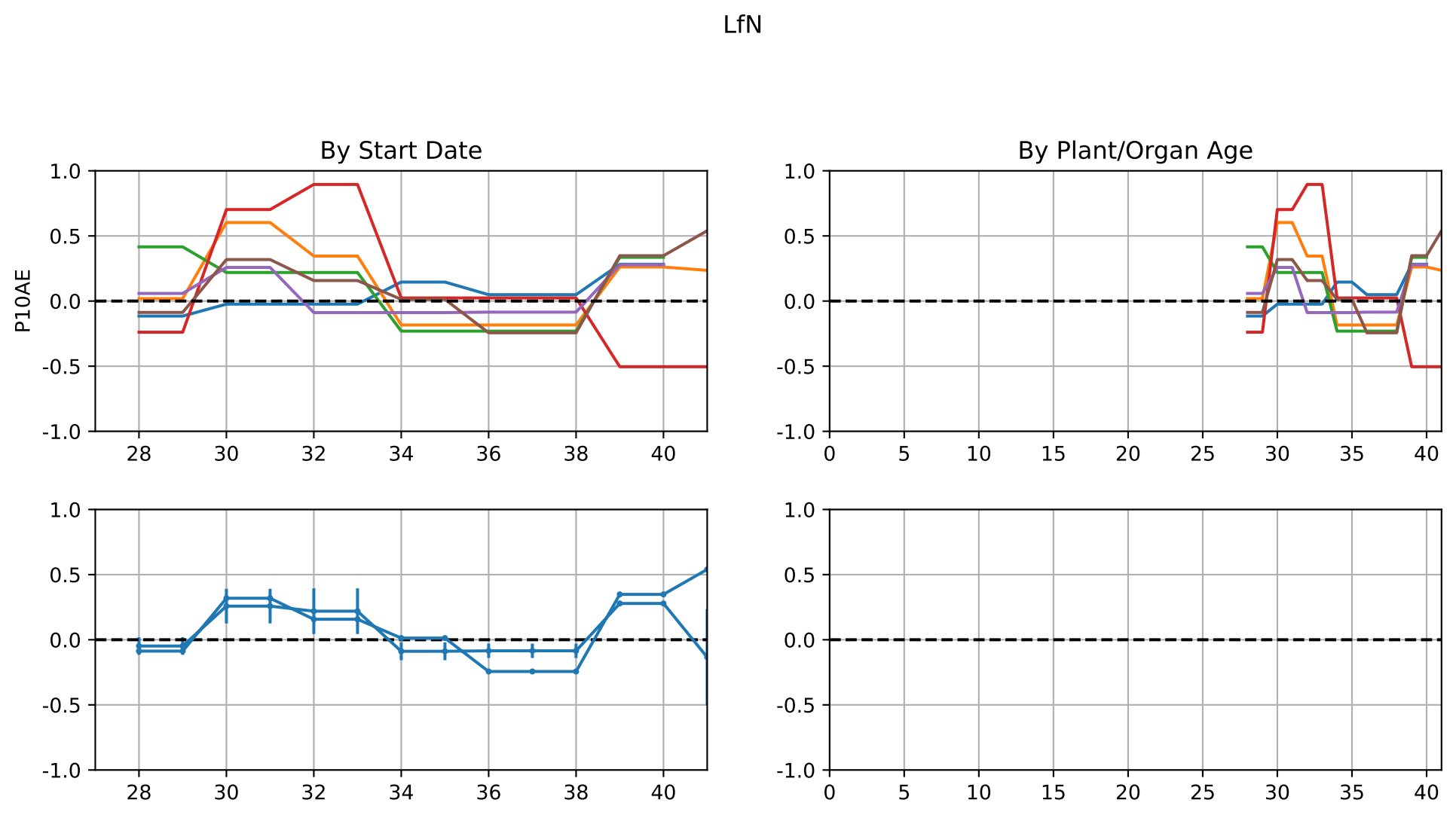

a (Def=0.56 Set=0.54)
avg1=0.58(fail) avg2=0.54
dm (Def=2 Set=7.03)
avg1=3.61(fail) avg2=7.03
de (Def=5 Set=3.21)
avg1=15.27(fail) avg2=3.21
P10AE NdN
P10AE
Object Number
Object Number
Object Number

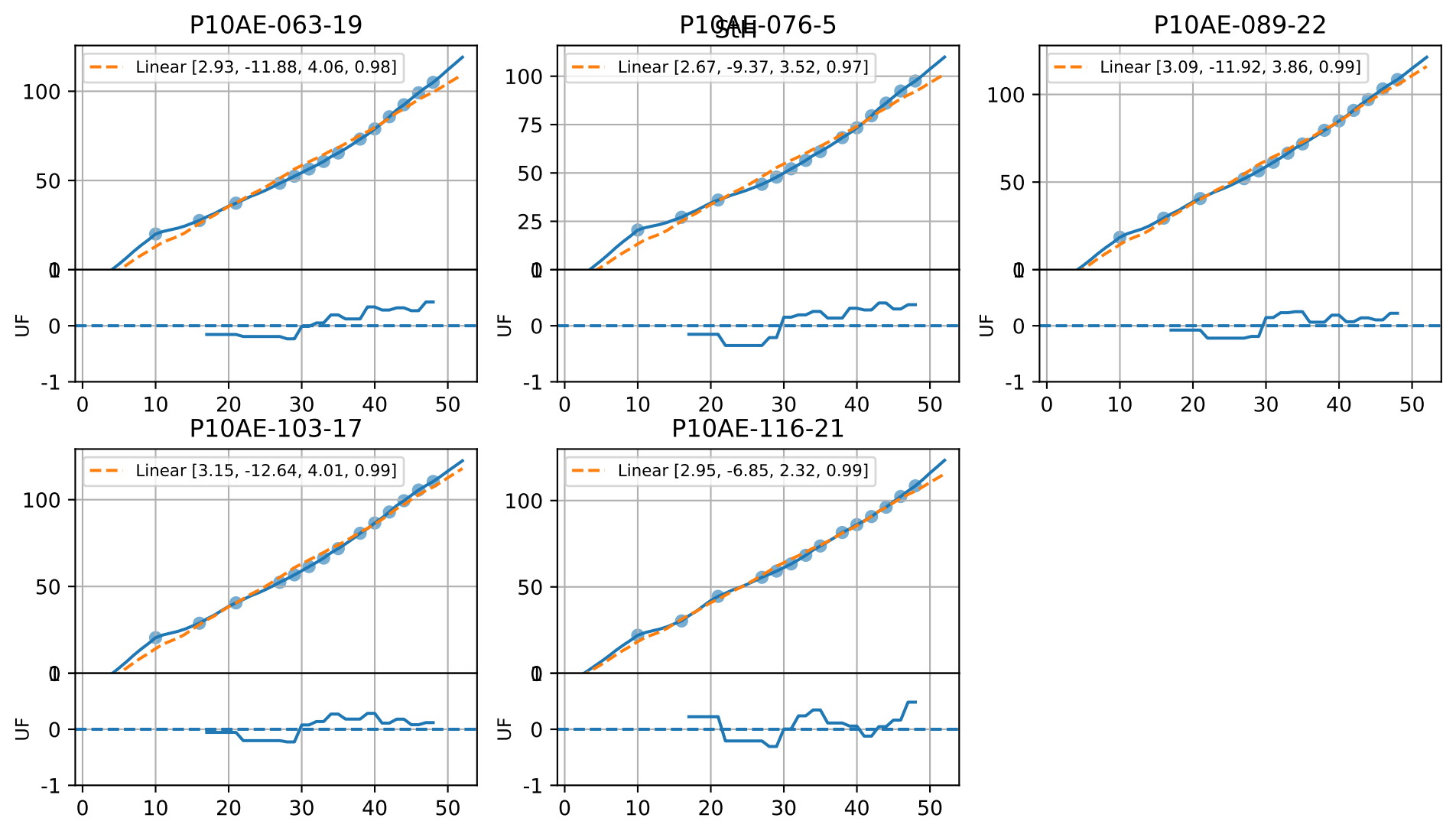

P10AE InitDev
InitDev_dm (Def=2 Set=8.4)
avg1=8.4~0% avg2=8.4
InitDev_de (Def=5 Set=3.83)
avg1=3.83~0% avg2=3.83
P10AE
Object Number
Object Number

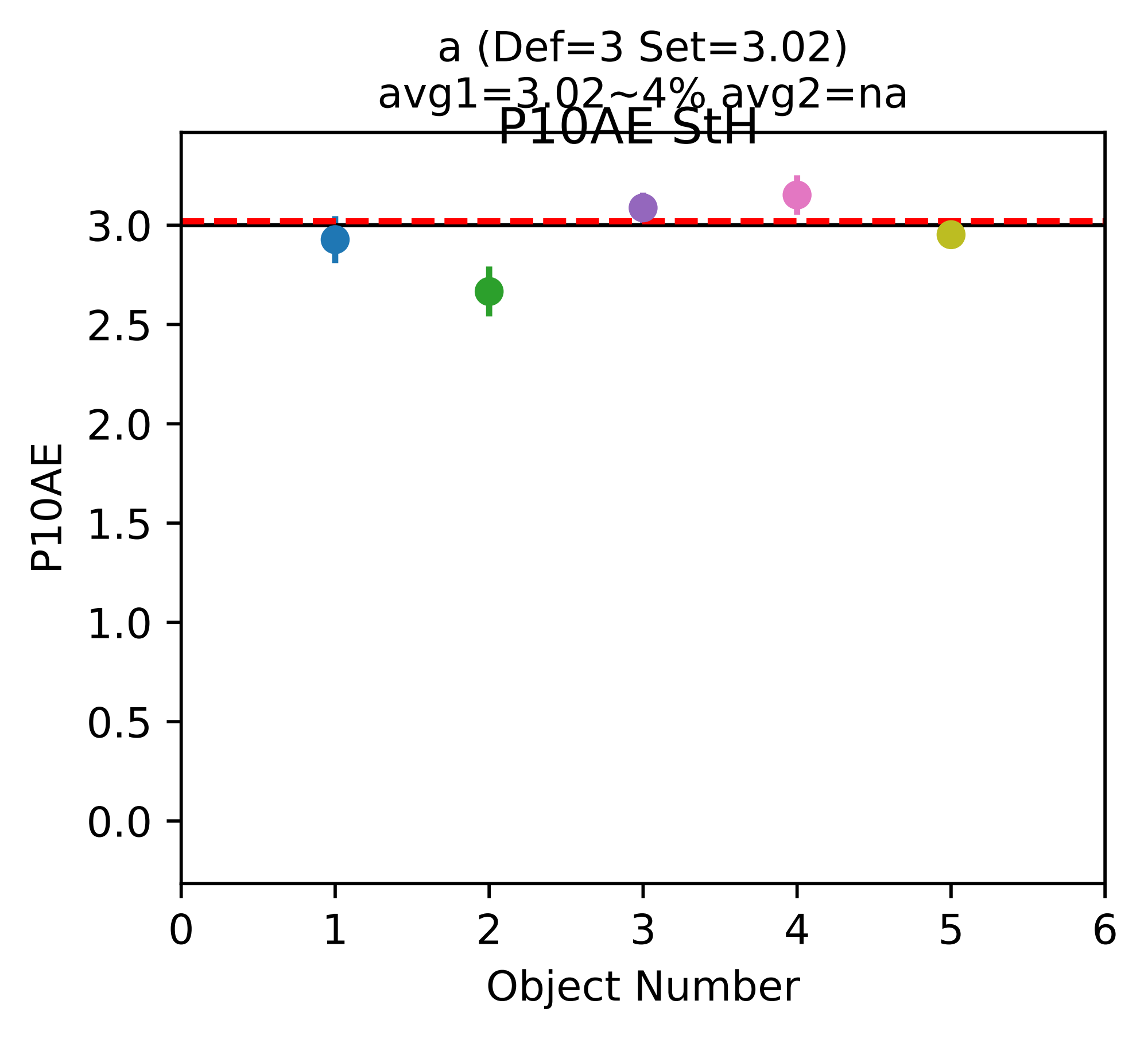

P10AE-063-19
Linear [0.48, 3.04, -6.31, 1.0]
P10AE-076-5
Linear [0.45, 4.13, -9.26, 0.98]
P10AE-089-22
Linear [0.42, 4.76, -11.3, 0.99]
P10AE-103-17
Linear [0.67, 1.36, -2.03, 0.97]
P10AE-116-21
Linear [0.48, 3.1, -6.42, 1.0]
UF

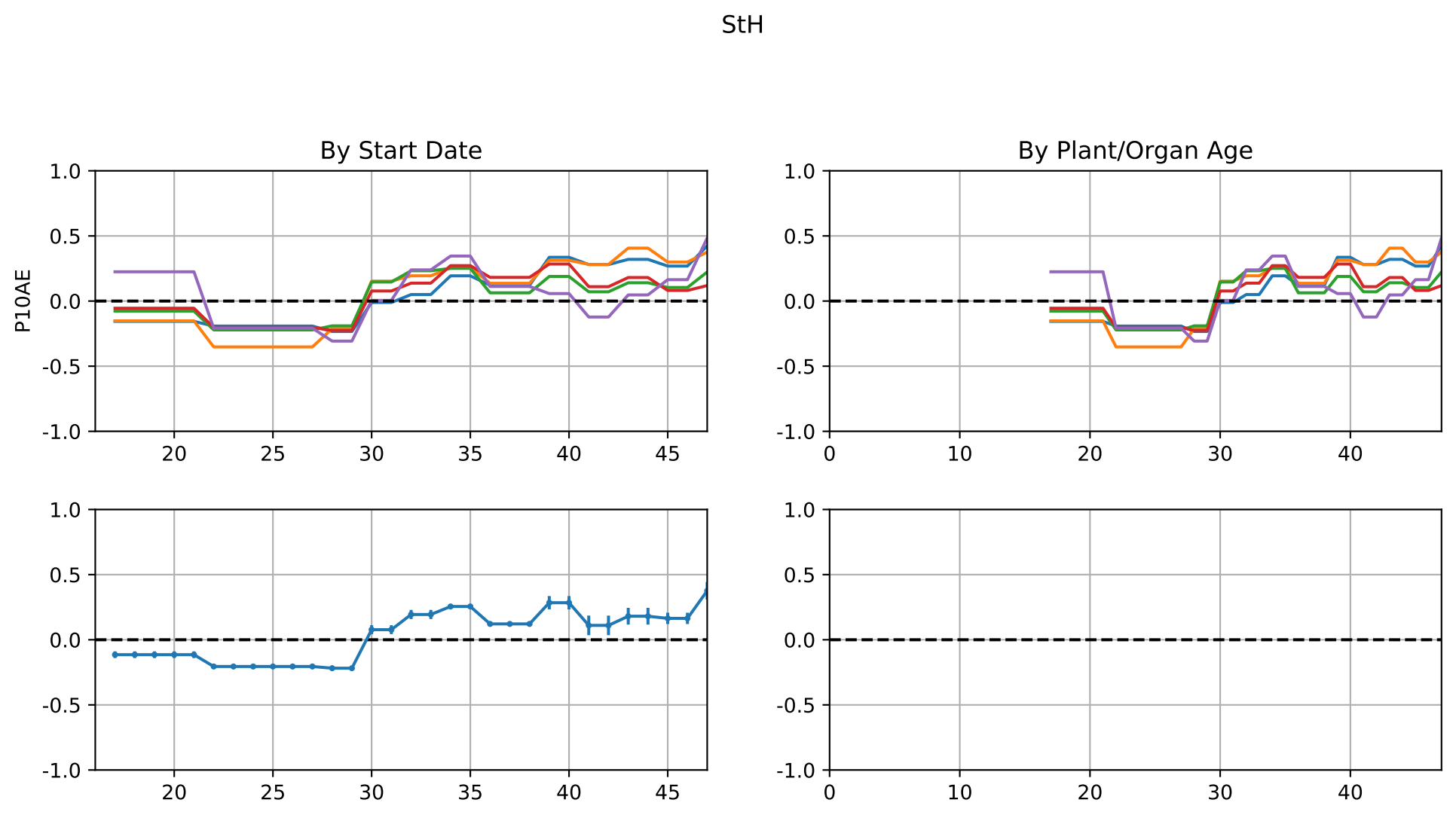

P10AEavg
LfN
Linear [0.55, 2.48, -4.52, 0.99]
20
15
10
5
0
0
UF
0
-1
0
10
20
30
40

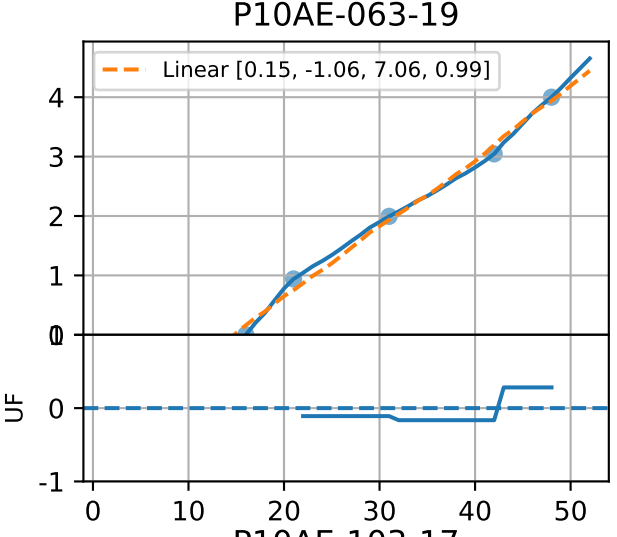

a (Def=0.42 Set=0.55)
avg1=0.46~6% avg2=0.55~10%
P10AE LfN
P10AE
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0
1
2
3
4
5
6
7
Object Number

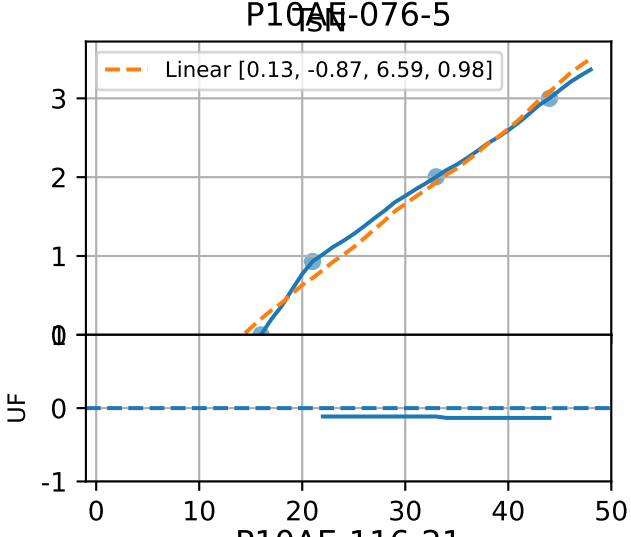

LfN
By Start Date
By Plant/Organ Age
P10AE
1.0
0.5
0.0
-0.5
-1.0
28
30
32
34
36
38
40
0
5
10
15
20
25
30
35
40

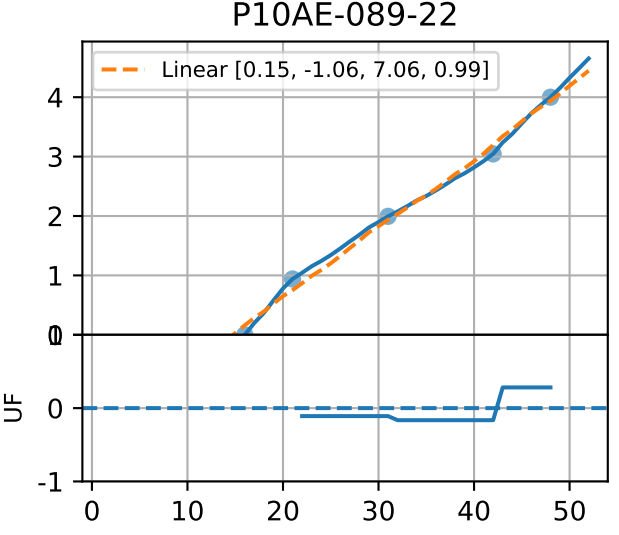

P10AE-063-19
Linear [2.93, -11.88, 4.06, 0.98]
P10AE-076-5
Linear [2.67, -9.37, 3.52, 0.97]
P10AE-089-22
Linear [3.09, -11.92, 3.86, 0.99]
P10AE-103-17
Linear [3.15, -12.64, 4.01, 0.99]
P10AE-116-21
Linear [2.95, -6.85, 2.32, 0.99]
UF

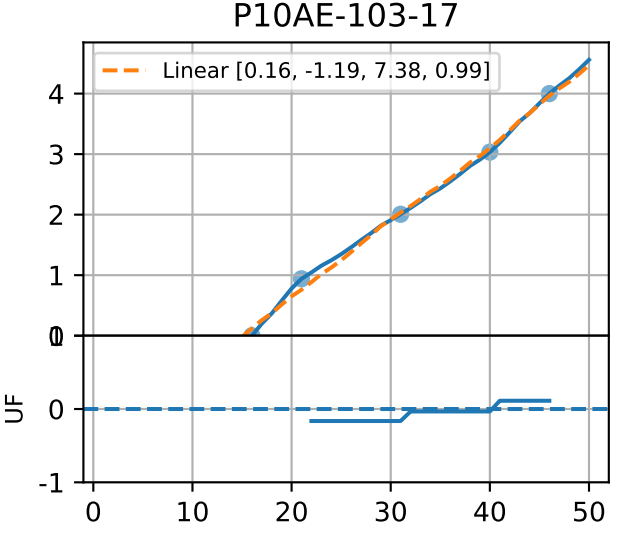

a (Def=3 Set=3.02)
avg1=3.02~4% avg2=na
P10AE StH
P10AE
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0
1
2
3
4
5
6
Object Number

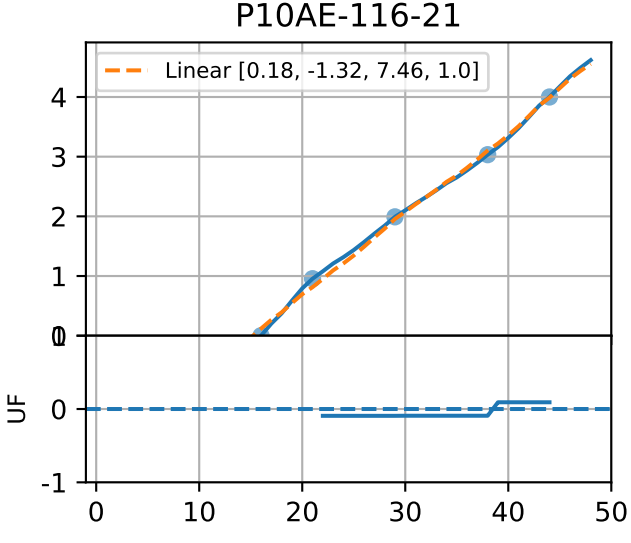

StH
By Start Date
By Plant/Organ Age
P10AE
1.0
0.5
0.0
-0.5
-1.0
20
25
30
35
40
45
0
10
20
30
40

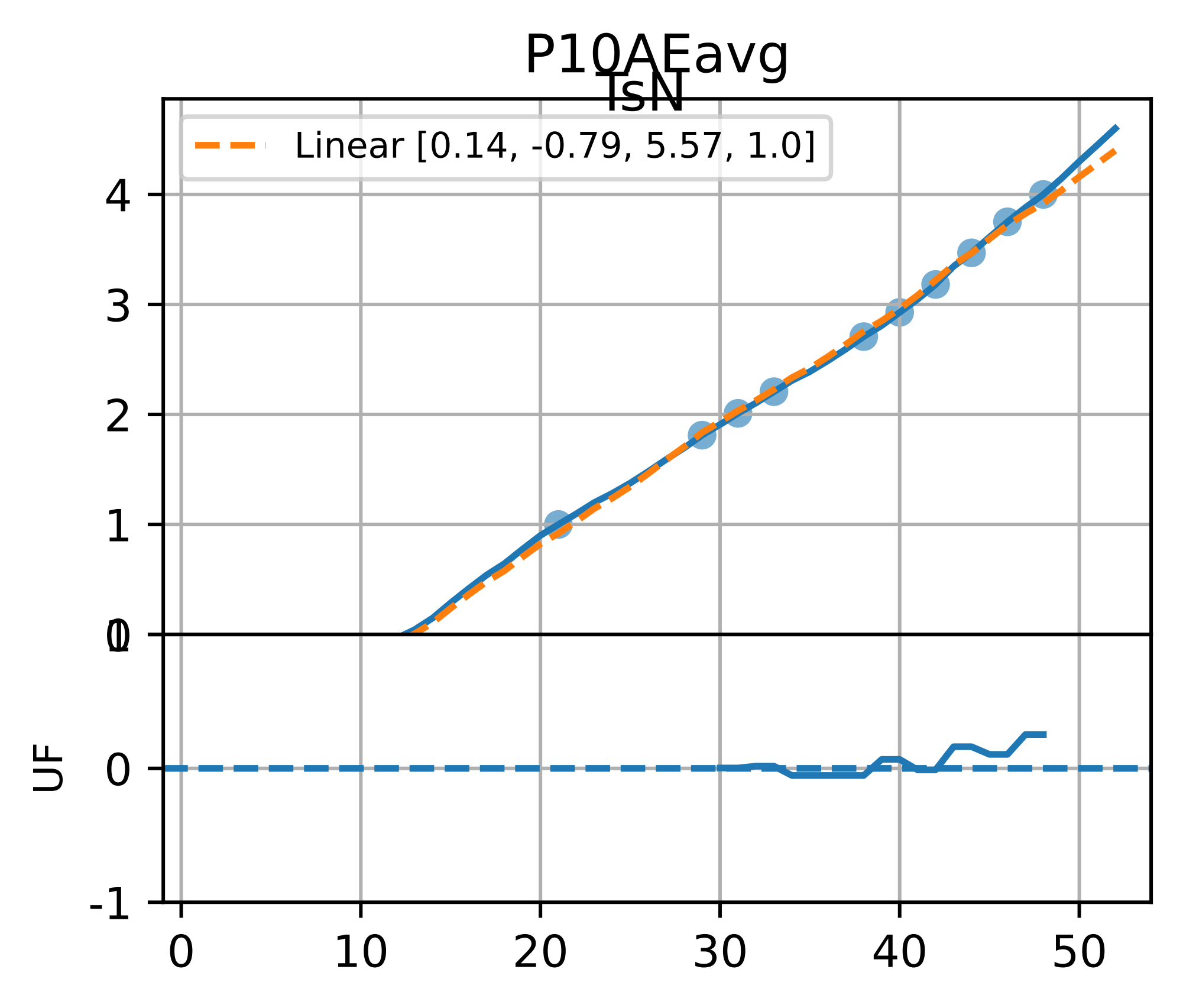

P10AE-063-19
Linear [0.15, -1.06, 7.06, 0.99]
UF

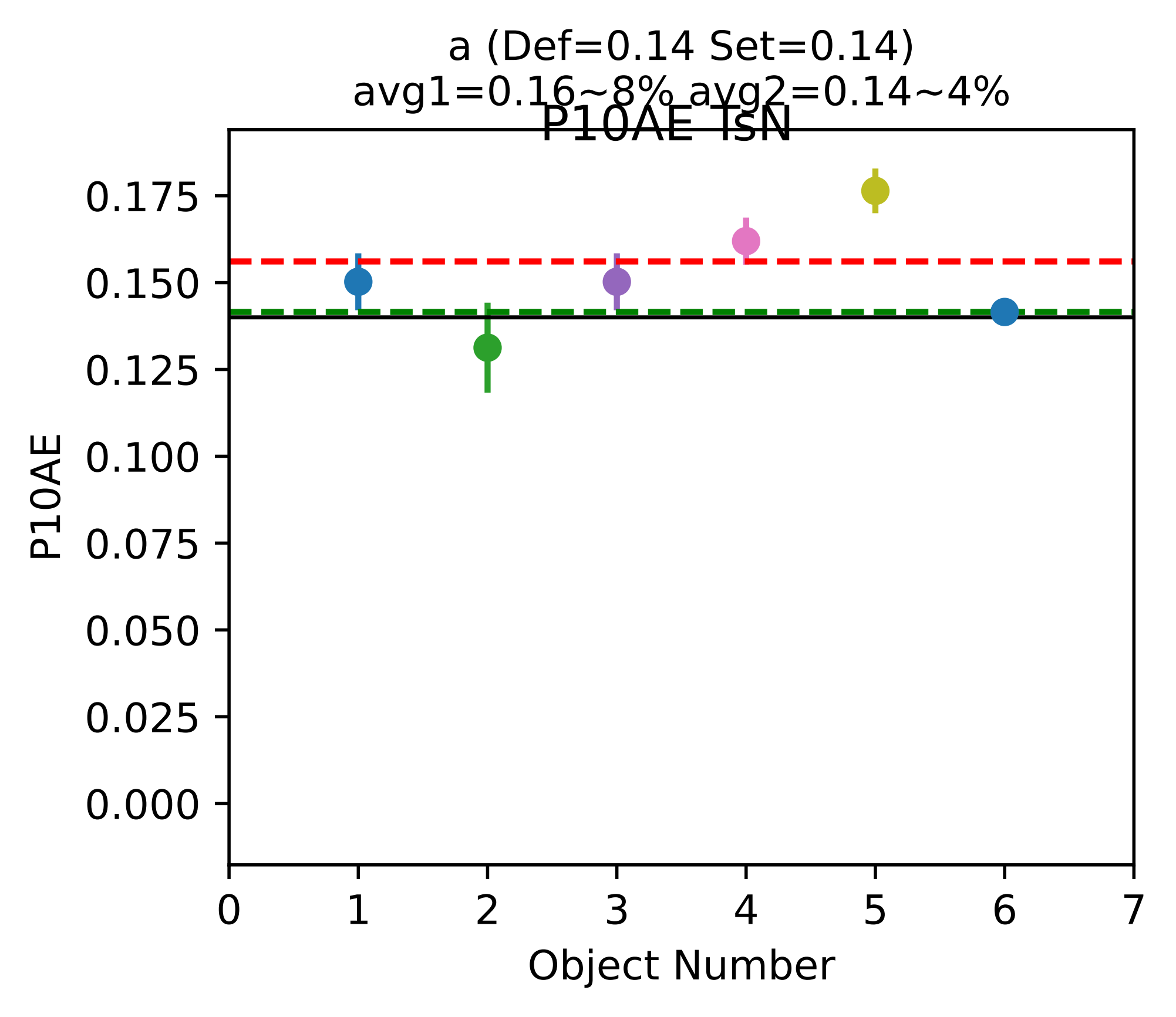

P10AE-076-5
Linear [0.13, -0.87, 6.59, 0.98]
UF

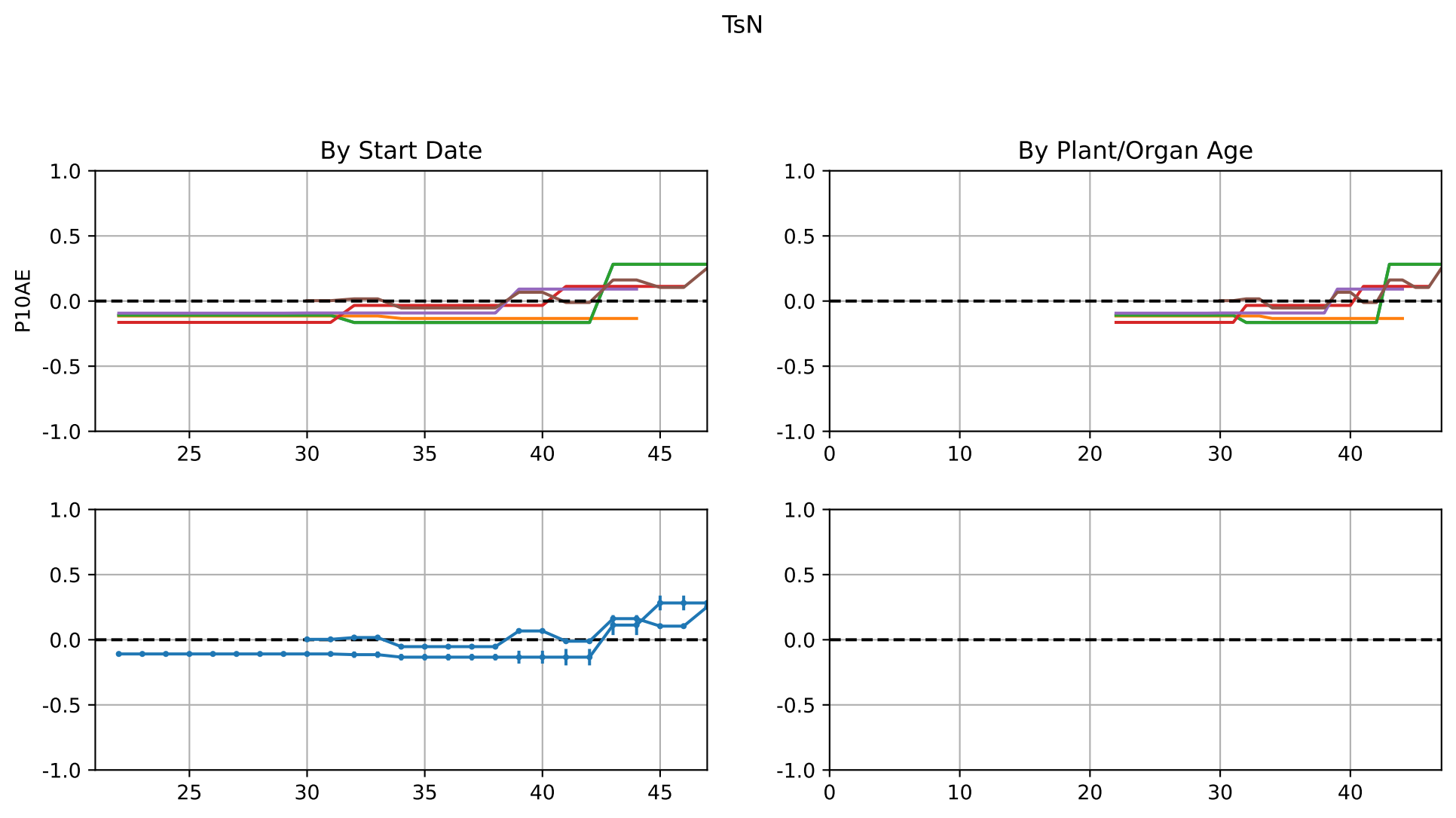

P10AE-089-22
Linear [0.15, -1.06, 7.06, 0.99]
UF

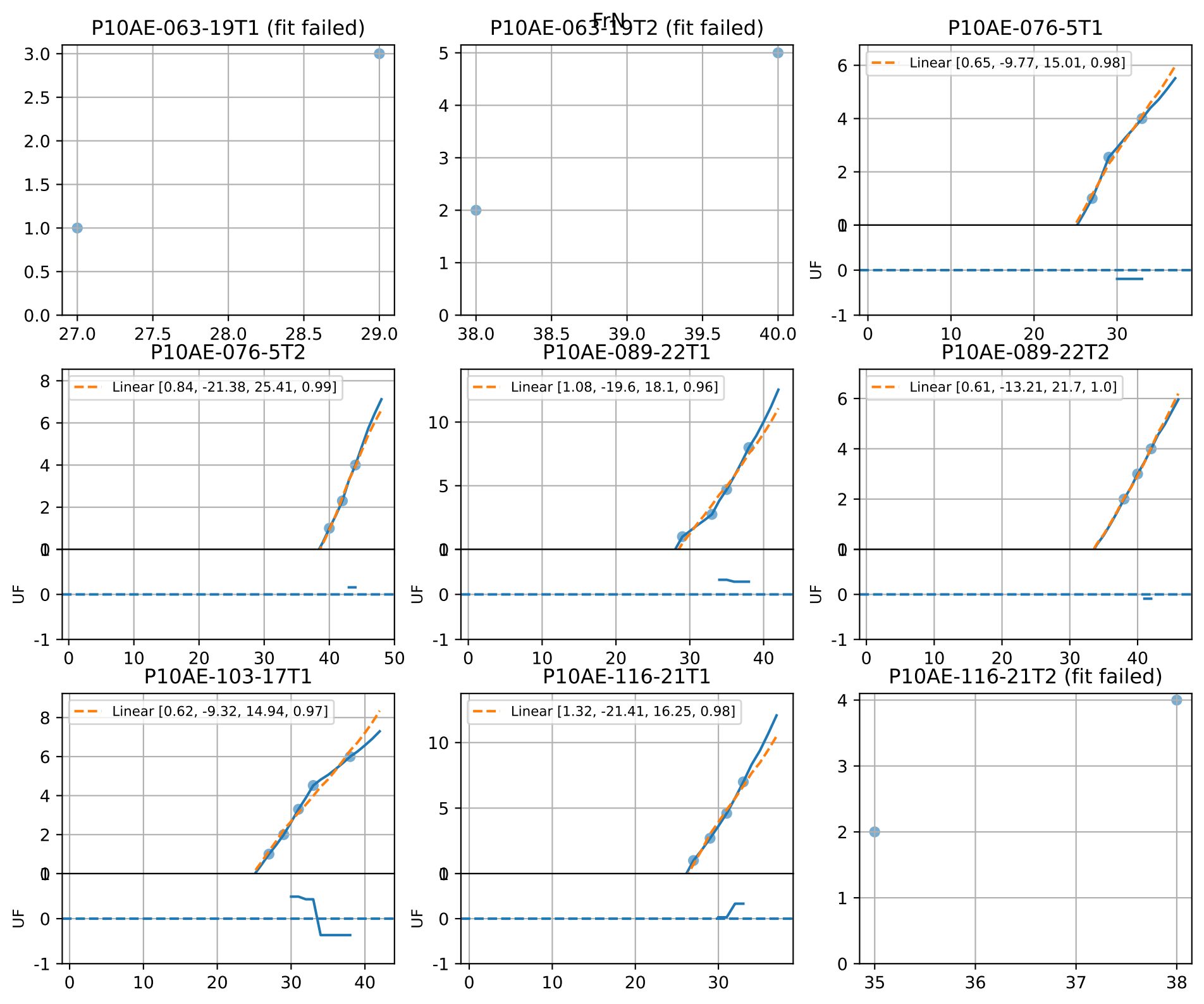

P10AE-103-17
Linear [0.16, -1.19, 7.38, 0.99]
UF

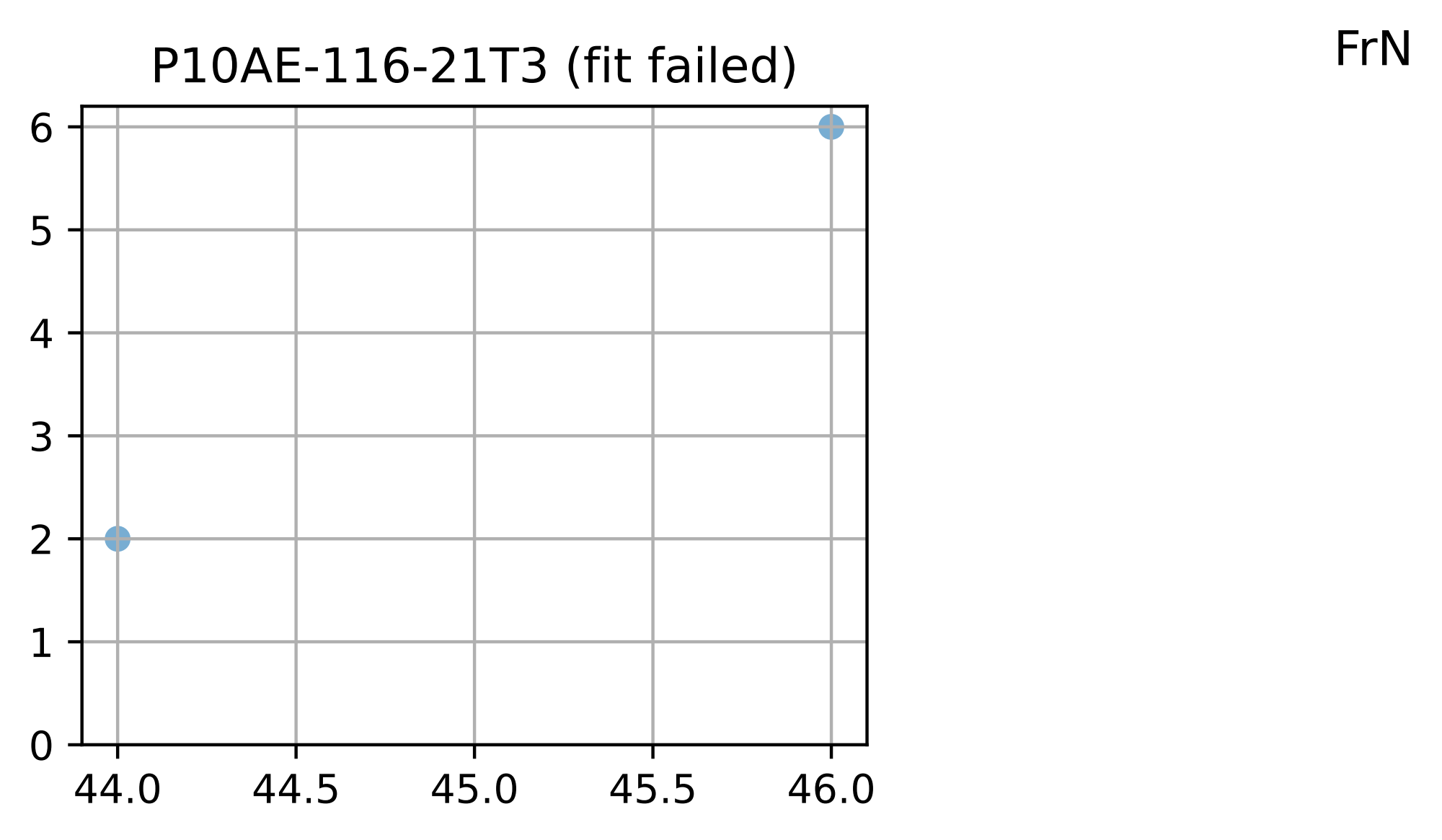

P10AE-116-21
Linear [0.18, -1.32, 7.46, 1.0]
UF

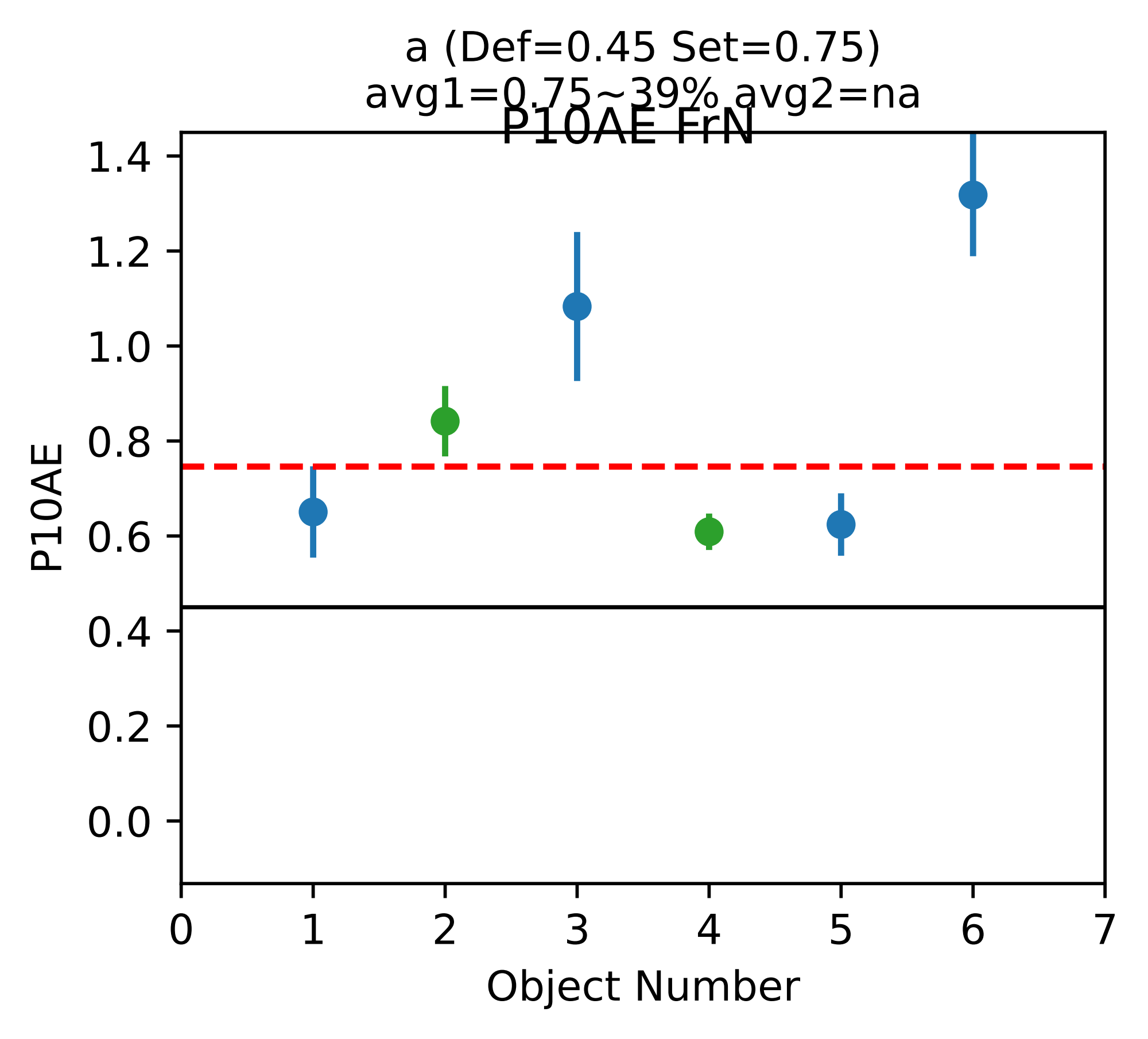

P10AEavg
IsN
Linear [0.14, -0.79, 5.57, 1.0]
4
3
2
1
0
0
-1
UF
0
10
20
30
40
50

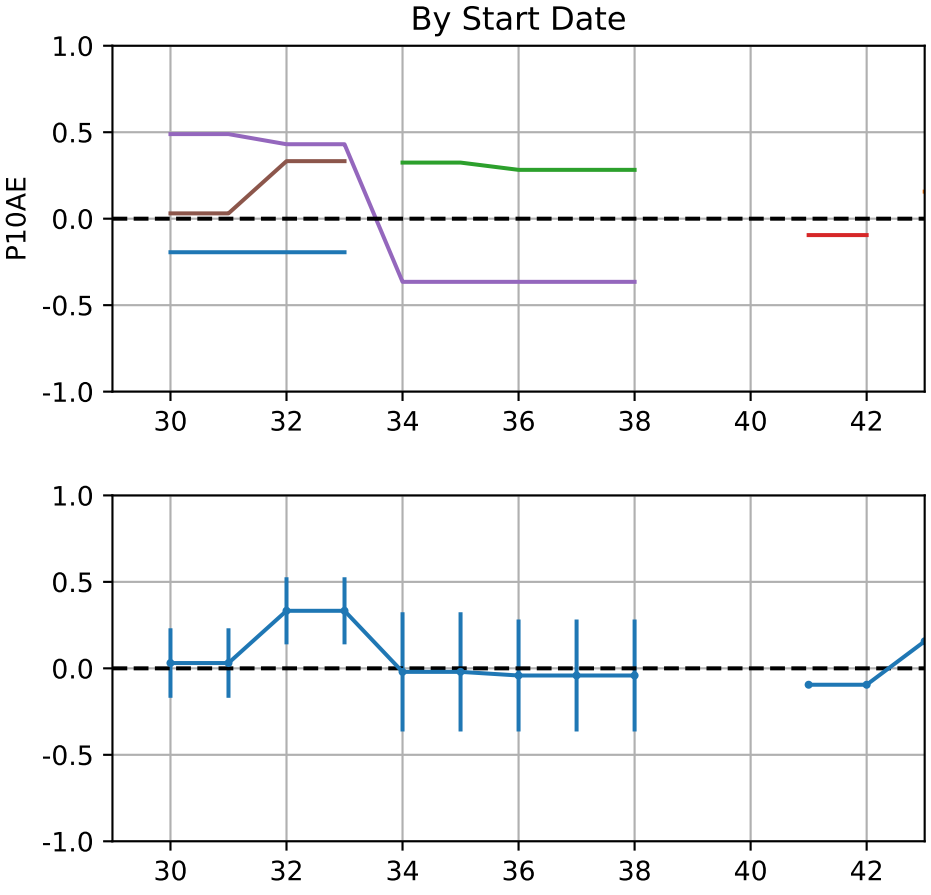

a (Def=0.14 Set=0.14)
avg1=0.16~8% avg2=0.14~4%
P10AE TSN
P10AE
0.175
0.150
0.125
0.100
0.075
0.050
0.025
0.000
0
1
2
3
4
5
6
7
Object Number

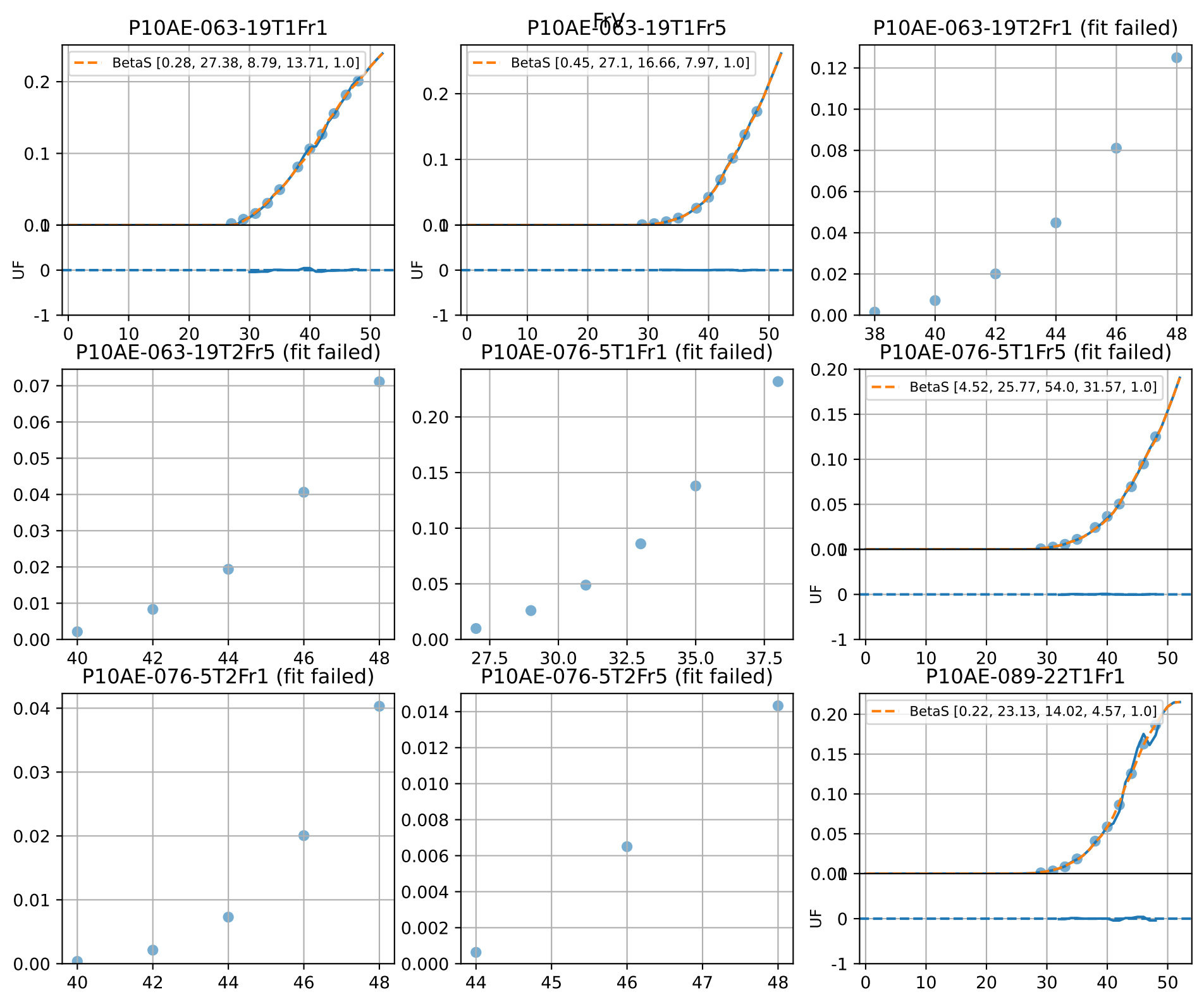

TsN
By Start Date
By Plant/Organ Age
P10AE
1.0
0.5
0.0
-0.5
-1.0
25
30
35
40
45
0
10
20
30
40

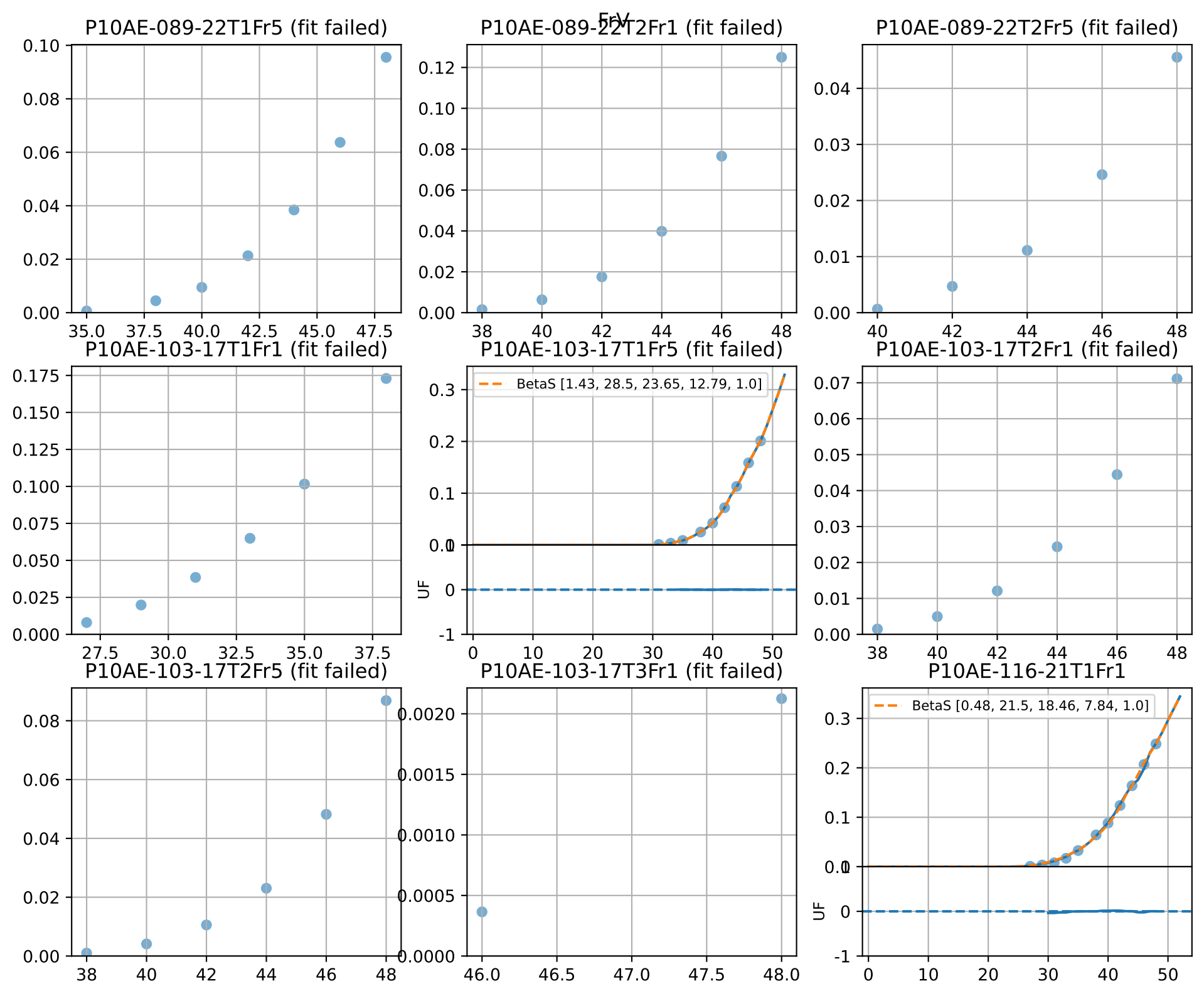

FrN
P10AE-063-19T1 (fit failed)
P10AE-063-19T2 (fit failed)
P10AE-076-5T1
Linear [0.65, -9.77, 15.01, 0.98]
P10AE-076-5T2
Linear [0.84, -21.38, 25.41, 0.99]
P10AE-089-22T1
Linear [1.08, -19.6, 18.1, 0.96]
P10AE-089-22T2
Linear [0.61, -13.21, 21.7, 1.0]
P10AE-103-17T1
Linear [0.62, -9.32, 14.94, 0.97]
P10AE-116-21T1
Linear [1.32, -21.41, 16.25, 0.98]
P10AE-116-21T2 (fit failed)
UF

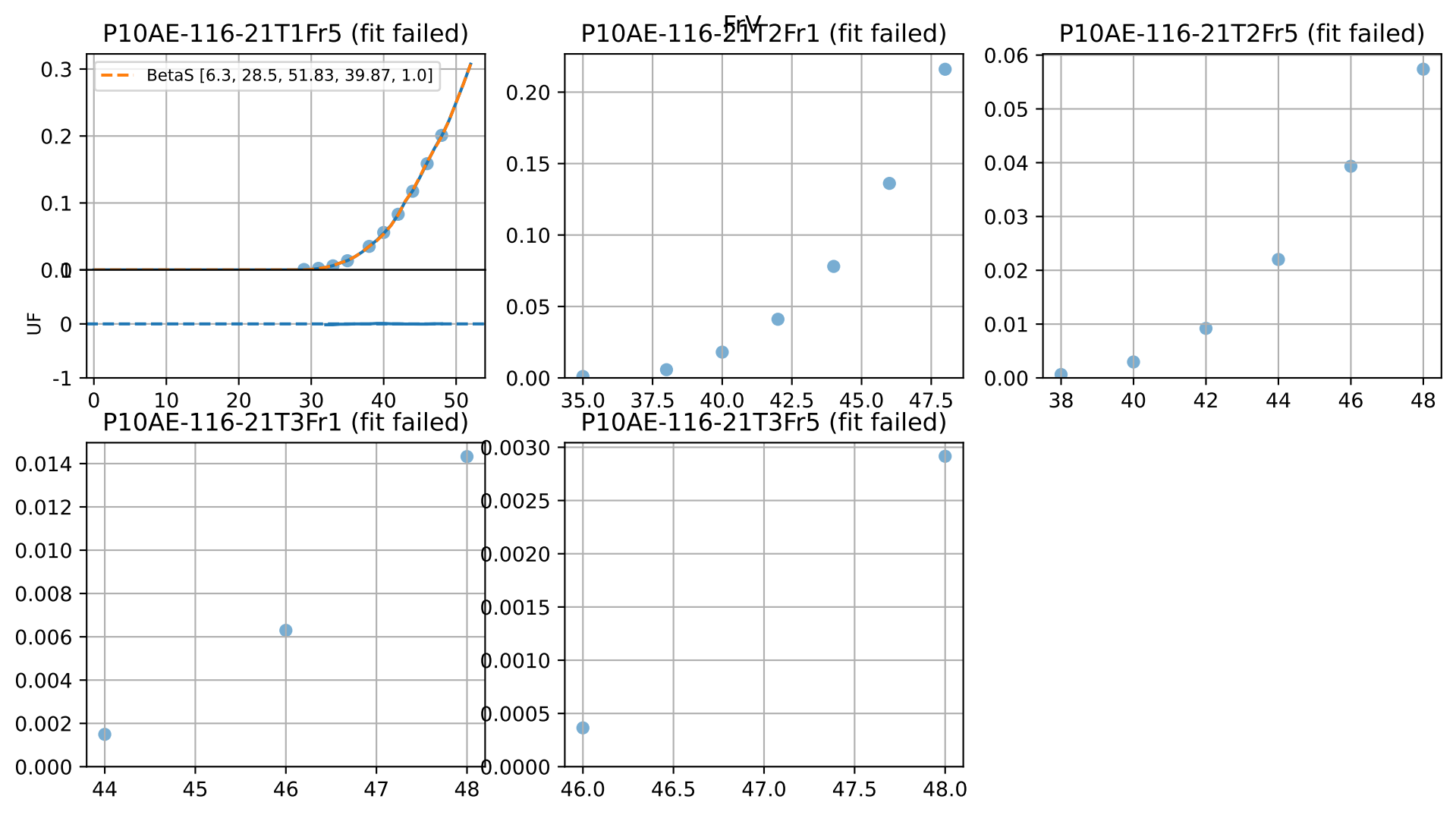

P10AE-116-21T3 (fit failed)
FrN
6
5
4
3
2
1
0
44.0
44.5
45.0
45.5
46.0

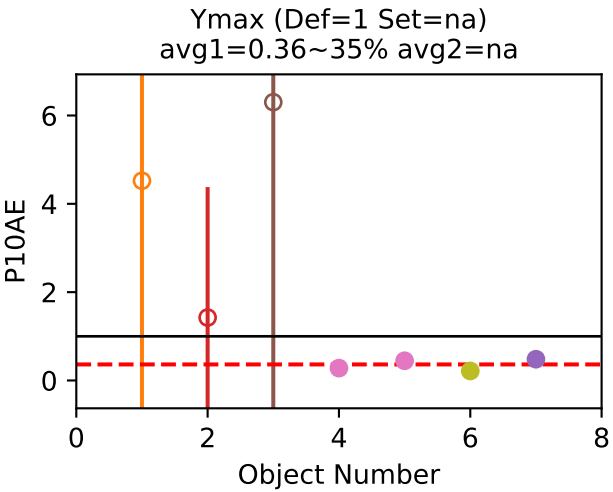

a (Def=0.45 Set=0.75)
avg1=0.75~39% avg2=na
P10AE FrN
P10AE
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
0
1
2
3
4
5
6
7
Object Number

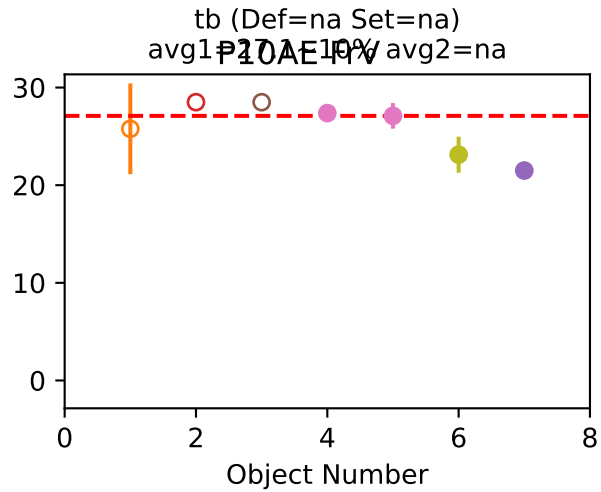

By Start Date
P10AE
1.0
0.5
0.0
-0.5
-1.0
30
32
34
36
38
40
42

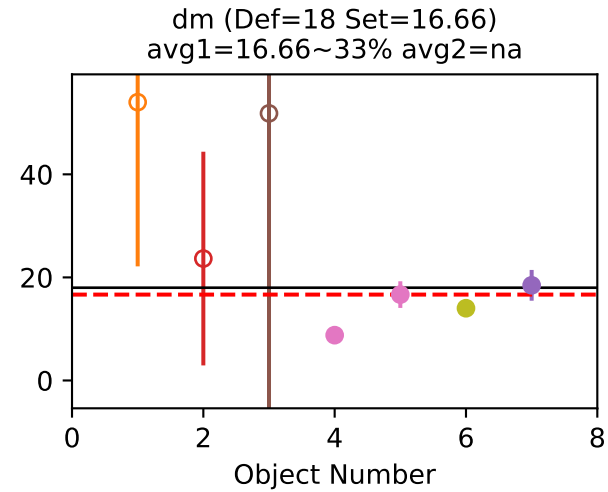

FrV
P10AE-063-19T1Fr1
BetaS [0.28, 27.38, 8.79, 13.71, 1.0]
UF
P10AE-063-19T1Fr5
BetaS [0.45, 27.1, 16.66, 7.97, 1.0]
UF
P10AE-063-19T2Fr1 (fit failed)
P10AE-063-19T2Fr5 (fit failed)
P10AE-076-5T1Fr1 (fit failed)
P10AE-076-5T1Fr5 (fit failed)
BetaS [4.52, 25.77, 54.0, 31.57, 1.0]
UF
P10AE-076-5T2Fr1 (fit failed)
P10AE-076-5T2Fr5 (fit failed)
P10AE-089-22T1Fr1
BetaS [0.22, 23.13, 14.02, 4.57, 1.0]
UF

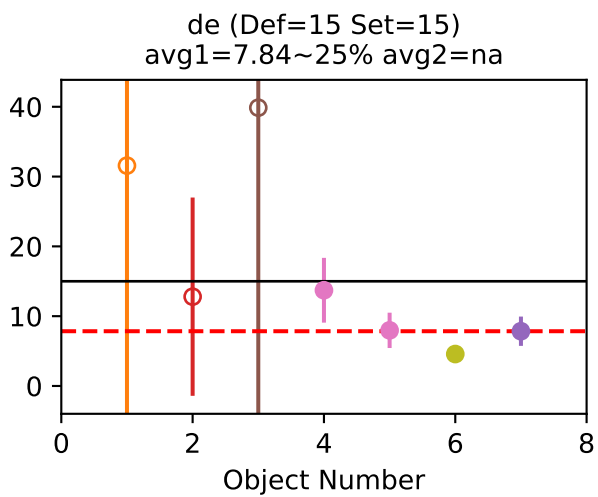

FrV
P10AE-089-22T1Fr5 (fit failed)
P10AE-089-22T2Fr1 (fit failed)
P10AE-089-22T2Fr5 (fit failed)
P10AE-103-17T1Fr1 (fit failed)
P10AE-103-17T1Fr5 (fit failed)
BetaS [1.43, 28.5, 23.65, 12.79, 1.0]
UF
P10AE-103-17T2Fr1 (fit failed)
P10AE-103-17T2Fr5 (fit failed)
P10AE-103-17T3Fr1 (fit failed)
P10AE-116-21T1Fr1
BetaS [0.48, 21.5, 18.46, 7.84, 1.0]
UF

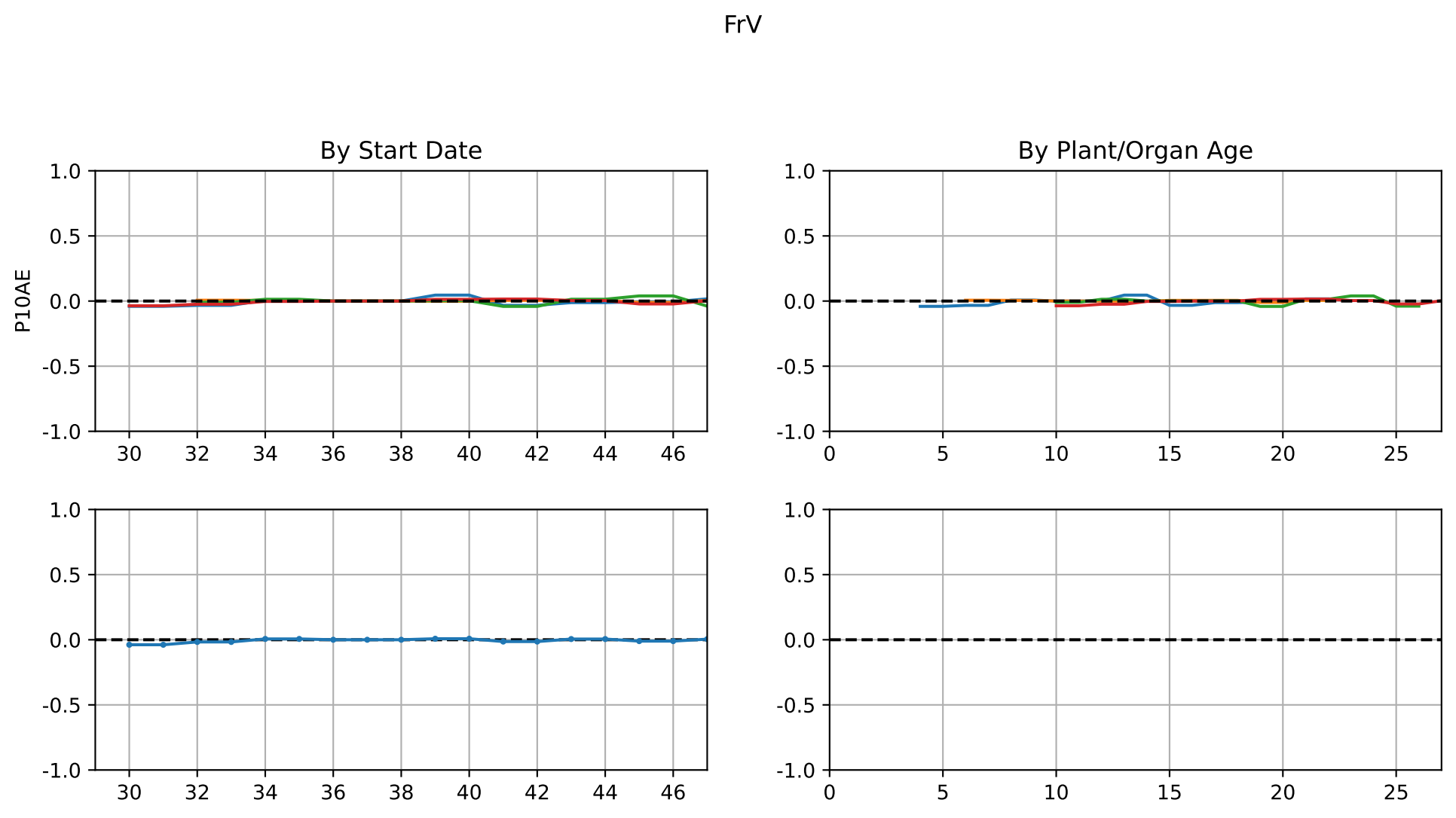

FrV
P10AE-116-21T1Fr5 (fit failed)
BetaS [6.3, 28.5, 51.83, 39.87, 1.0]
UF
P10AE-116-21T2Fr1 (fit failed)
P10AE-116-21T2Fr5 (fit failed)
P10AE-116-21T3Fr1 (fit failed)
P10AE-116-21T3Fr5 (fit failed)

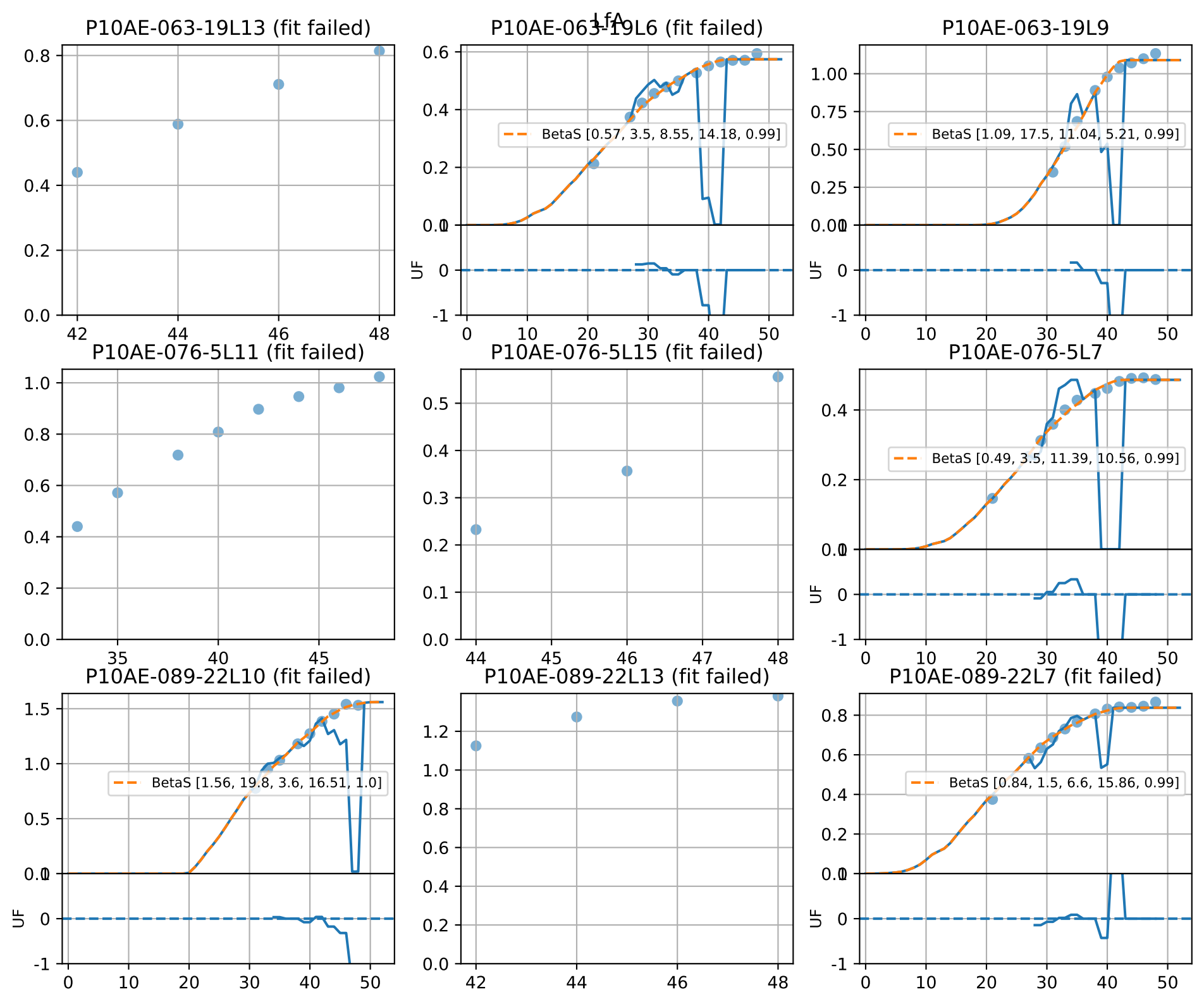

Ymax (Def=1 Set=na)
avg1=0.36~35% avg2=na
P10AE
Object Number

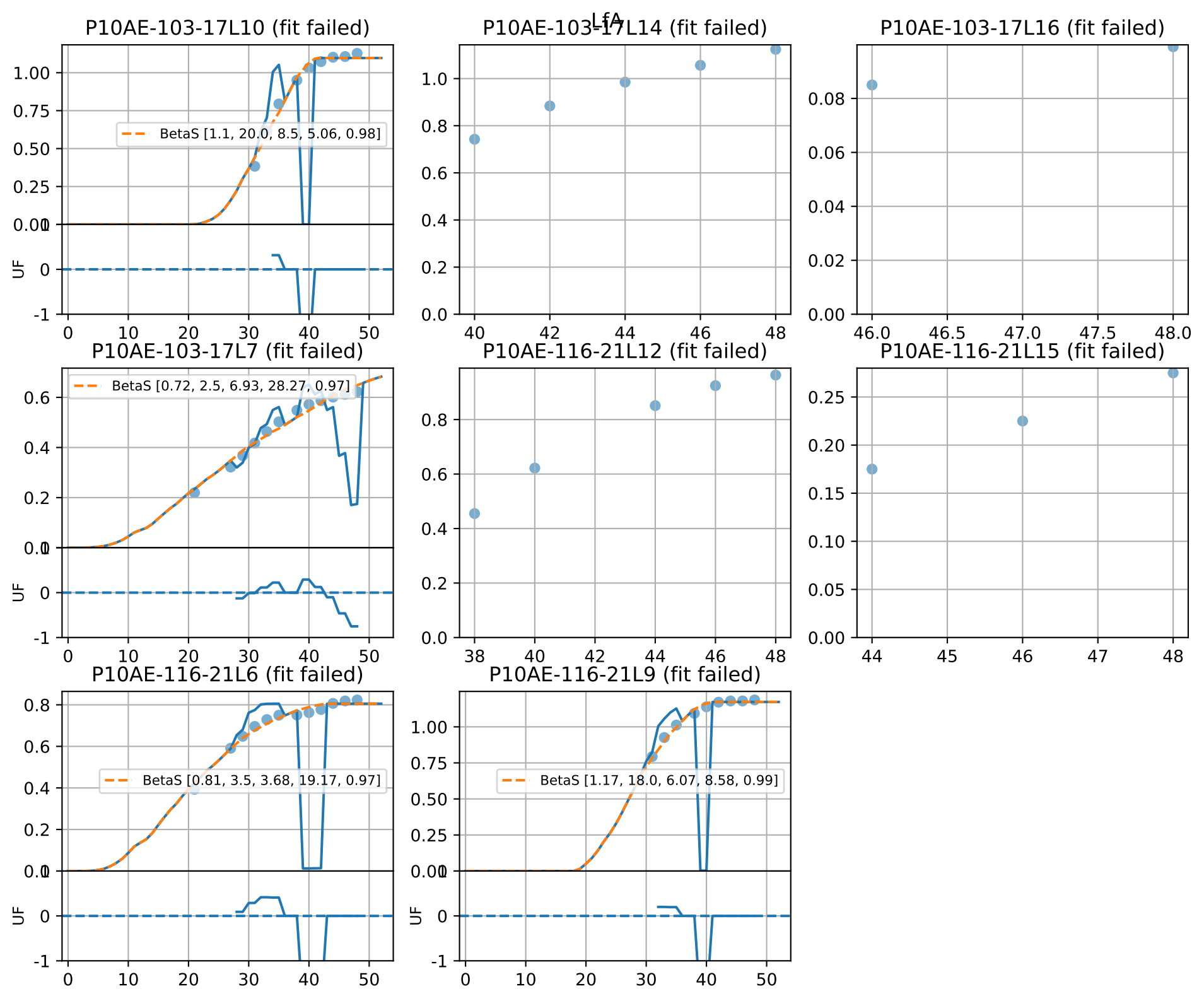

tb (Def=na Set=na)
avg1=27.1~10% avg2=na
P10AE+1%
Object Number

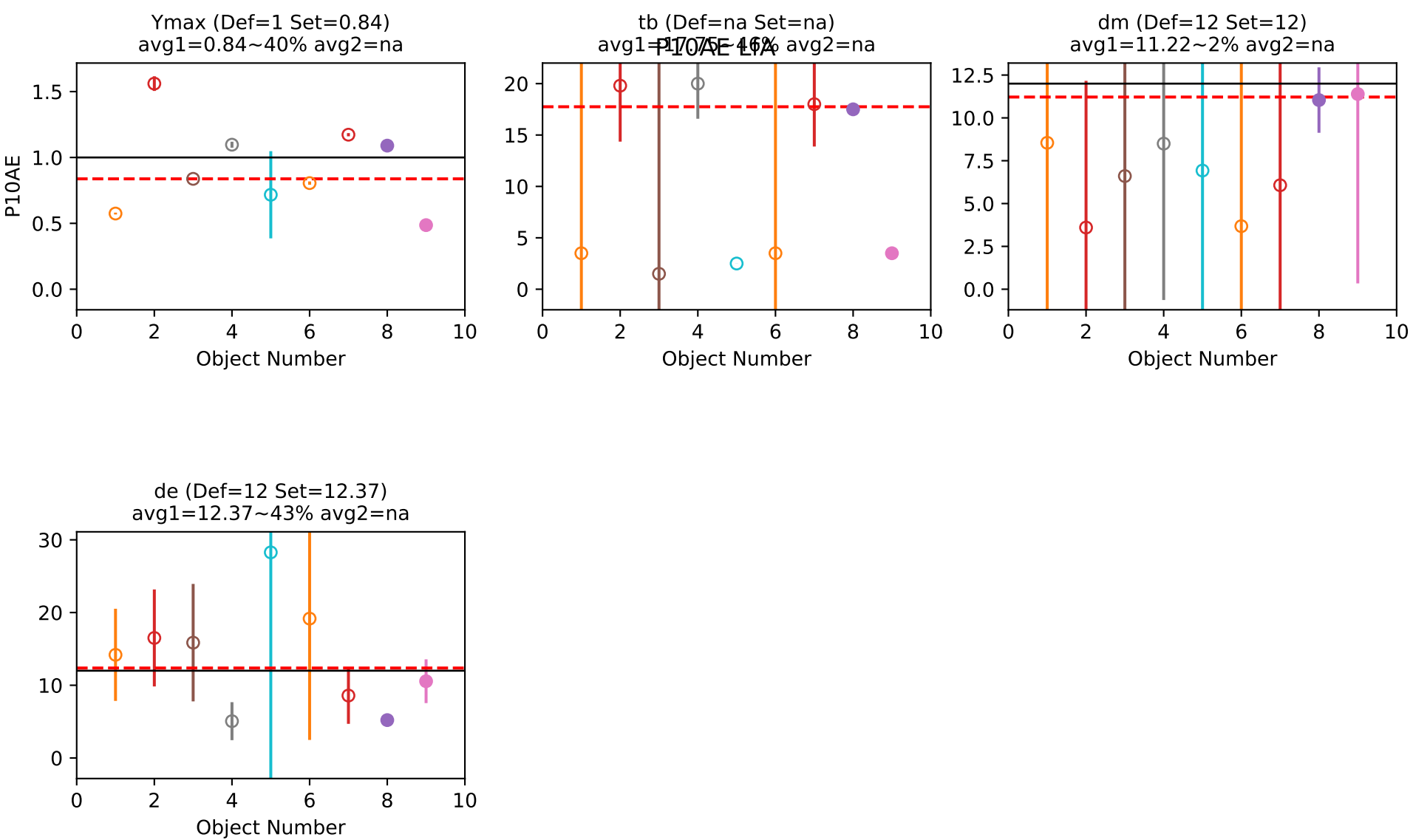

dm (Def=18 Set=16.66)
avg1=16.66~33% avg2=na
Object Number

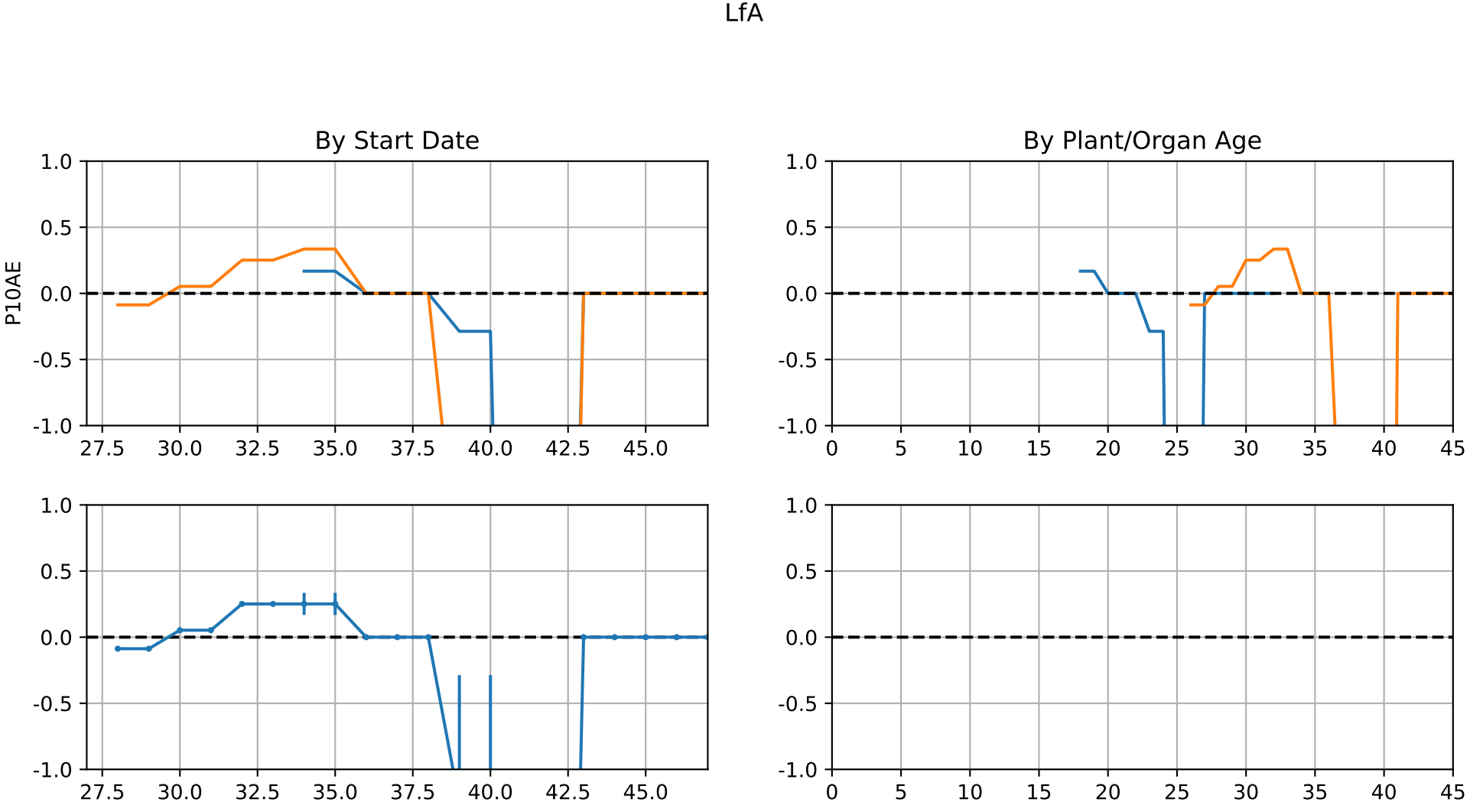

de (Def=15 Set=15)
avg1=7.84~25% avg2=na
Object Number

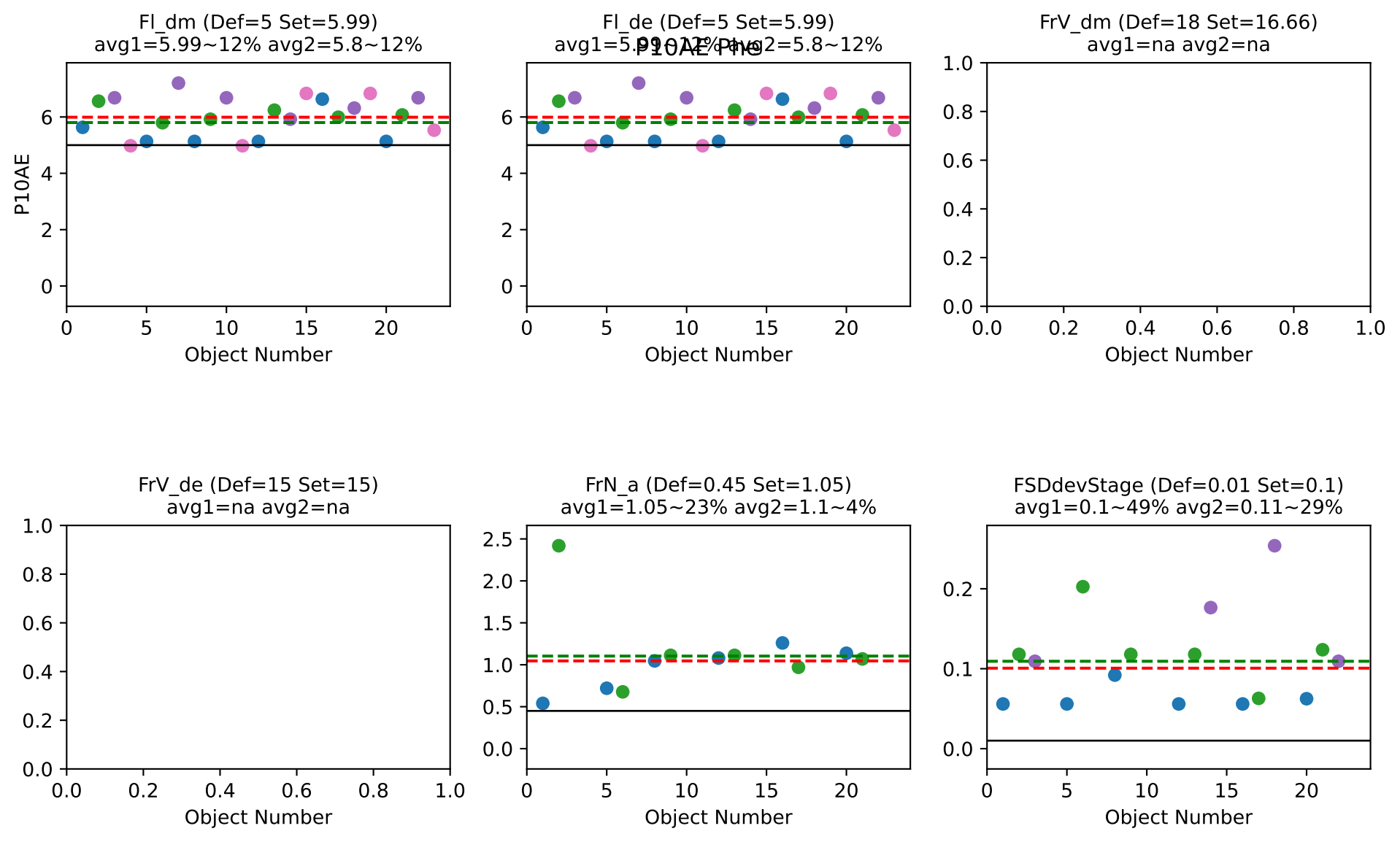

FrV
By Start Date
By Plant/Organ Age
P10AE
1.0
0.5
0.0
-0.5
-1.0
30
32
34
36
38
40
42
44
46
0
5
10
15
20
25

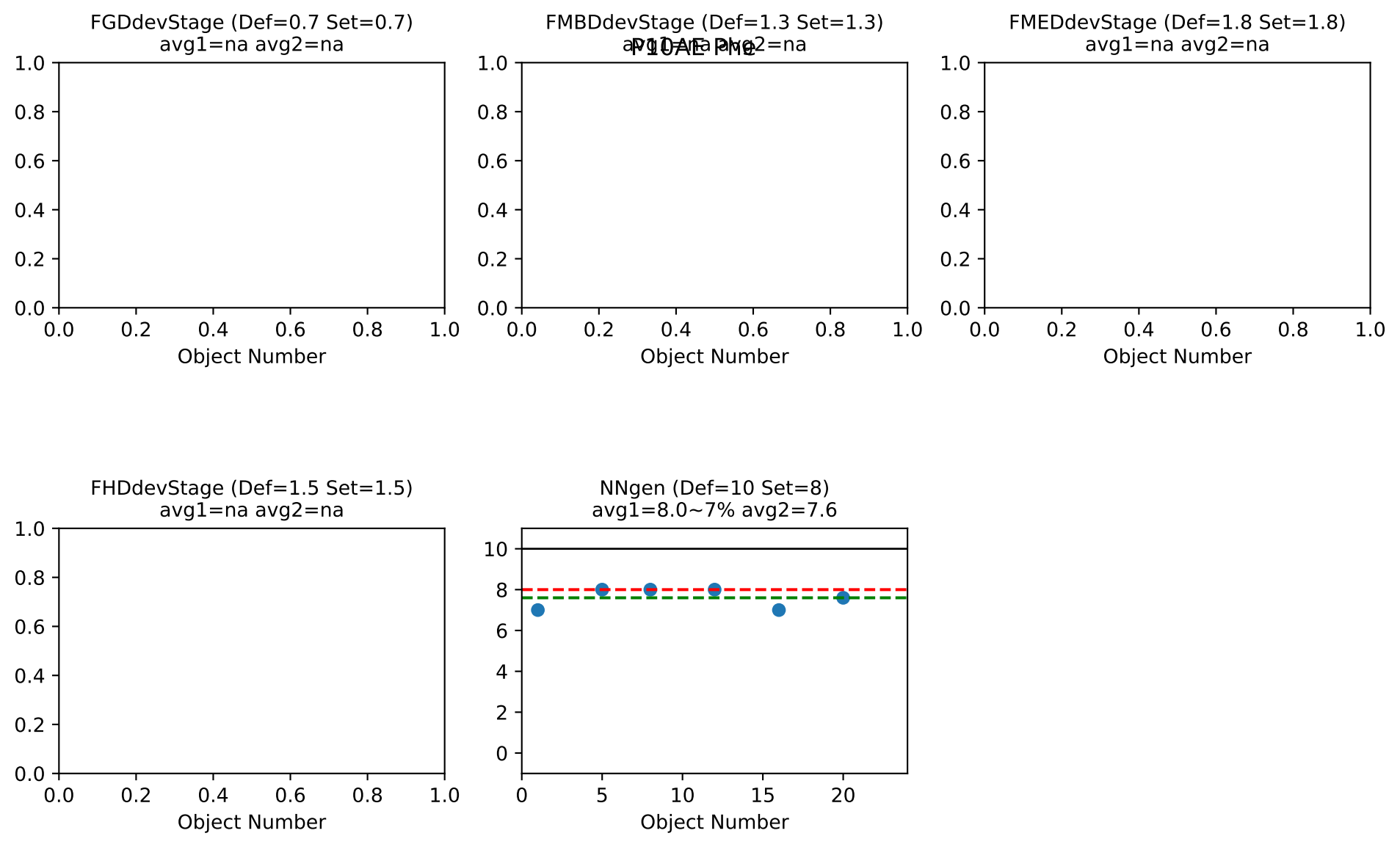

P10AE-063-19L13 (fit failed)
P10AE-063-19L6 (fit failed)
BetaS [0.57, 3.5, 8.55, 14.18, 0.99]
P10AE-063-19L9
BetaS [1.09, 17.5, 11.04, 5.21, 0.99]
P10AE-076-5L11 (fit failed)
P10AE-076-5L15 (fit failed)
P10AE-076-5L7
BetaS [0.49, 3.5, 11.39, 10.56, 0.99]
P10AE-089-22L10 (fit failed)
BetaS [1.56, 19.8, 3.6, 16.51, 1.0]
P10AE-089-22L13 (fit failed)
P10AE-089-22L7 (fit failed)
BetaS [0.84, 1.5, 6.6, 15.86, 0.99]
UF

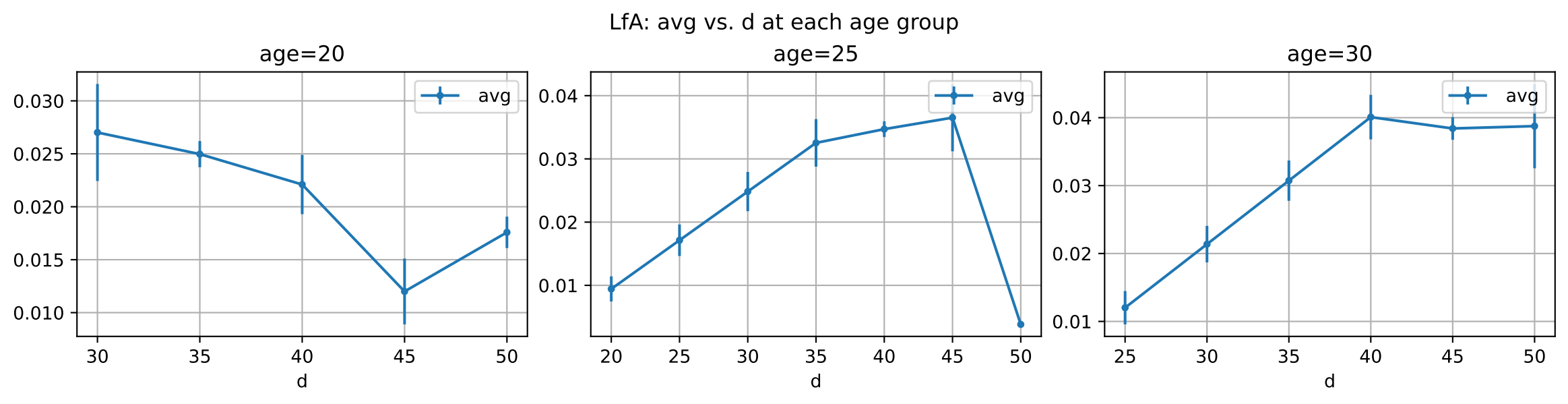

LfA
P10AE-103-17L10 (fit failed)
BetaS [1.1, 20.0, 8.5, 5.06, 0.98]
UF
P10AE-103-17L14 (fit failed)
P10AE-103-17L16 (fit failed)
P10AE-103-17L7 (fit failed)
BetaS [0.72, 2.5, 6.93, 28.27, 0.97]
UF
P10AE-116-21L12 (fit failed)
P10AE-116-21L15 (fit failed)
P10AE-116-21L6 (fit failed)
BetaS [0.81, 3.5, 3.68, 19.17, 0.97]
UF
P10AE-116-21L9 (fit failed)
BetaS [1.17, 18.0, 6.07, 8.58, 0.99]
UF

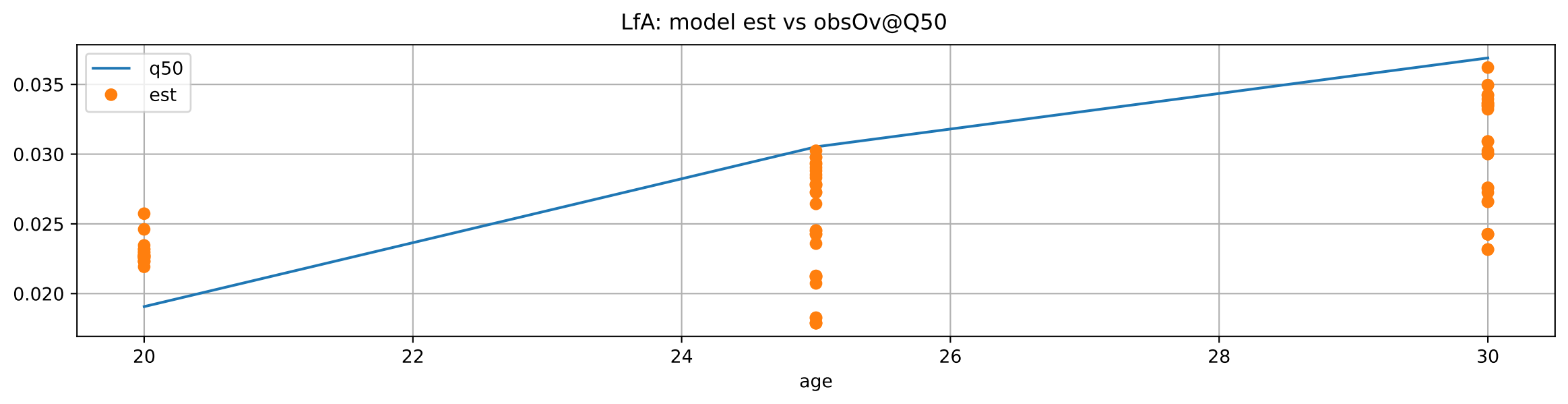

P10AE LTA
Ymax (Def=1 Set=0.84)
avg1=0.84~40% avg2=na
tb (Def=na Set=na)
avg1=17.75~46% avg2=na
dm (Def=12 Set=12)
avg1=11.22~2% avg2=na
de (Def=12 Set=12.37)
avg1=12.37~43% avg2=na
P10AE
Object Number

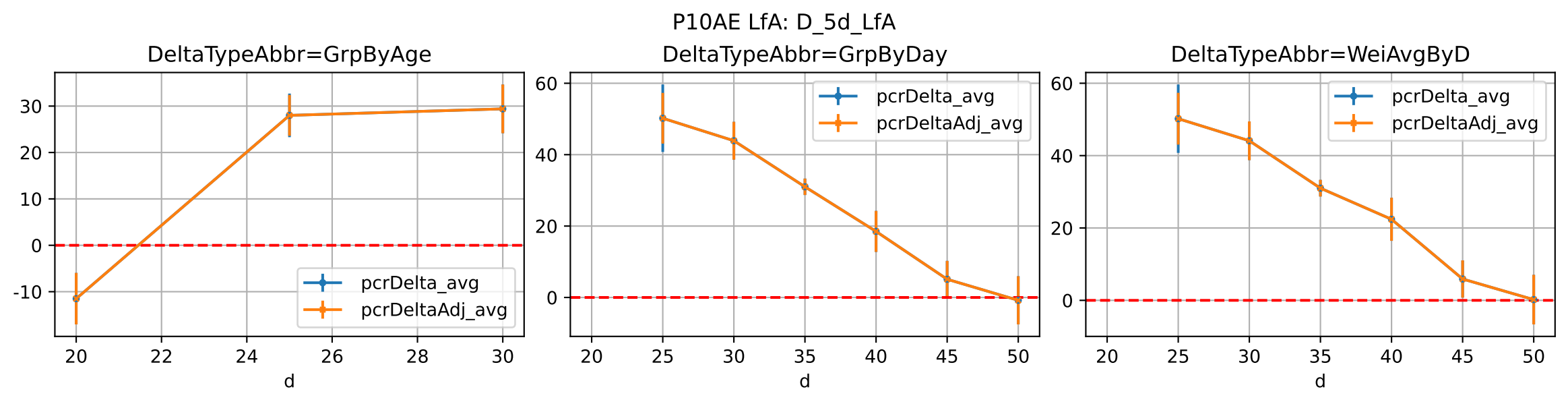

LfA
By Start Date
By Plant/Organ Age
P10AE
1.0
0.5
0.0
-0.5
-1.0
27.5
30.0
32.5
35.0
37.5
40.0
42.5
45.0
0
5
10
15
20
25
30
35
40
45

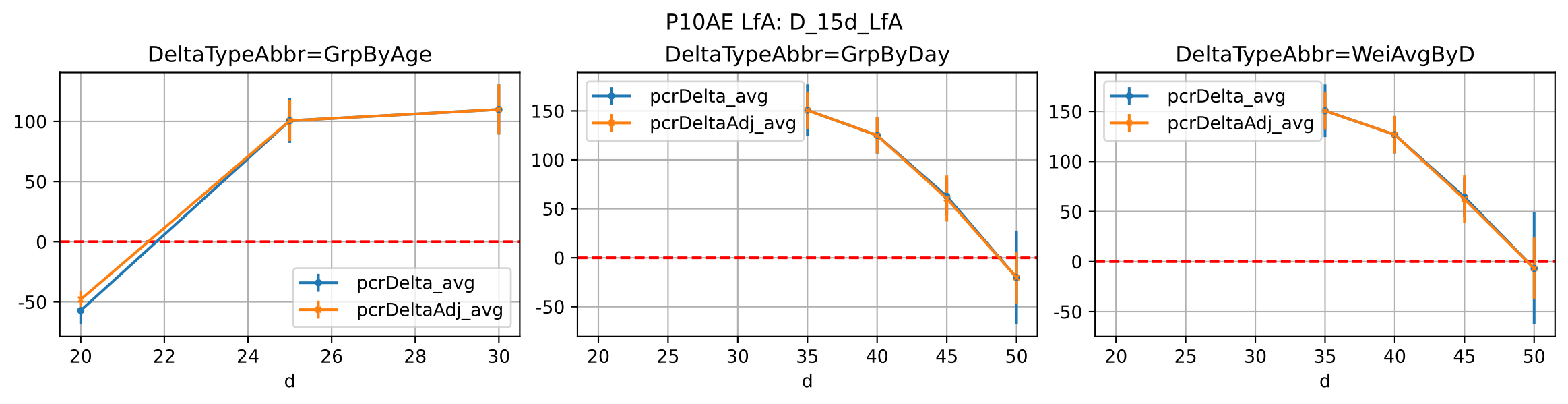

Fl_dm (Def=5 Set=5.99)
avg1=5.99~12% avg2=5.8~12%
Fl_de (Def=5 Set=5.99)
avg1=5.99~12% avg2=5.8~12%
P10AE Time
FrV_dm (Def=18 Set=16.66)
avg1=na avg2=na
FrV_de (Def=15 Set=15)
avg1=na avg2=na
FrN_a (Def=0.45 Set=1.05)
avg1=1.05~23% avg2=1.1~4%
FSDdevStage (Def=0.01 Set=0.1)
avg1=0.1~49% avg2=0.11~29%
P10AE
Object Number

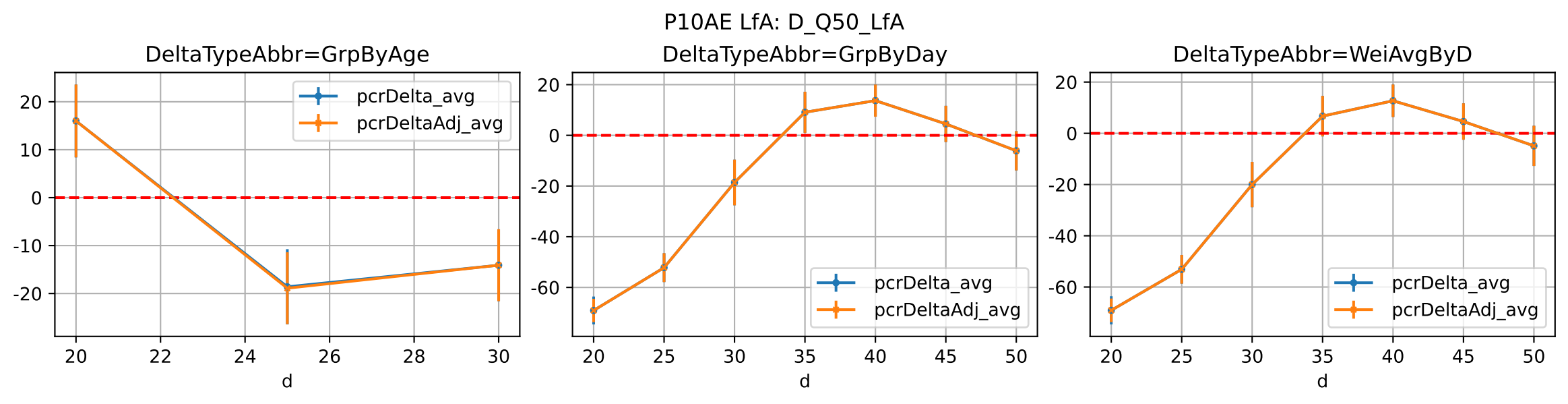

FGDdevStage (Def=0.7 Set=0.7)
avg1=na avg2=na
FMBDdevStage (Def=1.3 Set=1.3)
avg1=na avg2=na
FMEDdevStage (Def=1.8 Set=1.8)
avg1=na avg2=na
FHDdevStage (Def=1.5 Set=1.5)
avg1=na avg2=na
NNgen (Def=10 Set=8)
avg1=8.0~7% avg2=7.6
Object Number

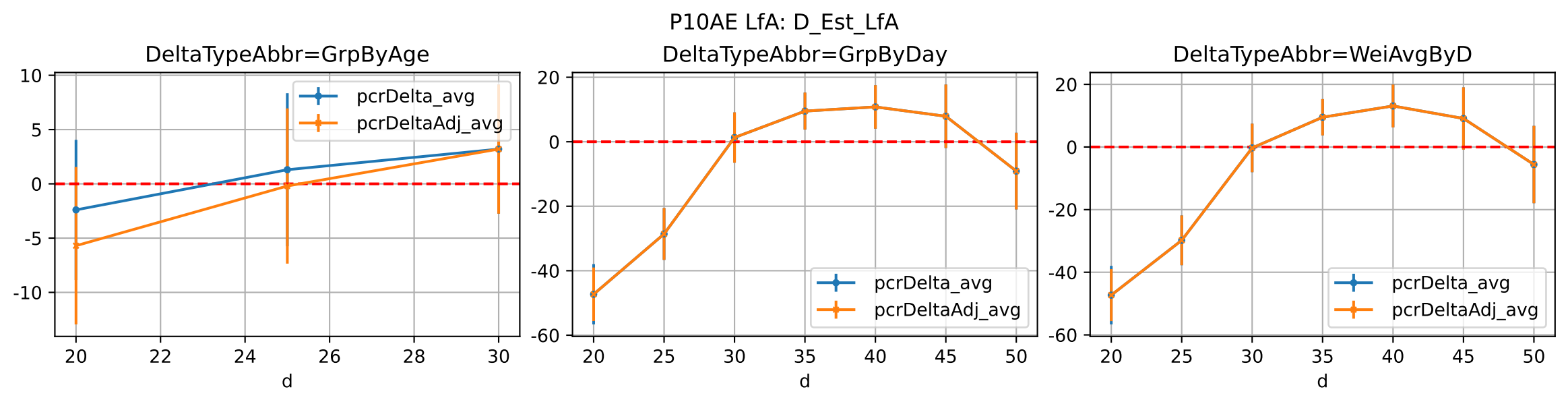

LfA: avg vs. d at each age group
age=20
age=25
age=30
avg
avg
avg
0.030
0.025
0.020
0.015
0.010
0.04
0.03
0.02
0.01
0.04
0.03
0.02
0.01
30
35
40
45
50
20
25
30
35
40
45
50
25
30
35
40
45
50
d
d
d

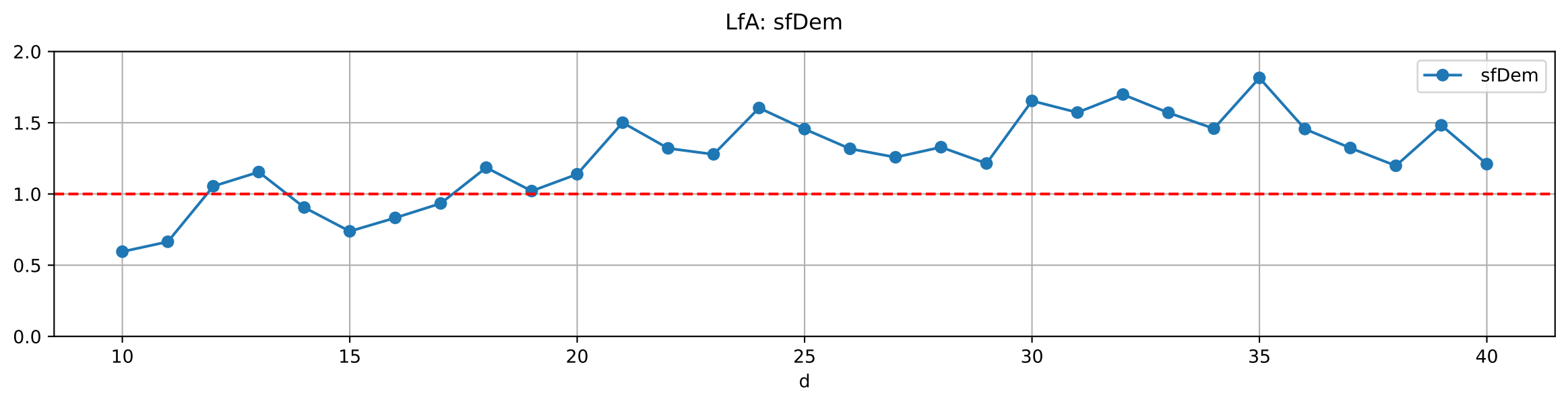

LfA: model est vs obsOv@Q50
q50
est
0.035
0.030
0.025
0.020
20
22
24
26
28
30
age

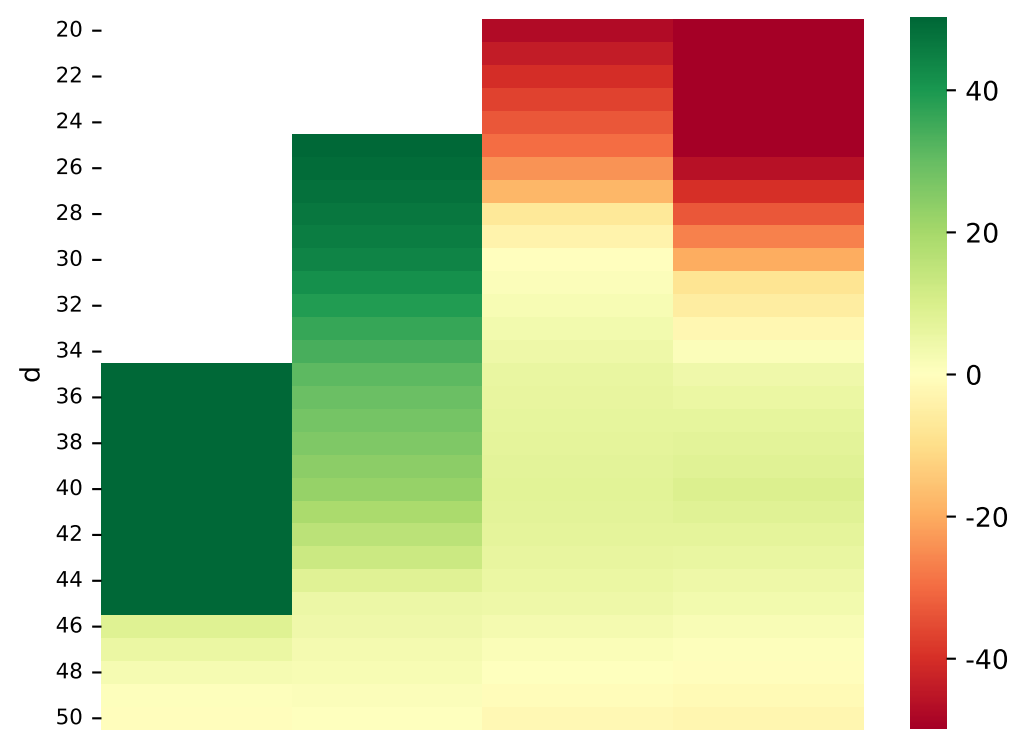

P10AE LfA: D_5d_LfA
DeltaTypeAbbr=GrpByAge
DeltaTypeAbbr=GrpByDay
DeltaTypeAbbr=WeiAvgByD
pcrDelta_avg
pcrDeltaAdj_avg
d

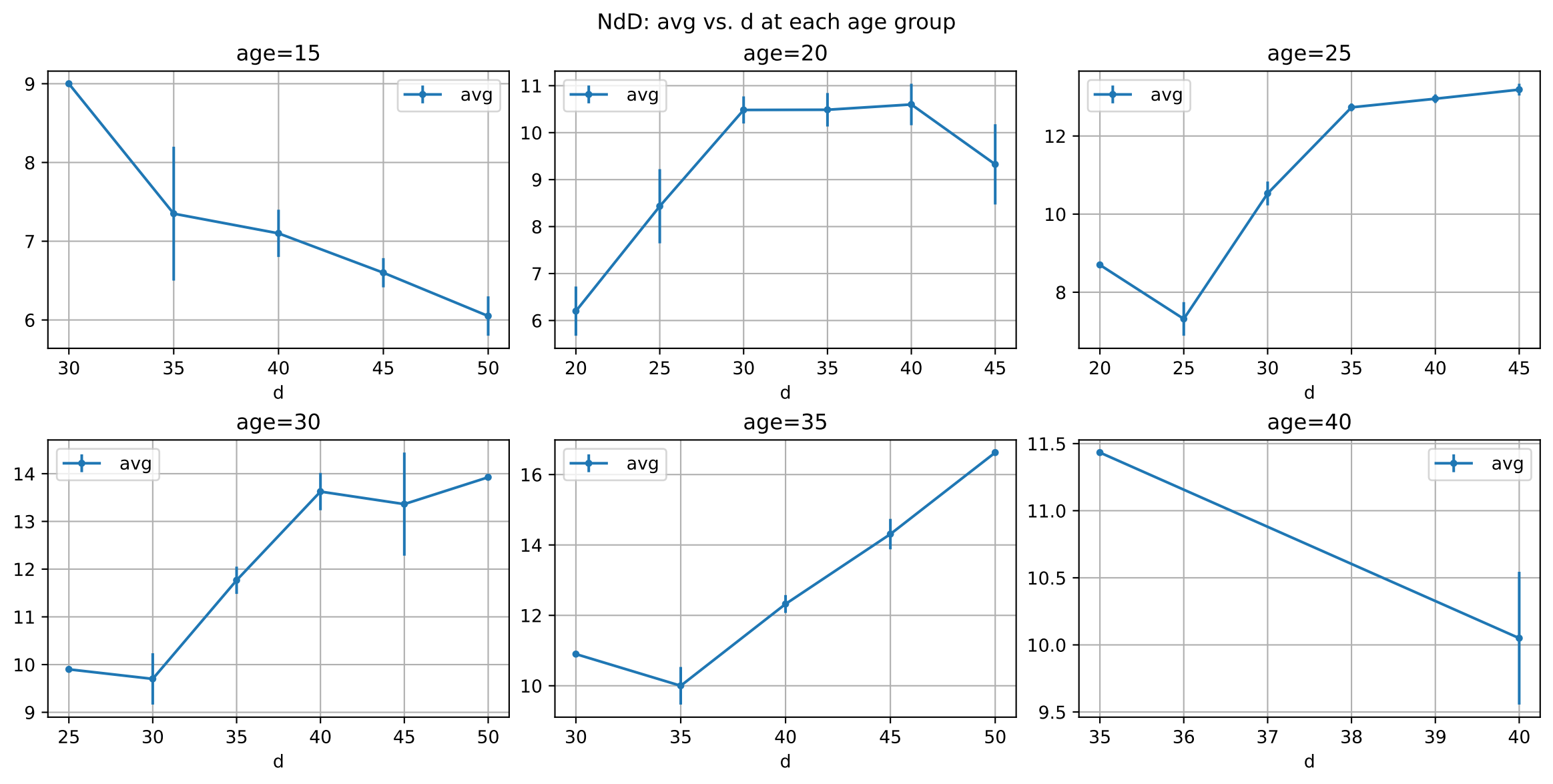

P10AE LfA: D_15d_LfA
DeltaTypeAbbr=GrpByAge
DeltaTypeAbbr=GrpByDay
DeltaTypeAbbr=WeiAvgByD
pcrDelta_avg
pcrDeltaAdj_avg
d

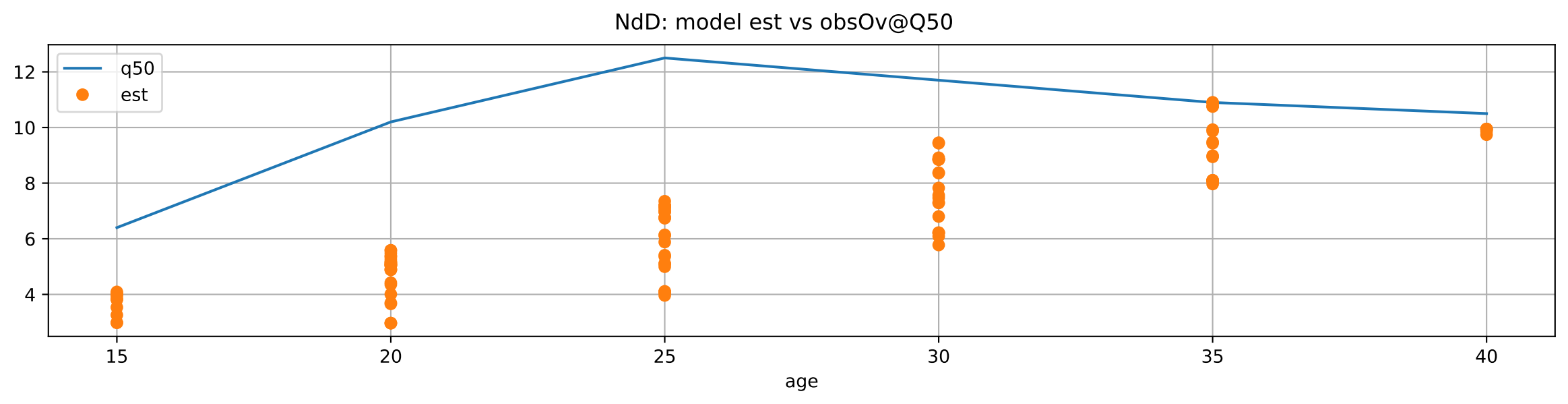

P10AE LfA: D_Q50_LfA
DeltaTypeAbbr=GrpByAge
DeltaTypeAbbr=GrpByDay
DeltaTypeAbbr=WeiAvgByD
pcrDelta_avg
pcrDeltaAdj_avg
d

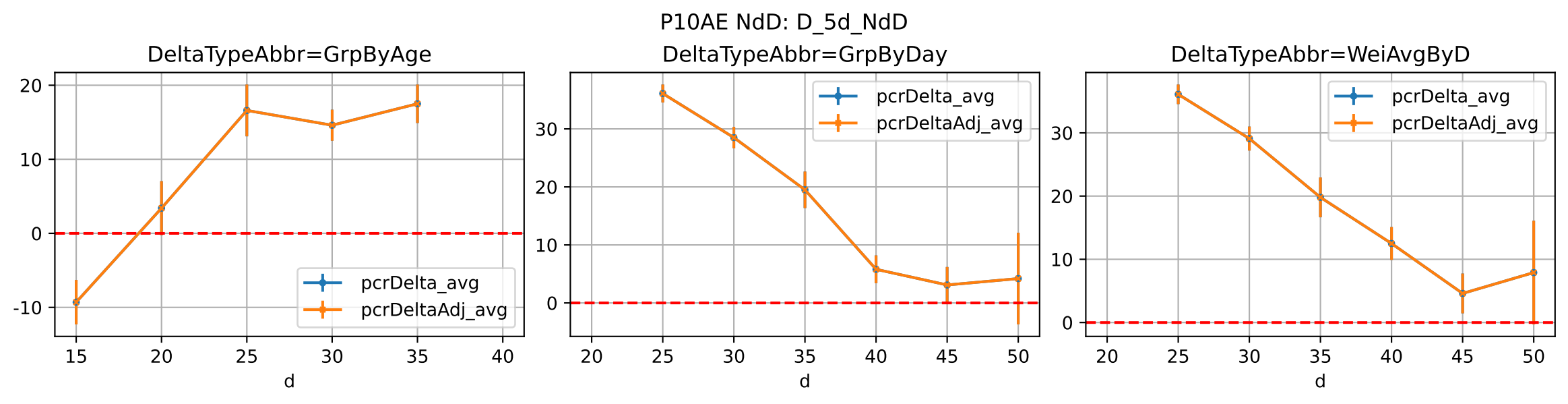

P10AE LfA: D_Est_LfA
DeltaTypeAbbr=GrpByAge
DeltaTypeAbbr=GrpByDay
DeltaTypeAbbr=WeiAvgByD
pcrDelta_avg
pcrDeltaAdj_avg
d

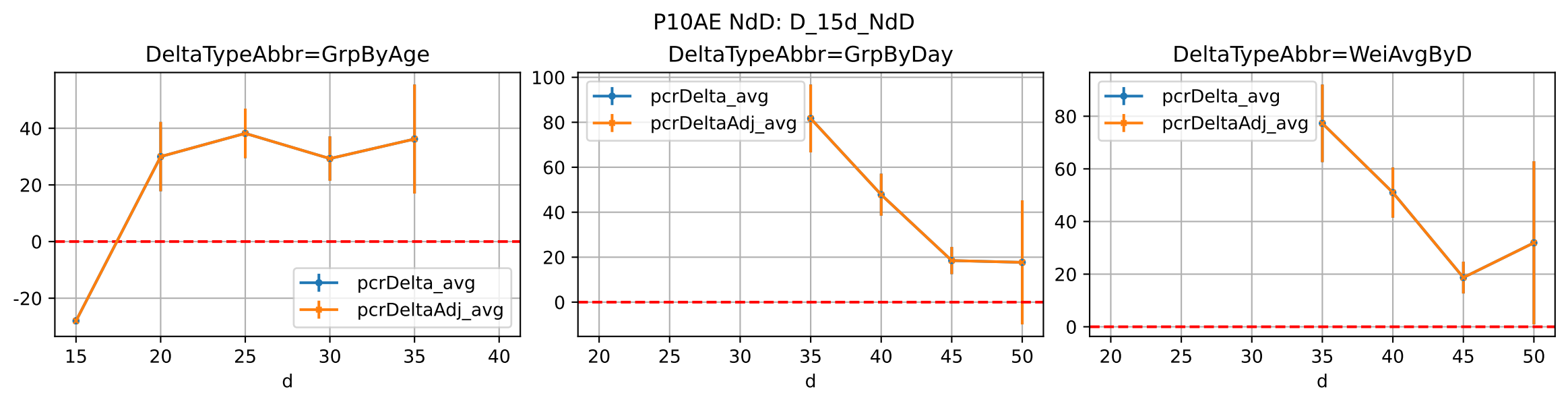

LfA: sfDem
sfDem
2.0
1.5
1.0
0.5
0.0
10
15
20
25
30
35
40
d

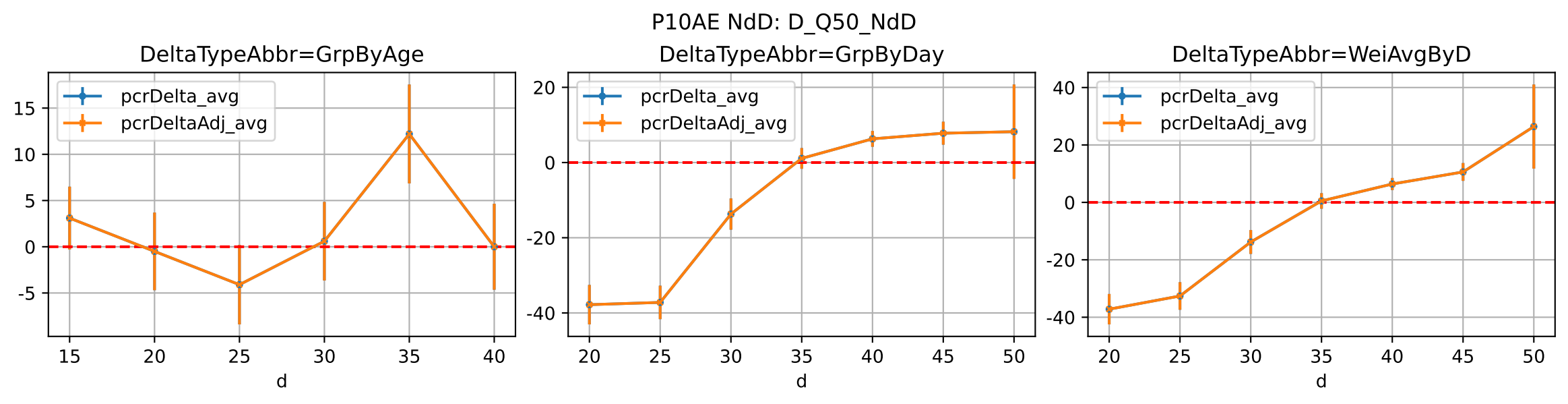

d
20
22
24
26
28
30
32
34
36
38
40
42
44
46
48
50
40
20
0
-20
-40

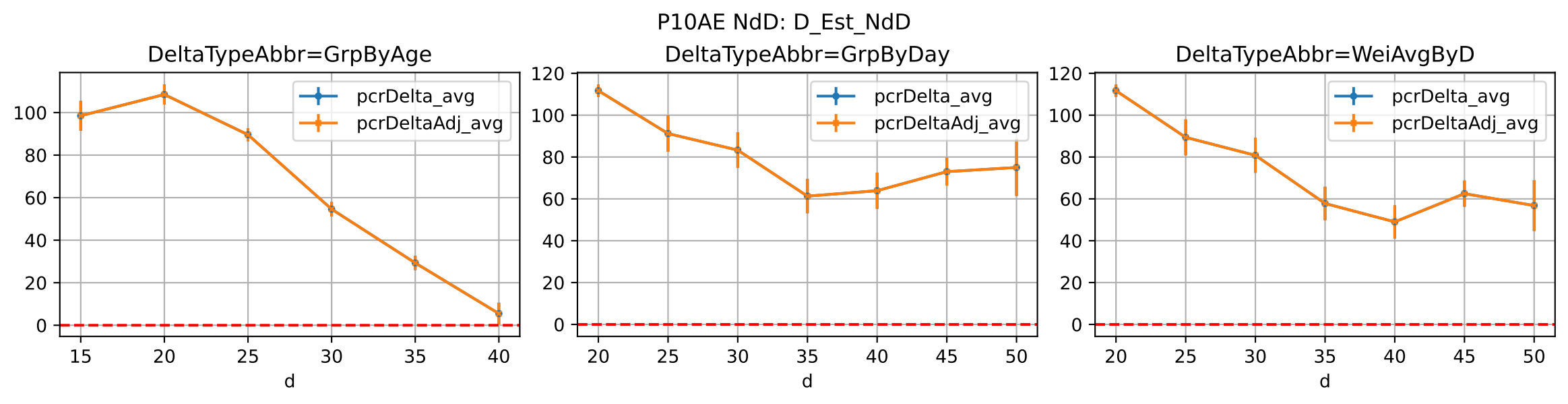

NdD: avg vs. d at each age group
age=15
avg
d
age=20
avg
d
age=25
avg
d
age=30
avg
d
age=35
avg
d
age=40
avg
d

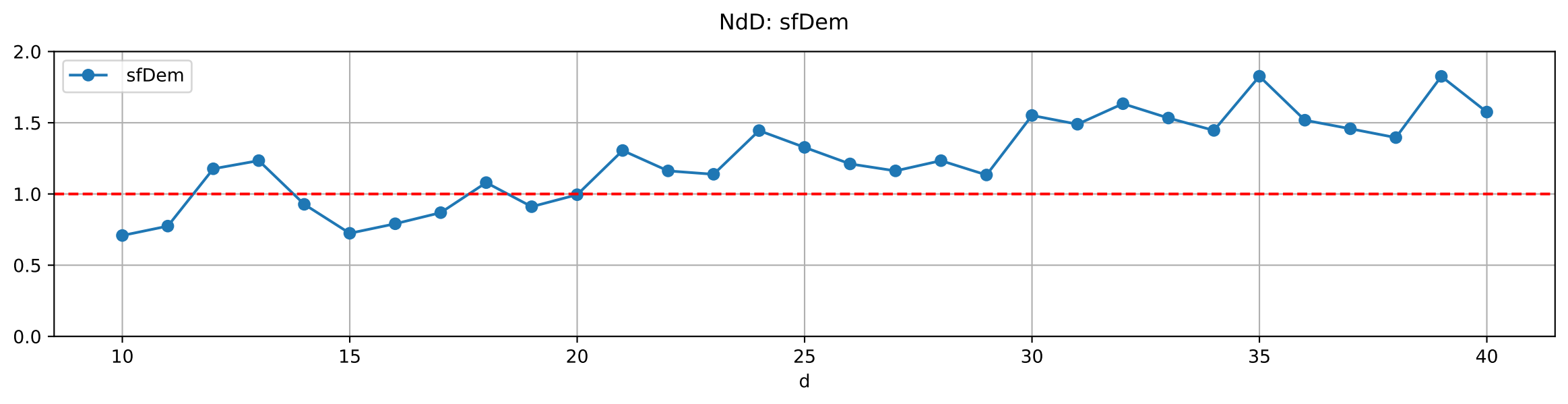

NdD: model est vs obsOv@Q50
q50
est
12
10
8
6
4
15
20
25
30
35
40
age

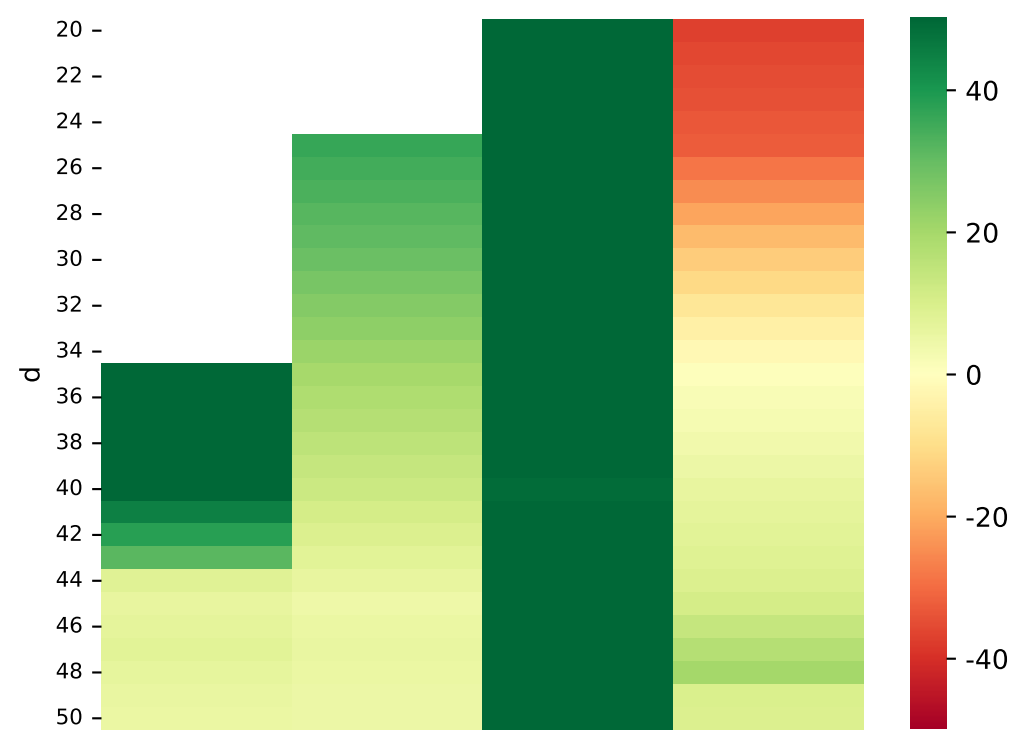

P10AE NdD: D_5d_NdD
DeltaTypeAbbr=GrpByAge
DeltaTypeAbbr=GrpByDay
DeltaTypeAbbr=WeiAvgByD
pcrDelta_avg
pcrDeltaAdj_avg
d

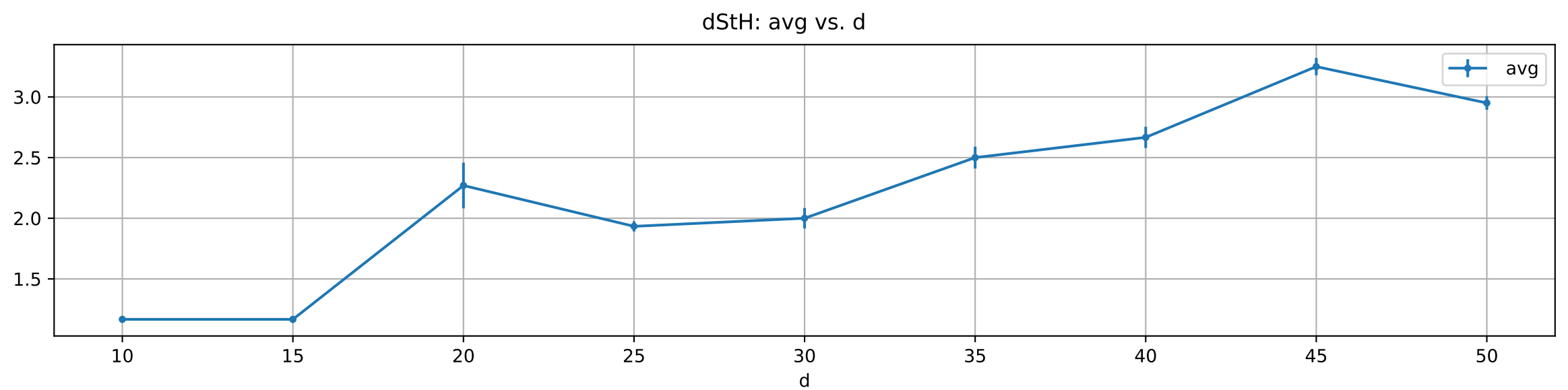

P10AE NdD: D_15d_NdD
DeltaTypeAbbr=GrpByAge
DeltaTypeAbbr=GrpByDay
DeltaTypeAbbr=WeiAvgByD
pcrDelta_avg
pcrDeltaAdj_avg
d

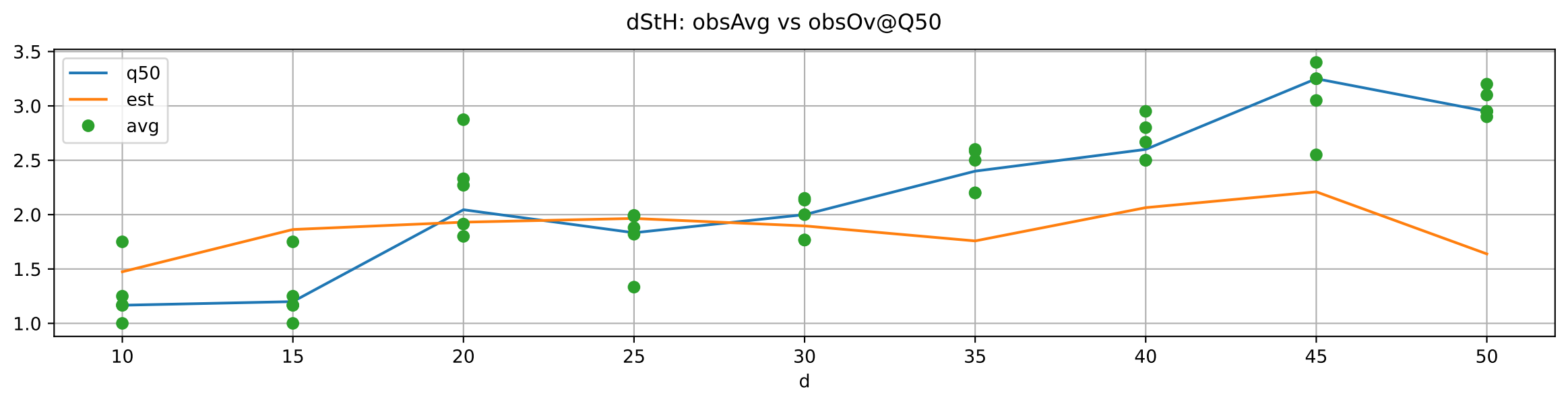

P10AE NdD: D_Q50_NdD
DeltaTypeAbbr=GrpByAge
DeltaTypeAbbr=GrpByDay
DeltaTypeAbbr=WeiAvgByD
pcrDelta_avg
pcrDeltaAdj_avg
d

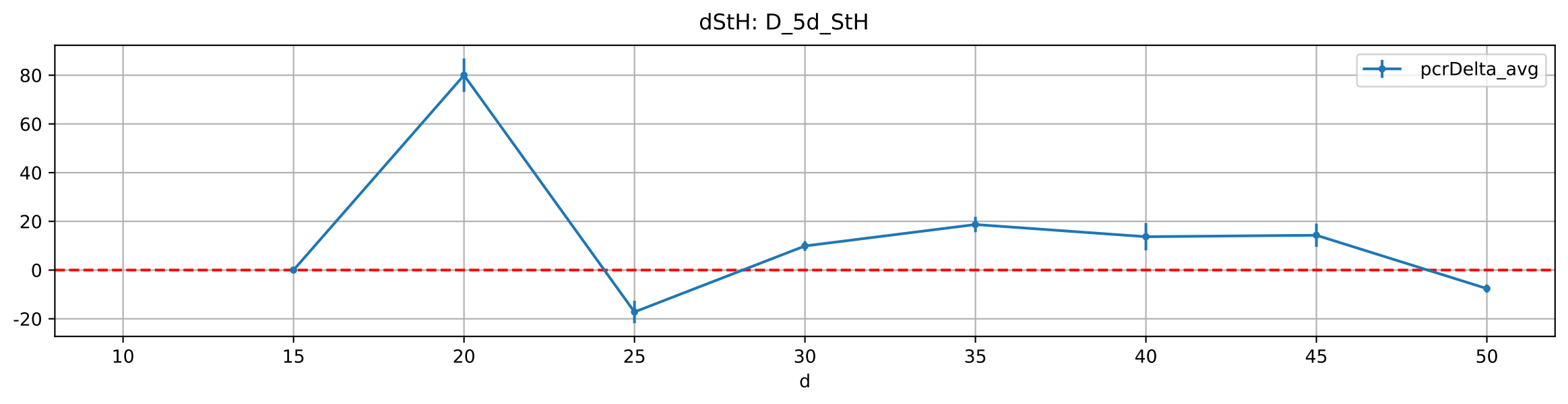

P10AE NdD: D_Est_NdD
DeltaTypeAbbr=GrpByAge
DeltaTypeAbbr=GrpByDay
DeltaTypeAbbr=WeiAvgByD
pcrDelta_avg
pcrDeltaAdj_avg
d

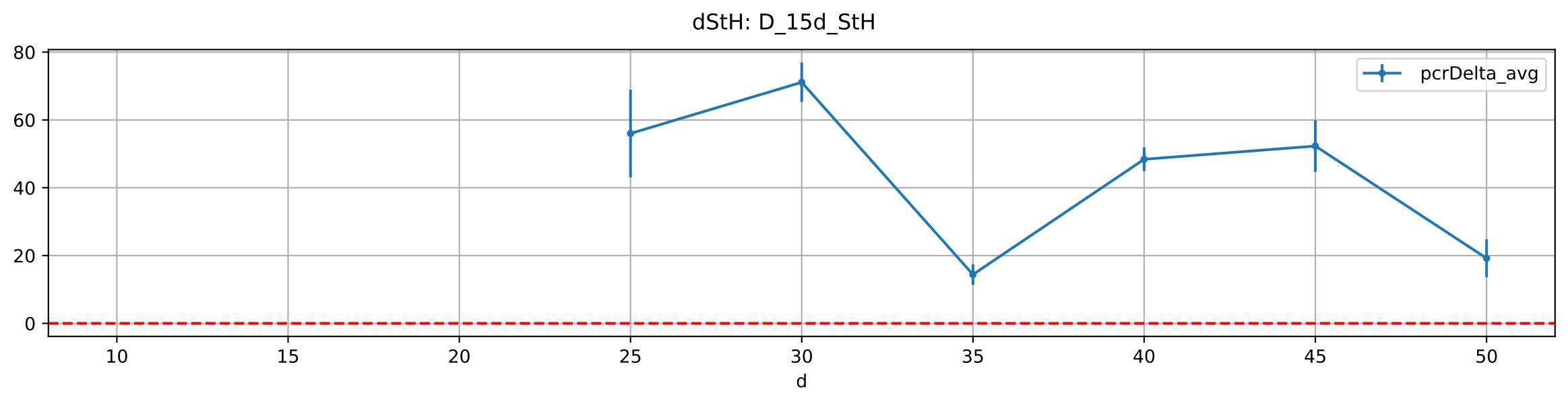

NdD: sfDem
sfDem
2.0
1.5
1.0
0.5
0.0
10
15
20
25
30
35
40
d

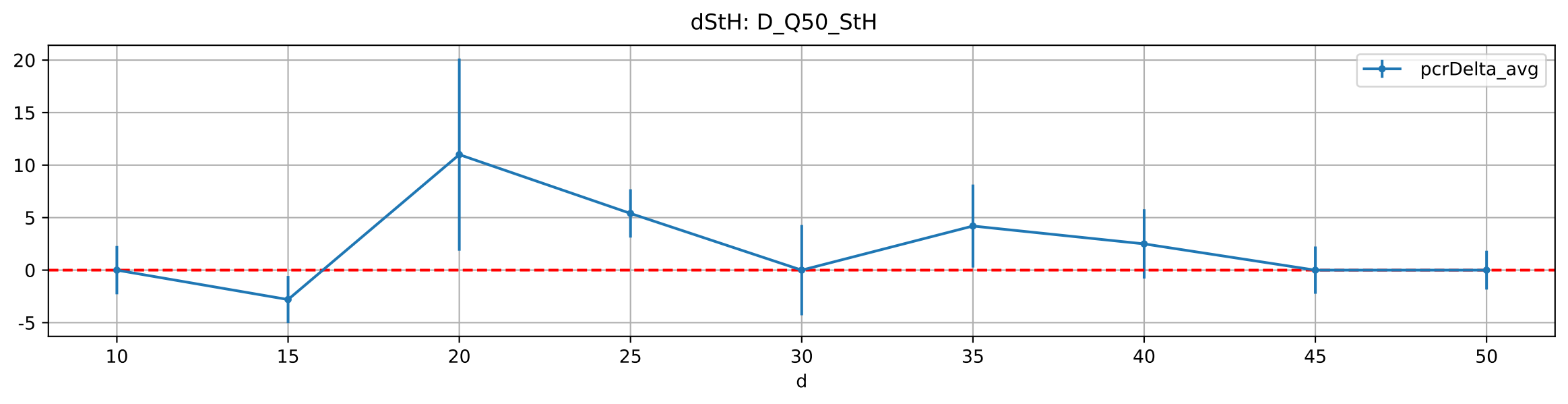

d
20
22
24
26
28
30
32
34
36
38
40
42
44
46
48
50
40
20
0
-20
-40

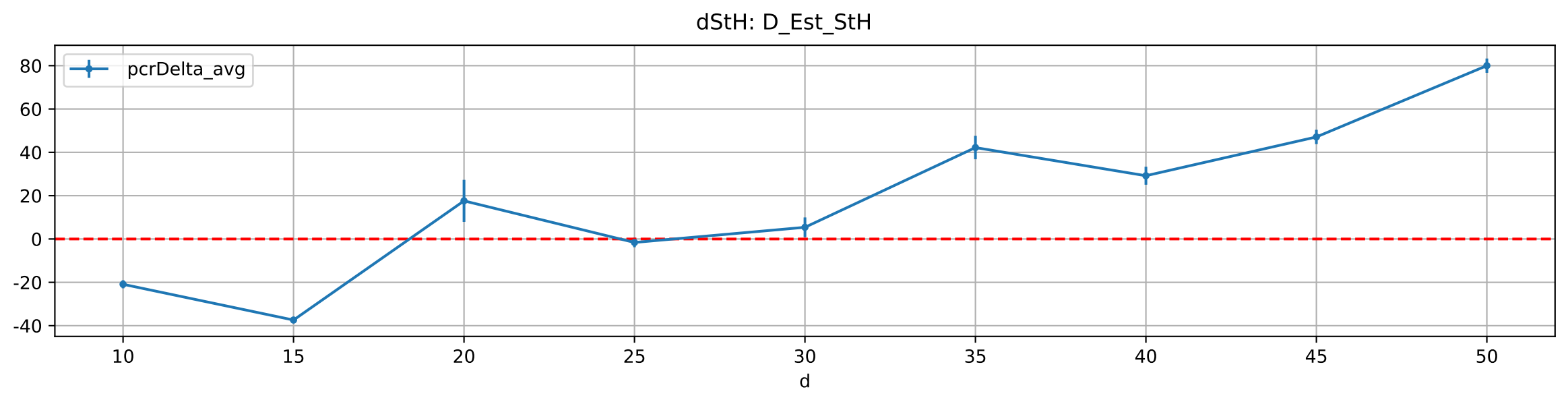

dStH: avg vs. d
avg
3.0
2.5
2.0
1.5
10
15
20
25
30
35
40
45
50
d

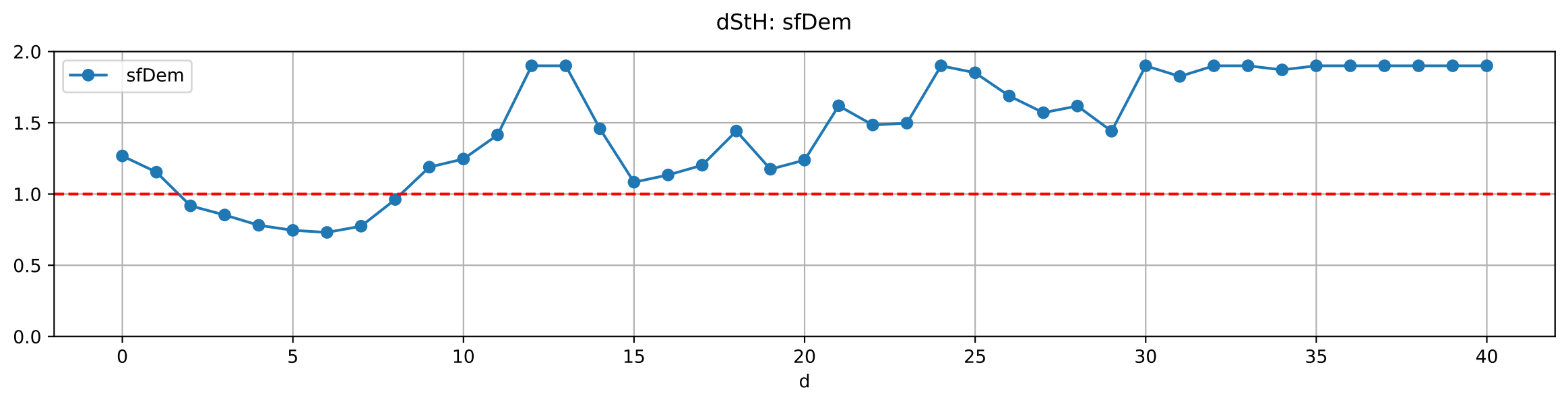

dStH: obsAvg vs obsOv@Q50
q50
est
avg
3.5
3.0
2.5
2.0
1.5
1.0
10
15
20
25
30
35
40
45
50
d

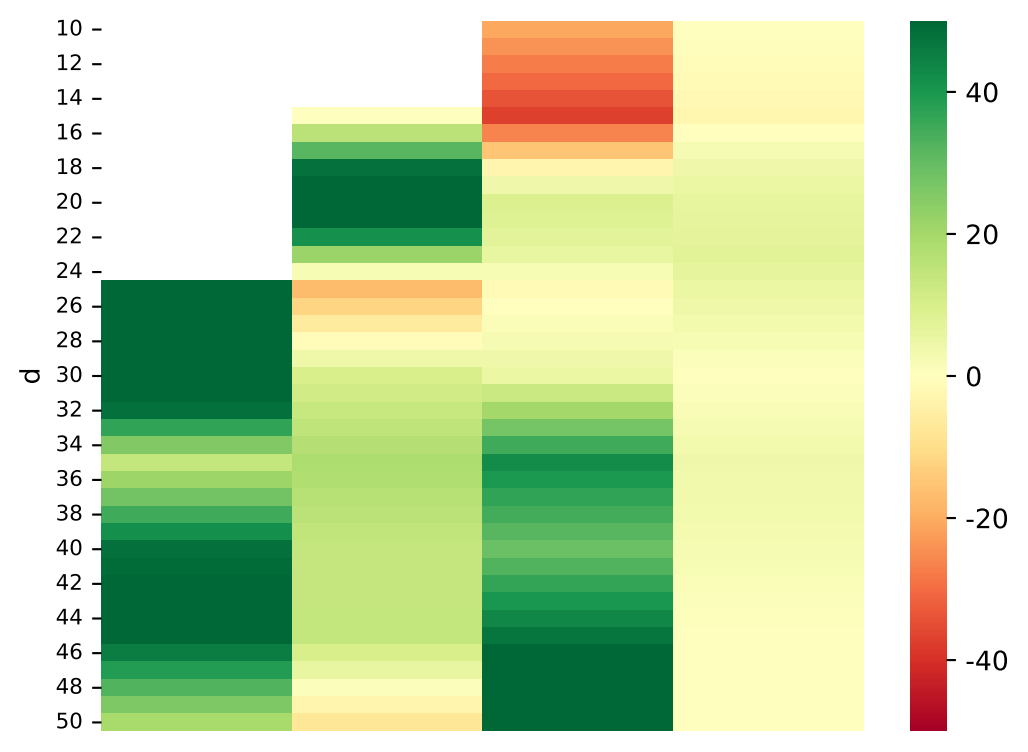

dStH: D_5d_StH
pcrDelta_avg
80
60
40
20
0
-20
10
15
20
25
30
35
40
45
50
d

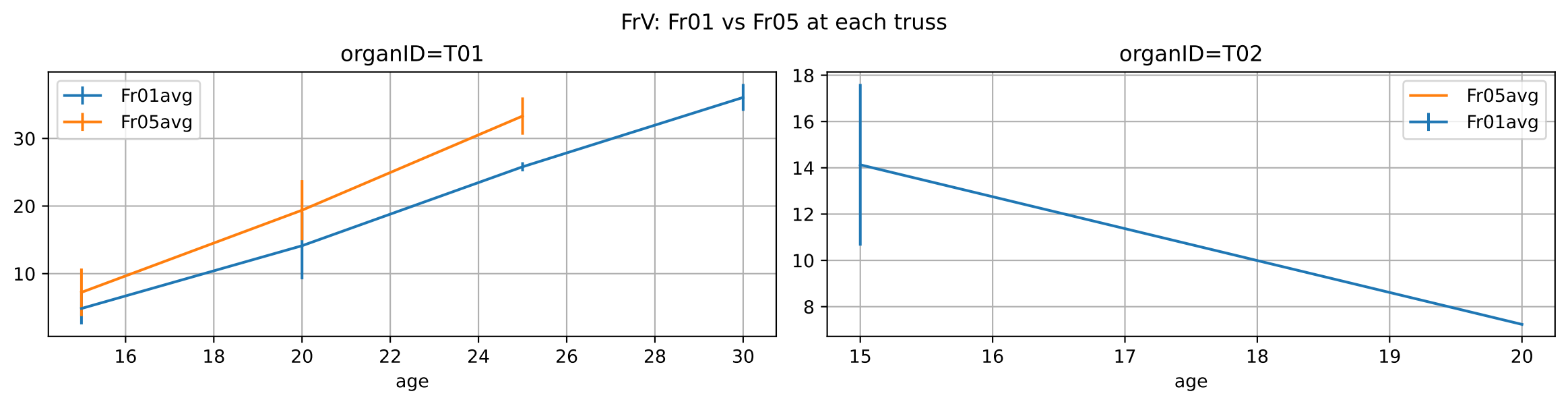

dStH: D_15d_StH
pcrDelta_avg
80
60
40
20
0
10
15
20
25
30
35
40
45
50
d

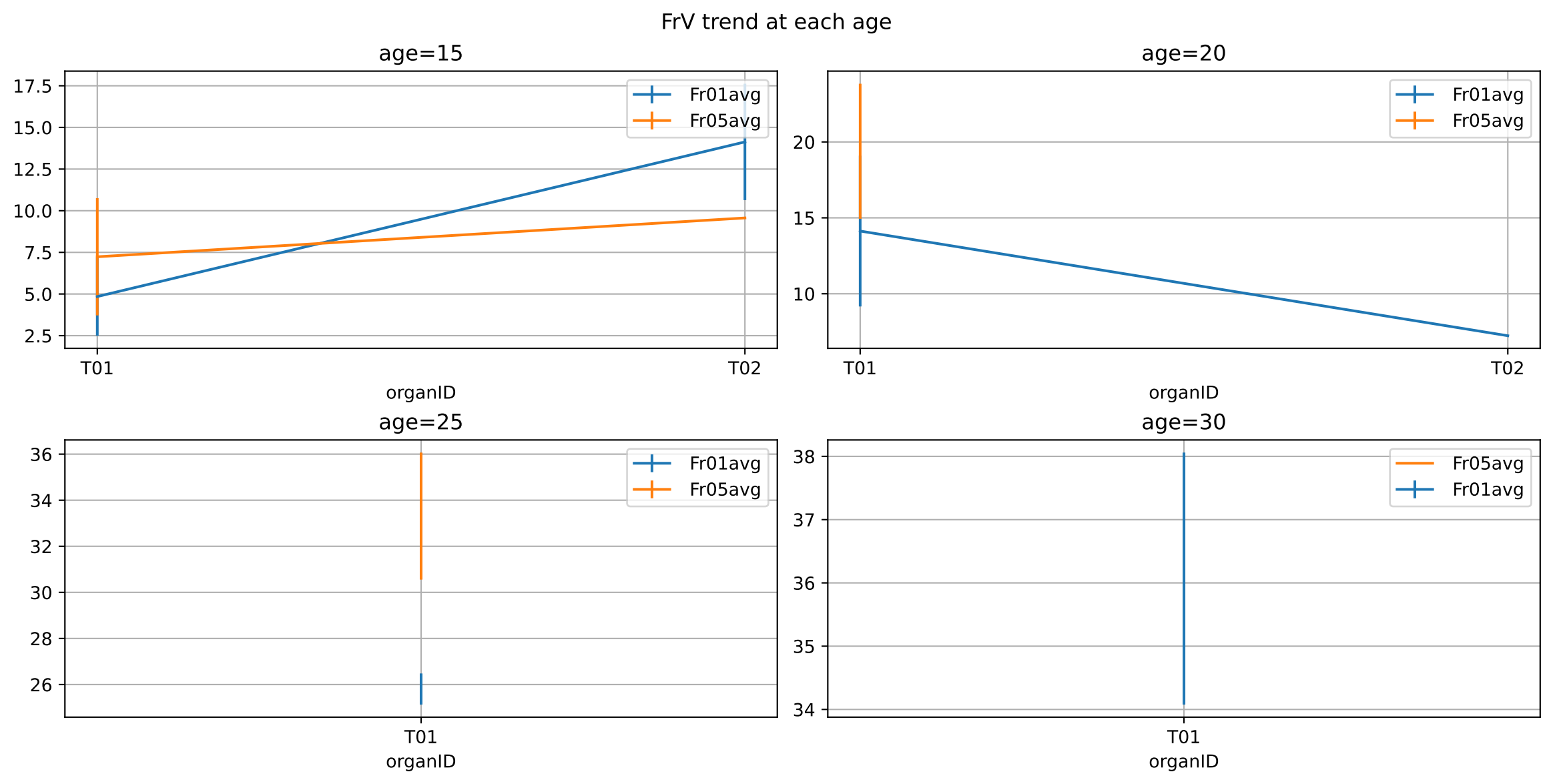

dStH: D_Q50_StH
pcrDelta_avg
20
15
10
5
0
-5
10
15
20
25
30
35
40
45
50
d

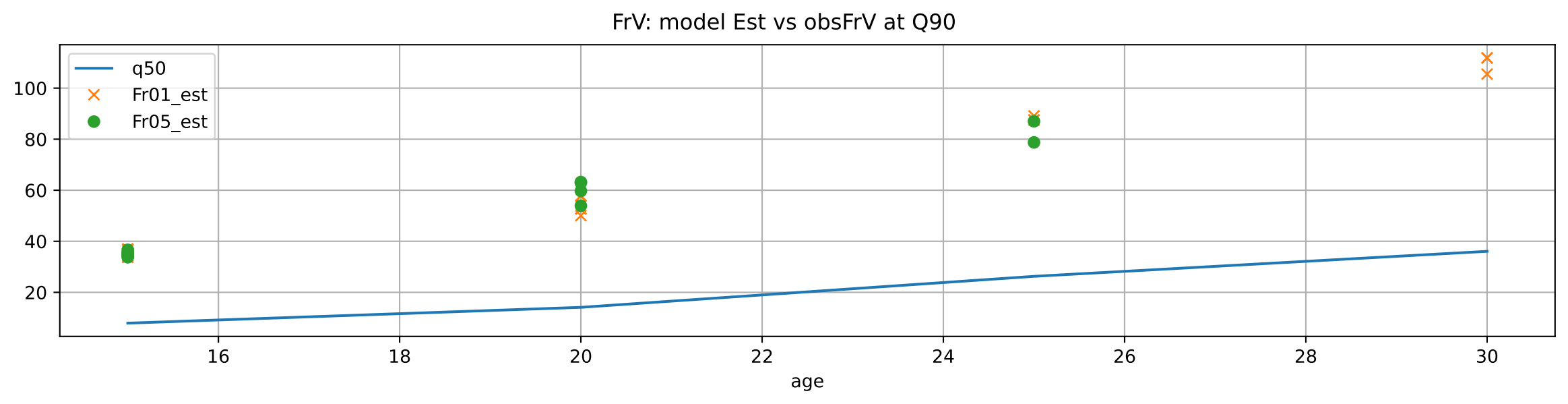

dStH: D_Est_StH
pcrDelta_avg
80
60
40
20
0
-20
-40
10
15
20
25
30
35
40
45
50
d

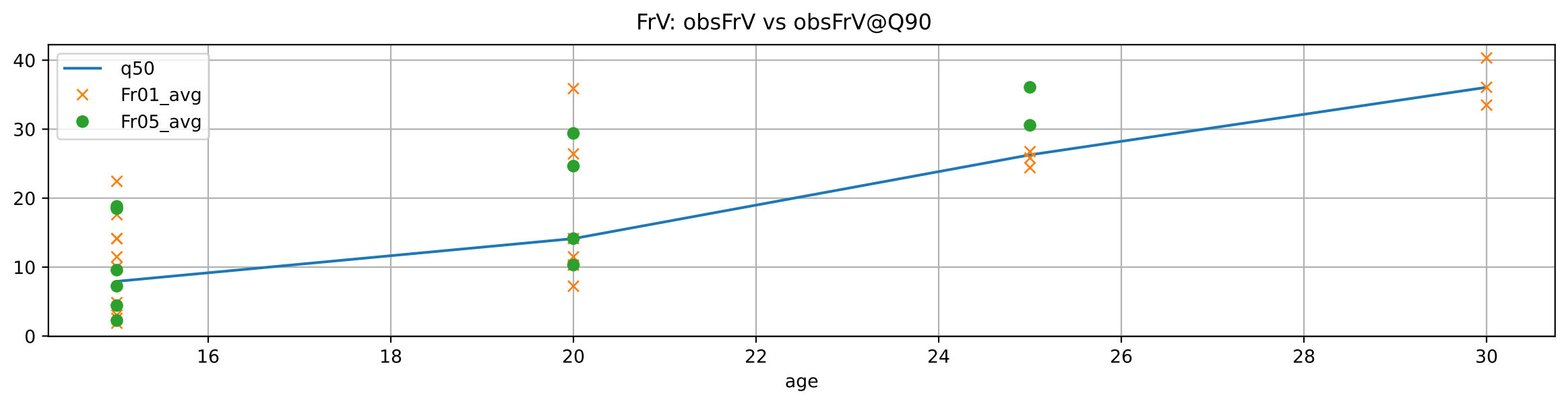

dStH: sfDem
sfDem
2.0
1.5
1.0
0.5
0.0
0
5
10
15
20
25
30
35
40
d

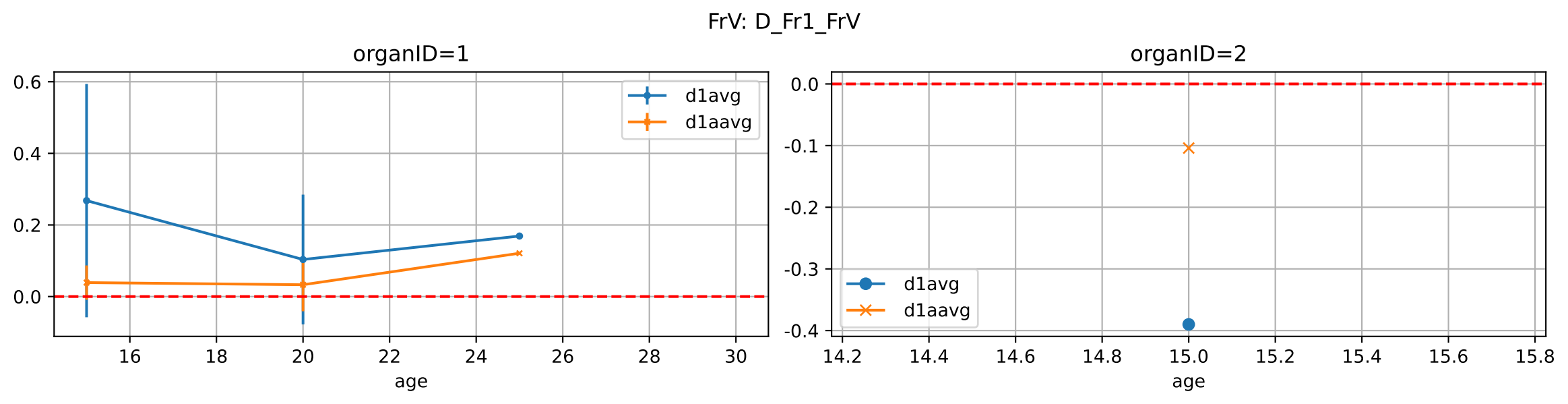

d
10
12
14
16
18
20
22
24
26
28
30
32
34
36
38
40
42
44
46
48
50
40
20
0
-20
-40

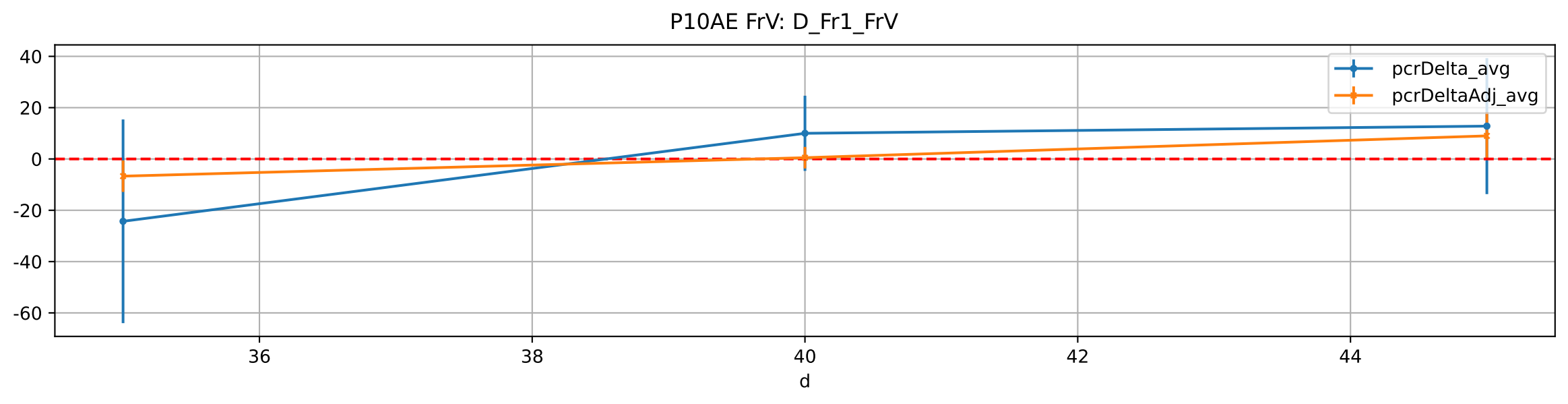

FrV: Fr01 vs Fr05 at each truss
organID=T01
Fr01avg
Fr05avg
30
20
10
16
18
20
22
24
26
28
30
age
organID=T02
Fr05avg
Fr01avg
18
16
14
12
10
8
15
16
17
18
19
20
age

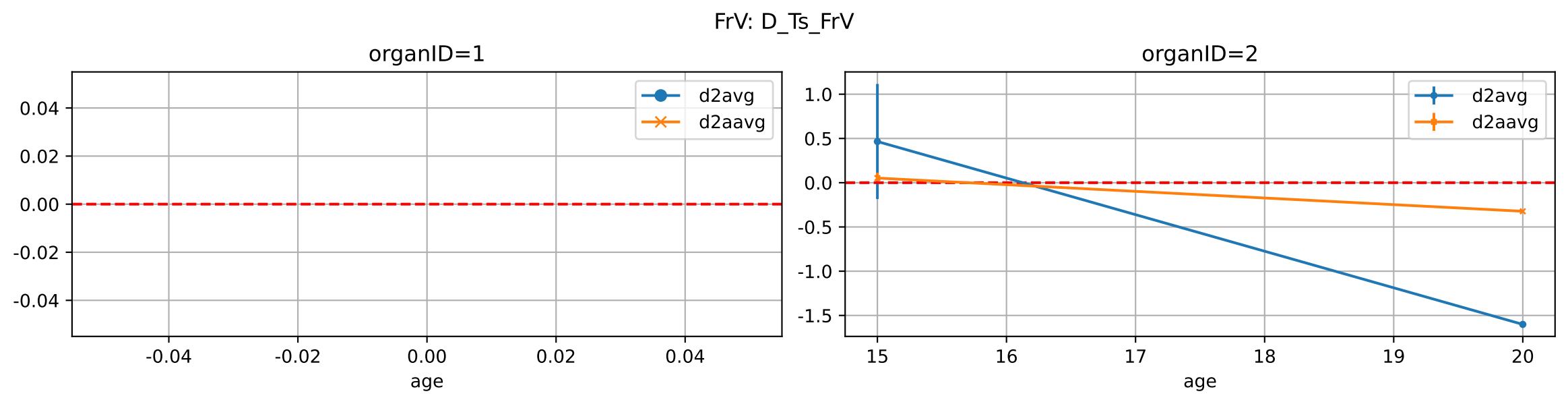

FrV trend at each age
age=15
17.5
15.0
12.5
10.0
7.5
5.0
2.5
Fr01avg
Fr05avg
T01
T02
organID
age=20
20
15
10
Fr01avg
Fr05avg
T01
T02
organID
age=25
36
34
32
30
28
26
Fr01avg
Fr05avg
T01
organID
age=30
38
37
36
35
34
Fr05avg
Fr01avg
T01
organID

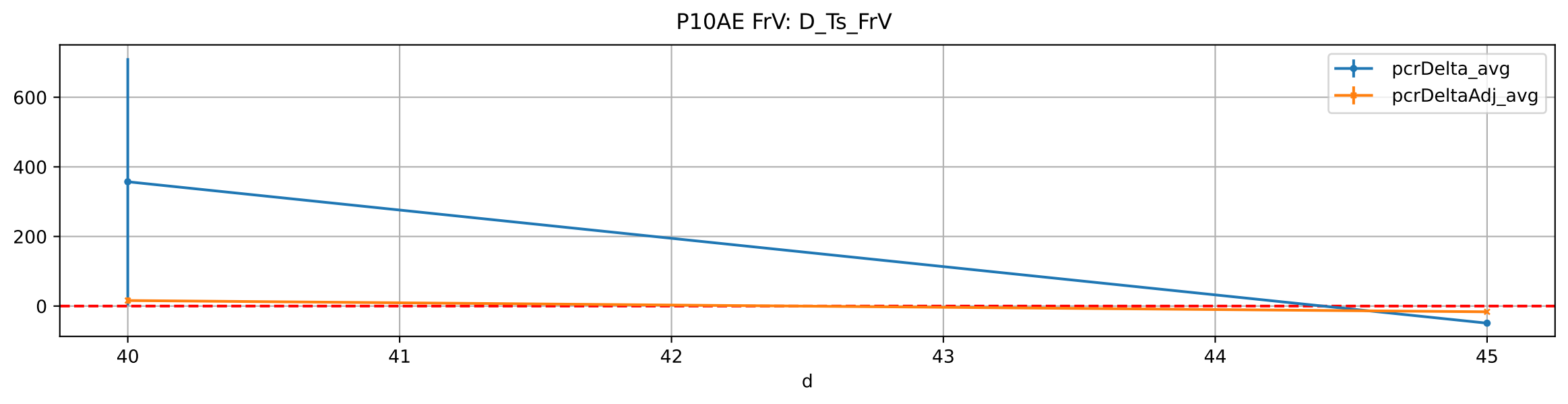

FrV: model Est vs obsFrV at Q90
q50
Fr01_est
Fr05_est
100
80
60
40
20
16
18
20
22
24
26
28
30
age

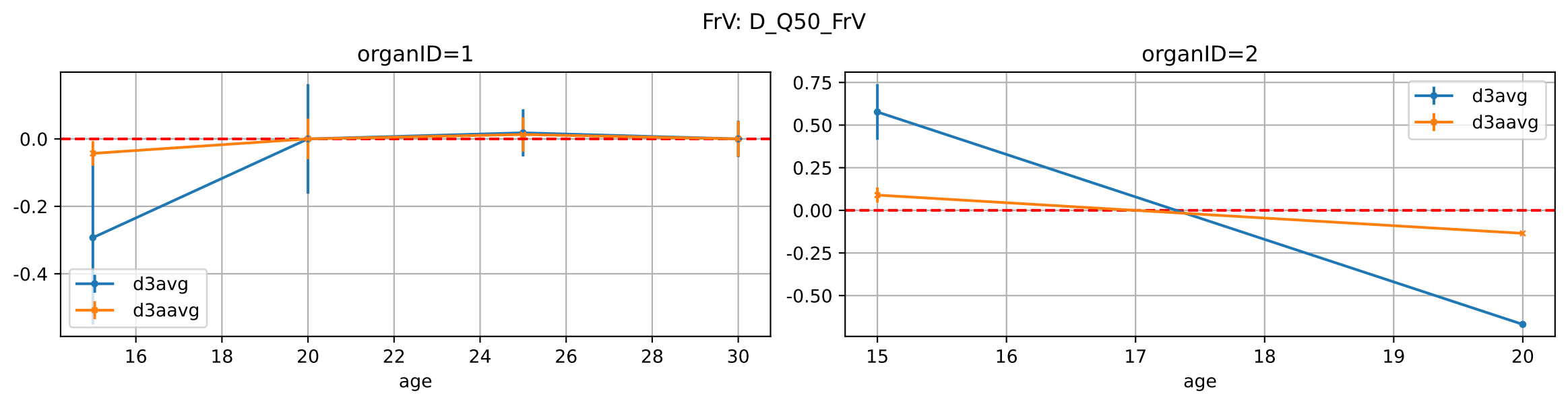

FrV: obsFrV vs obsFrV@Q90
q50
Fr01_avg
Fr05_avg
0
10
20
30
40
16
18
20
22
24
26
28
30
age

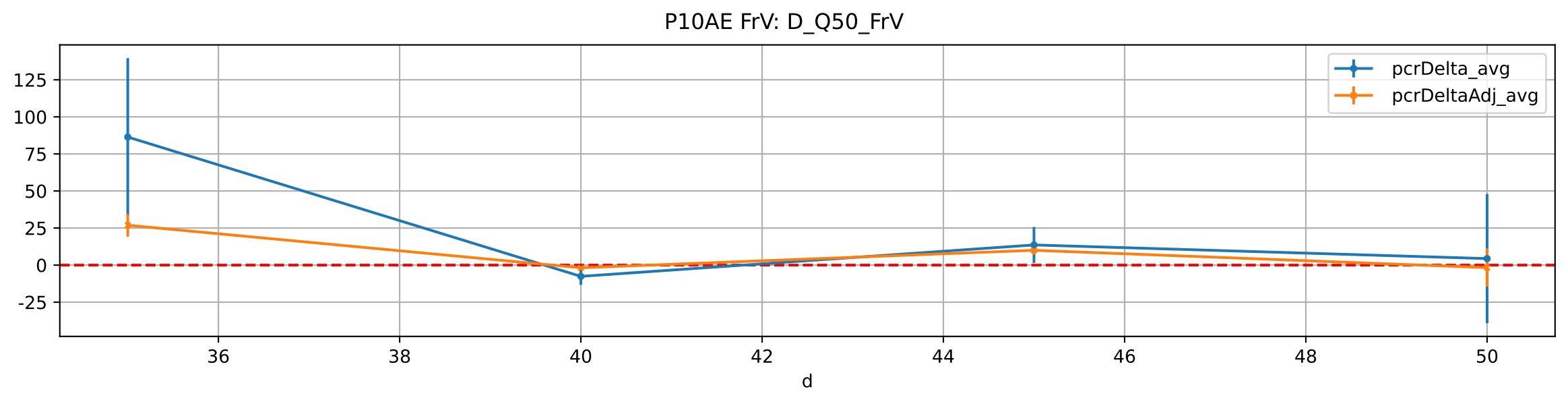

FrV: D_Fr1_FrV
organID=1
organID=2
d1avg
d1aavg
0.6
0.4
0.2
0.0
-0.1
-0.2
-0.3
-0.4
16
18
20
22
24
26
28
30
14.2
14.4
14.6
14.8
15.0
15.2
15.4
15.6
15.8
age
age

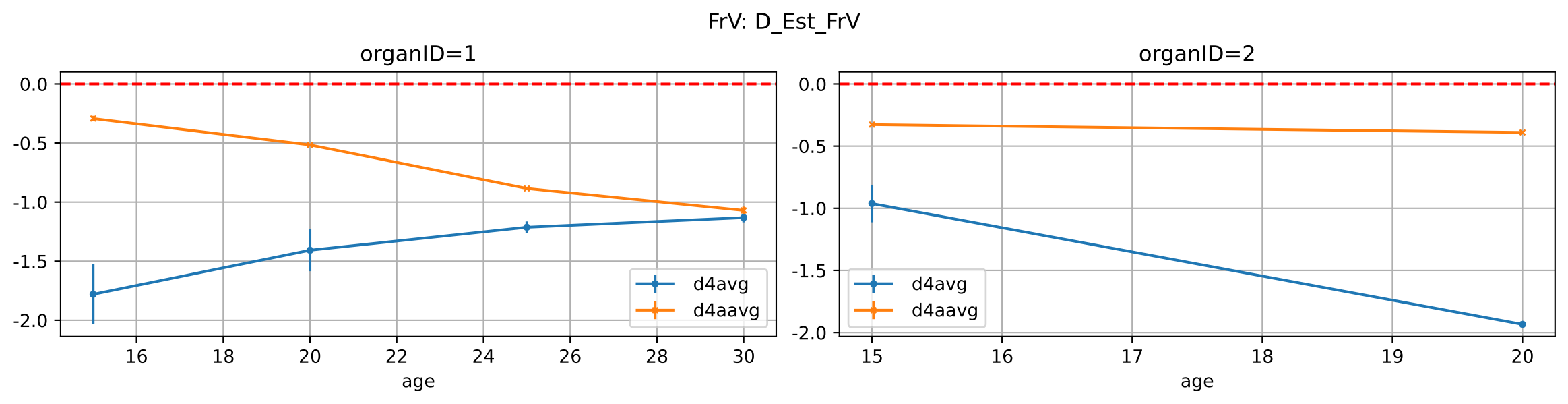

P10AE FrV: D_Fr1_FrV
pcrDelta_avg
pcrDeltaAdj_avg
40
20
0
-20
-40
-60
36
38
40
42
44
d

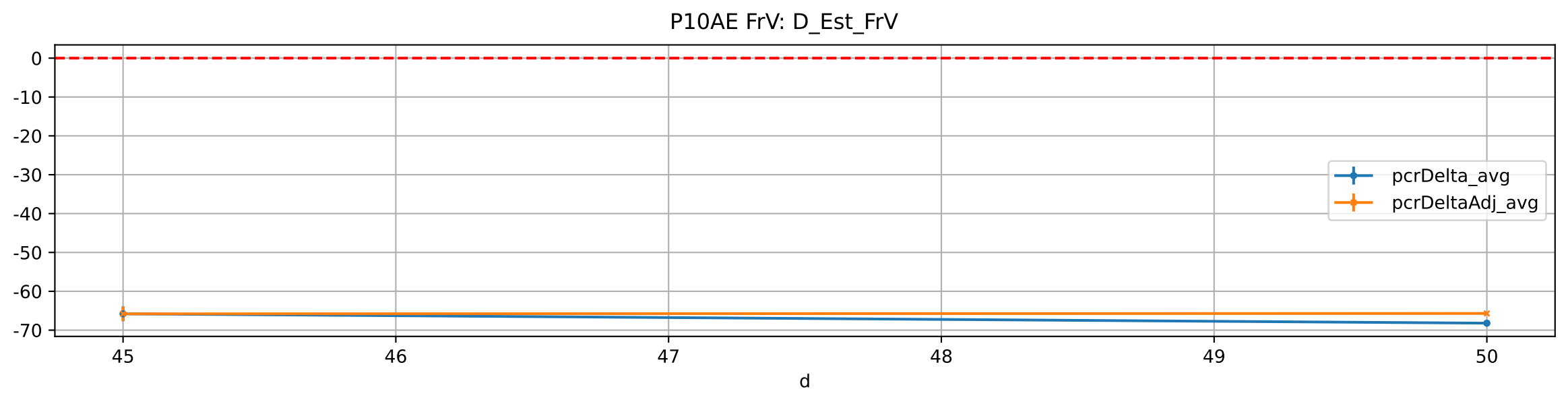

FrV: D_Ts_FrV
organID=1
organID=2
d2avg
d2aavg
0.04
0.02
0.00
-0.02
-0.04
1.0
0.5
0.0
-0.5
-1.0
-1.5
15
16
17
18
19
20
age
age

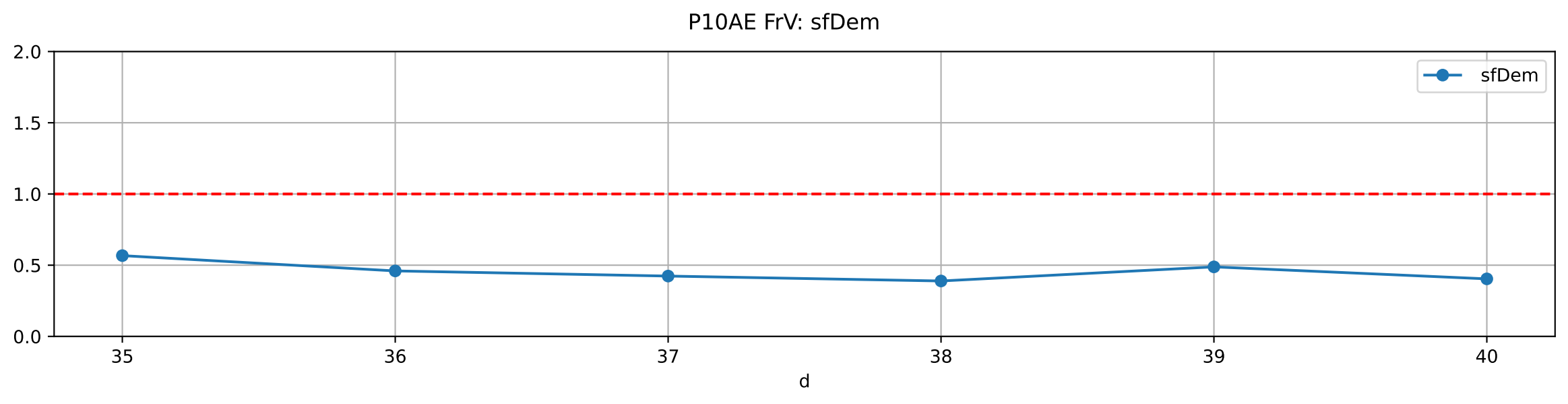

P10AE FrV: D_Ts_FrV
pcrDelta_avg
pcrDeltaAdj_avg
600
400
200
0
40
41
42
43
44
45
d

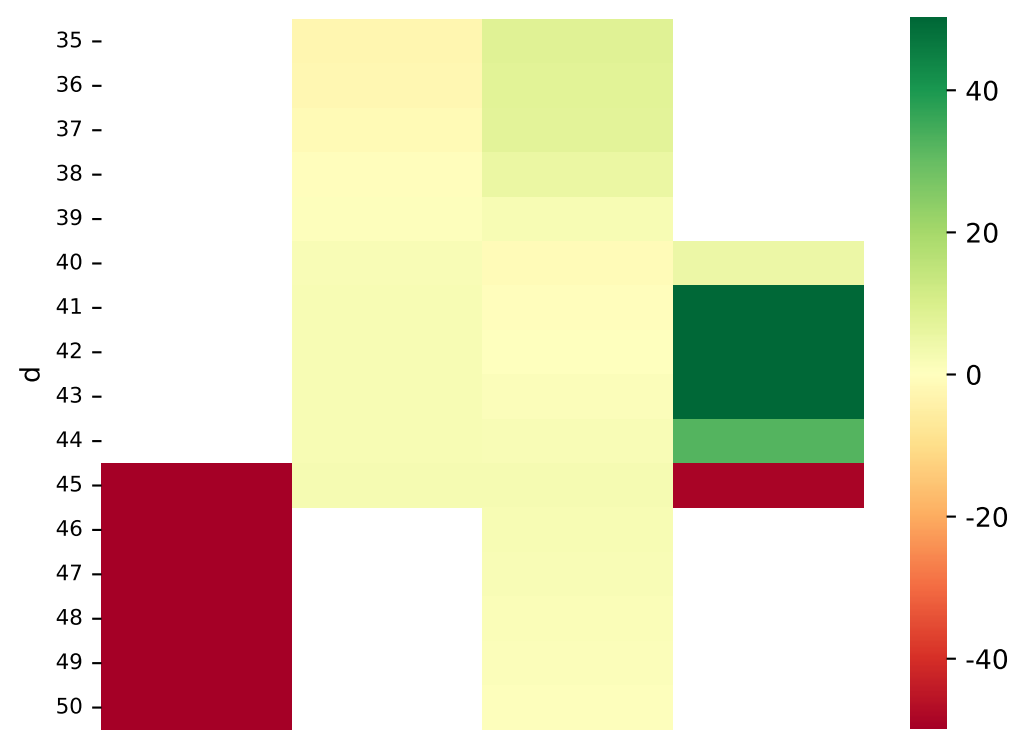

FrV: D_Q50_FrV
organID=1
organID=2
d3avg
d3aavg
0.0
-0.2
-0.4
0.75
0.50
0.25
0.00
-0.25
-0.50
15
16
17
18
19
20
22
24
26
28
30
age
age

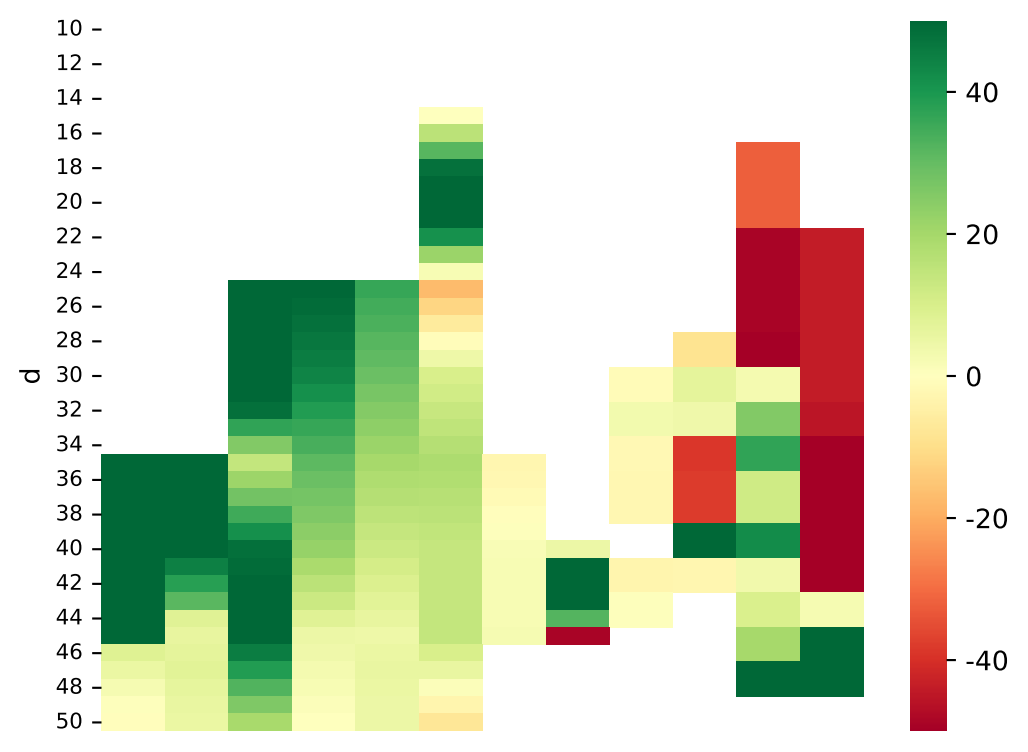

P10AE FrV: D_Q50_FrV
pcrDelta_avg
pcrDeltaAdj_avg
125
100
75
50
25
0
-25
36
38
40
42
44
46
48
50
d


FrV: D_Est_FrV
organID=1
organID=2
0.0
-0.5
-1.0
-1.5
-2.0
16
18
20
22
24
26
28
30
15
17
19
age
d4avg
d4aavg


P10AE FrV: D_Est_FrV
0
-10
-20
-30
-40
-50
-60
-70
45
46
47
48
49
50
d
pcrDelta_avg
pcrDeltaAdj_avg


P10AE FrV: sfDem
2.0
1.5
1.0
0.5
0.0
35
36
37
38
39
40
d
sfDem


d
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