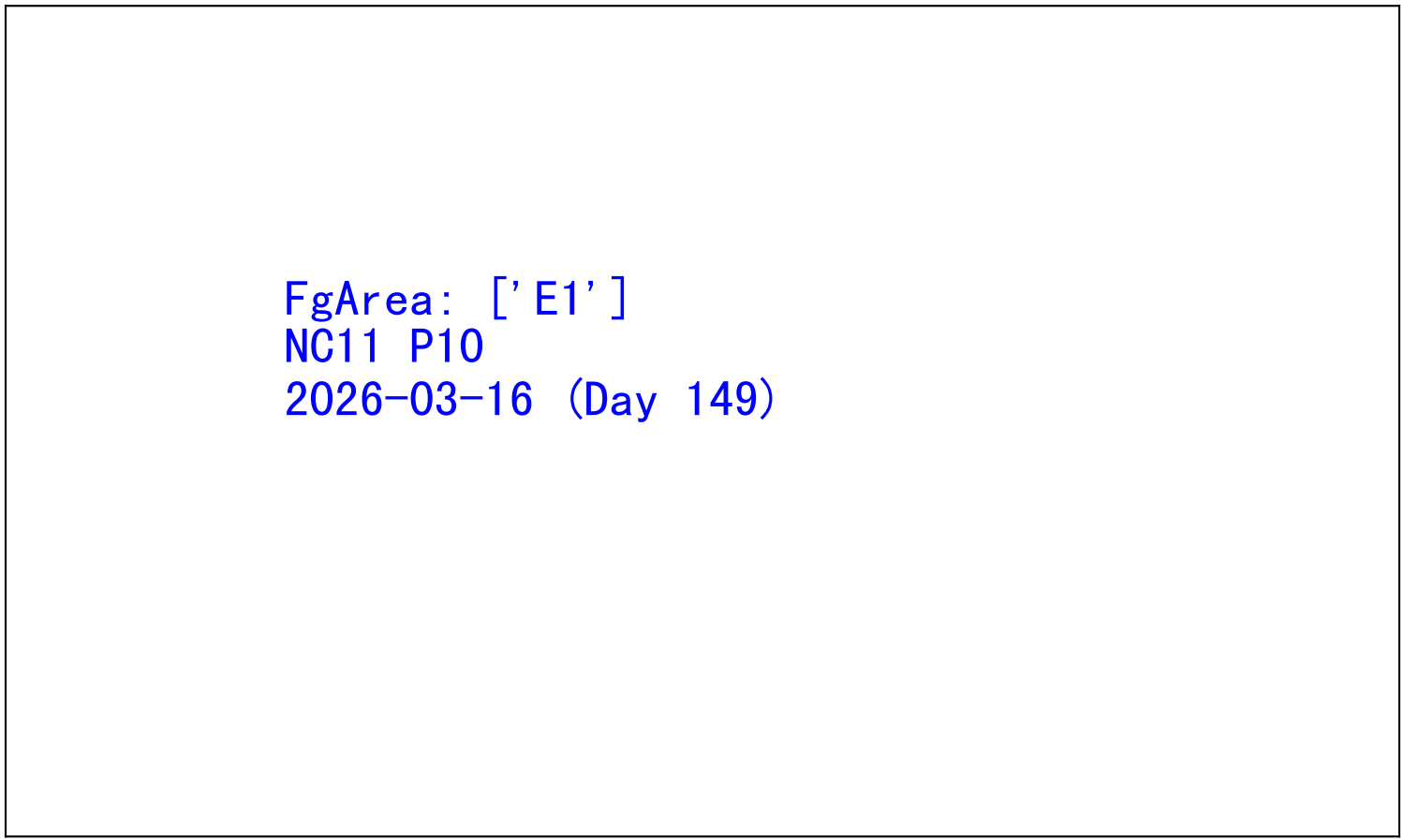
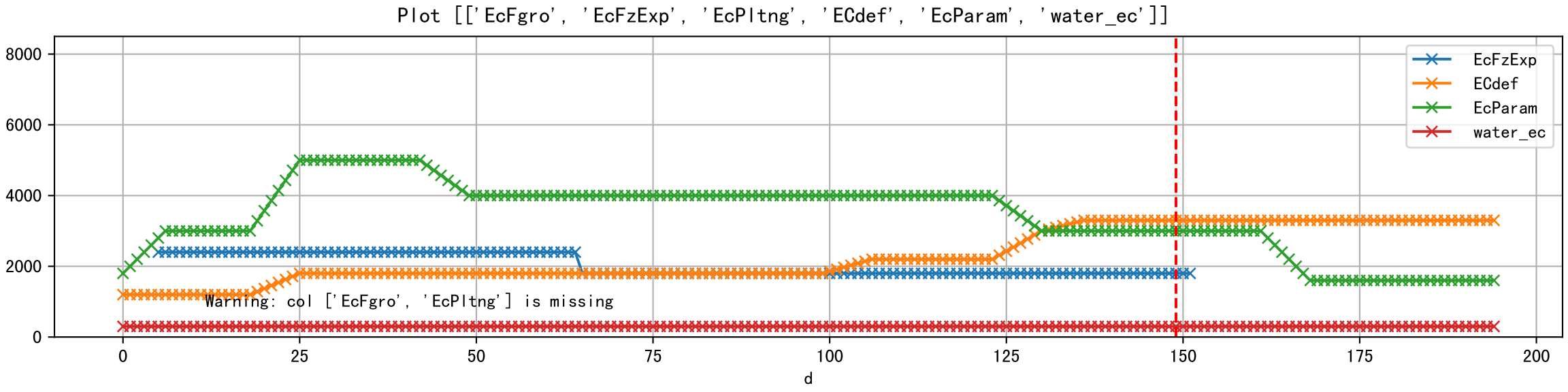
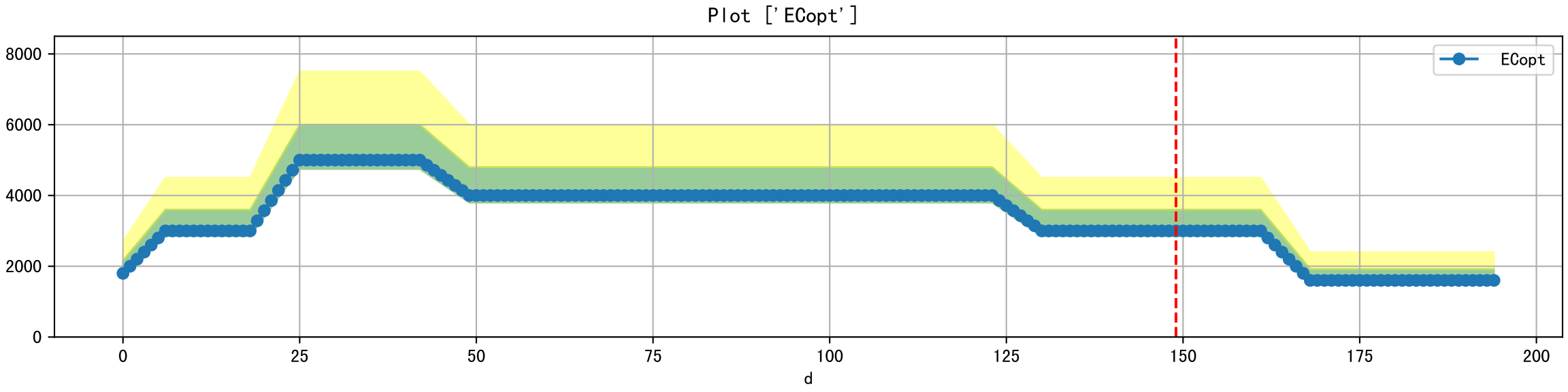
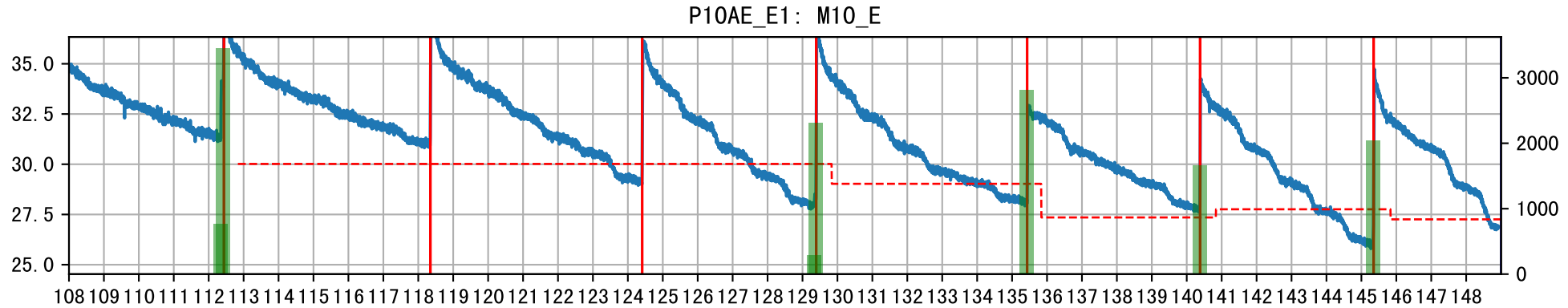
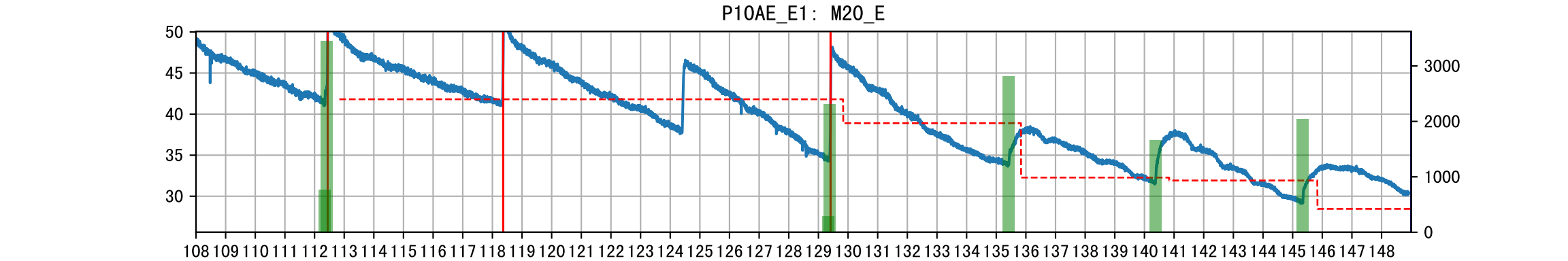
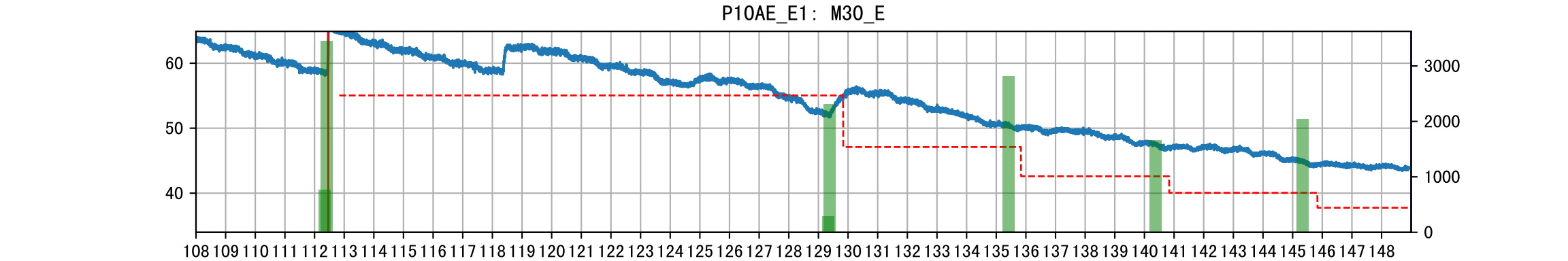

FgArea: ['E1']
NC11 P10
2026-03-16 (Day 149)

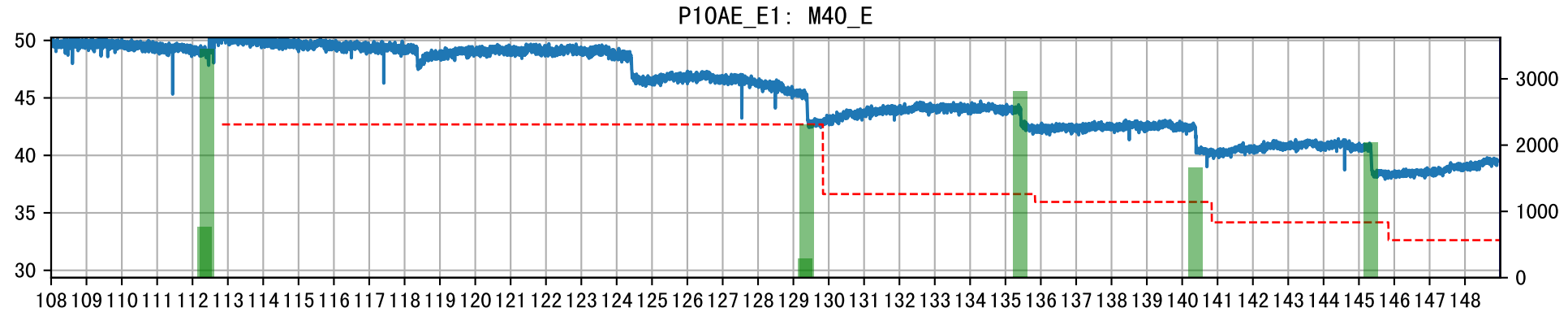

Plot [['EcFgro', 'EcFzExp', 'EcPltng', 'ECdef', 'EcParam', 'water_ec']]
EcFzExp
ECdef
EcParam
water_ec
Warning: col ['EcFgro', 'EcPltng'] is missing
8000
6000
4000
2000
0
0
25
50
75
100
125
150
175
200
d

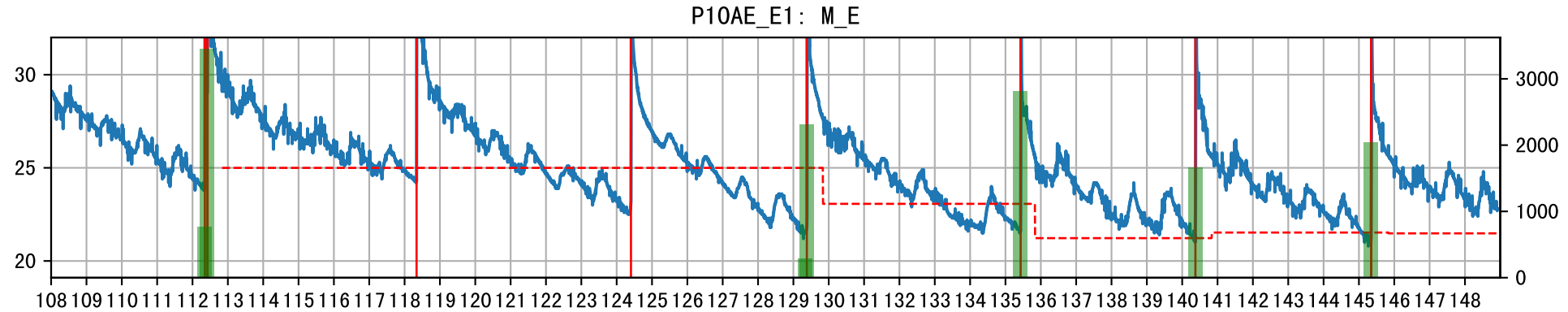

Plot ['ECopt']
ECopt
8000
6000
4000
2000
0
0
25
50
75
100
125
150
175
200
d


P10AE_E1: M10_E
35.0
32.5
30.0
27.5
25.0
3000
2000
1000
0
108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148

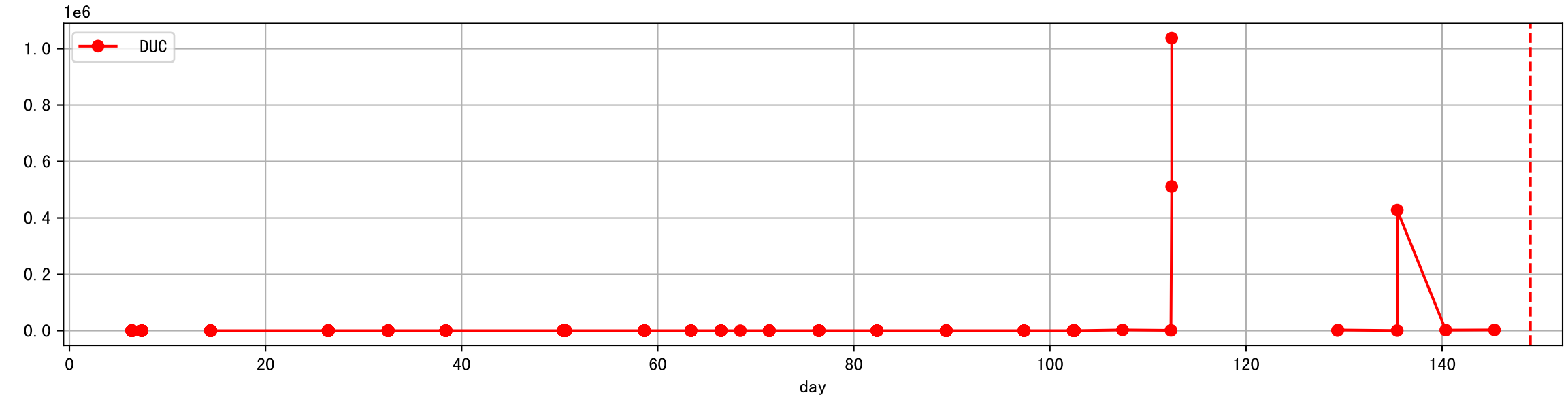

P10AE_E1: M20_E
50
45
40
35
30
3000
2000
1000
0
108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148

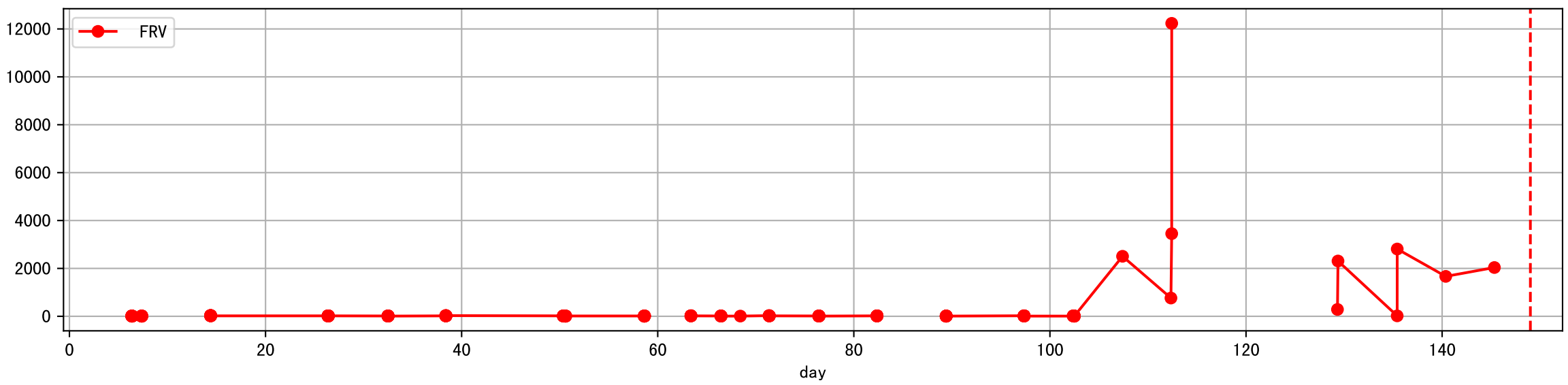

P10AE_E1: M30_E
60
50
40
3000
2000
1000
0
108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148

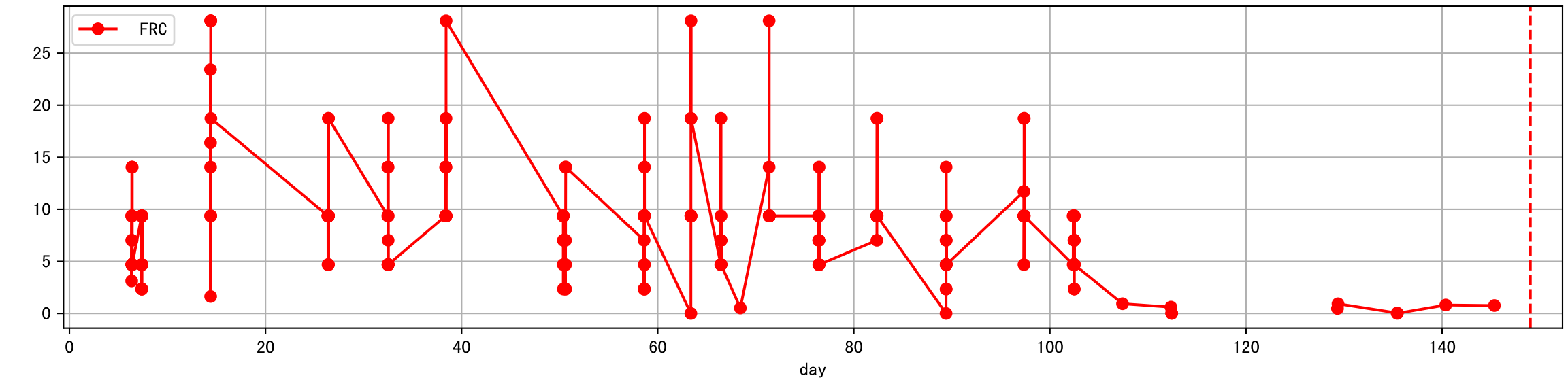

P10AE_E1: M40_E
50
45
40
35
30
3000
2000
1000
0
108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148

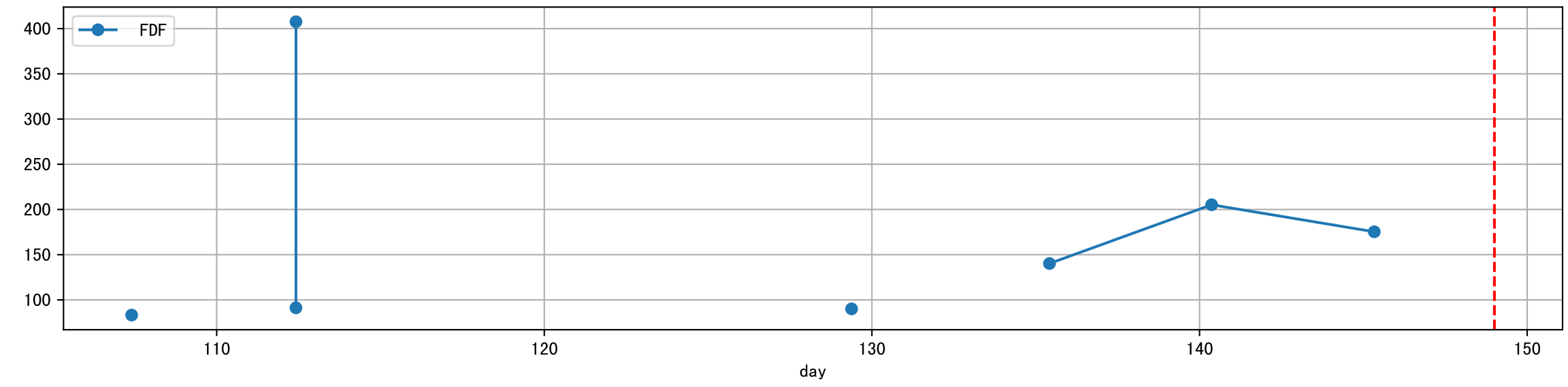

P10AE_E1: M_E
30
25
20
3000
2000
1000
0
108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148

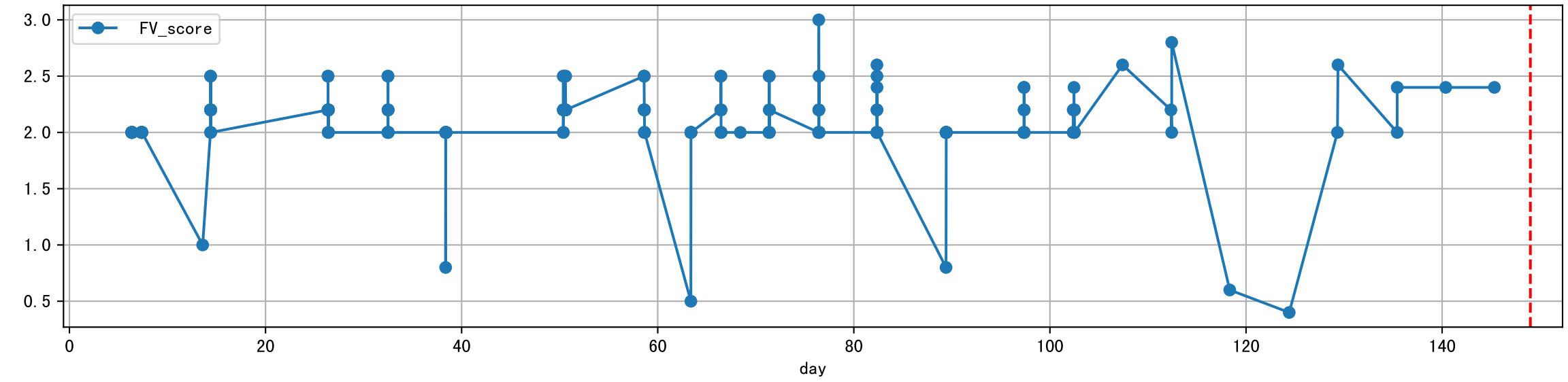
plot dfFv



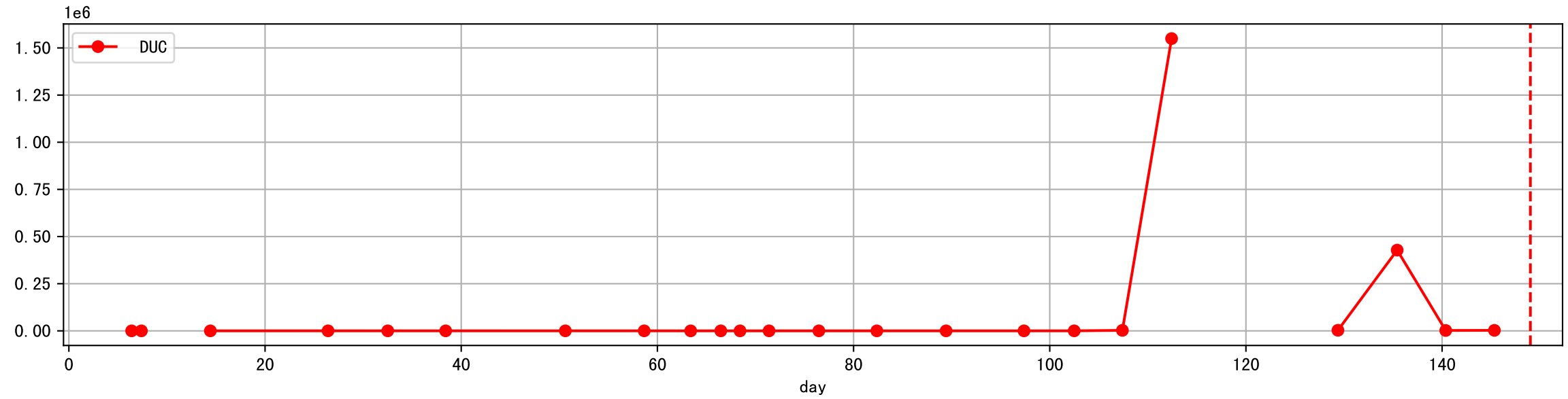


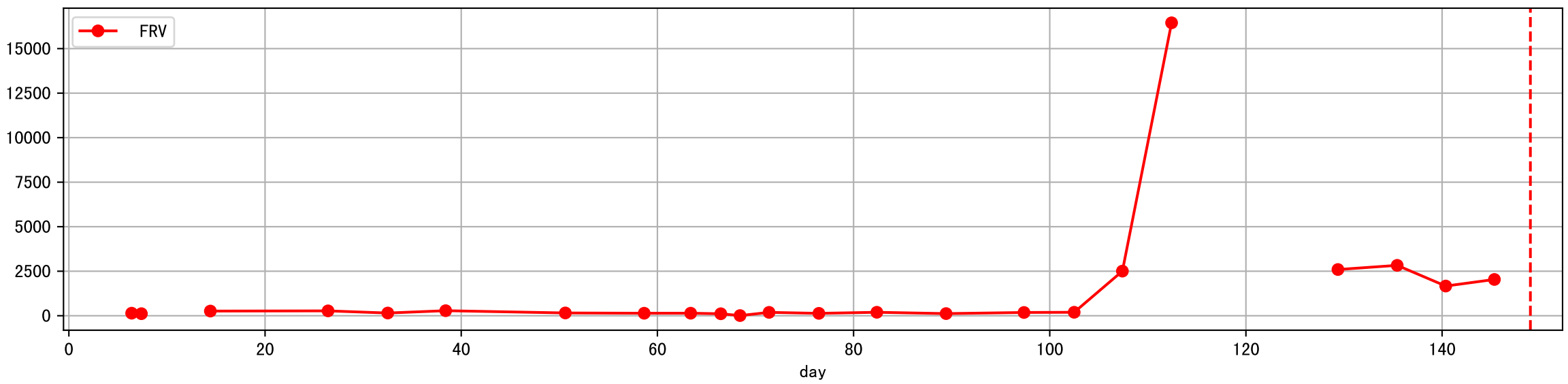


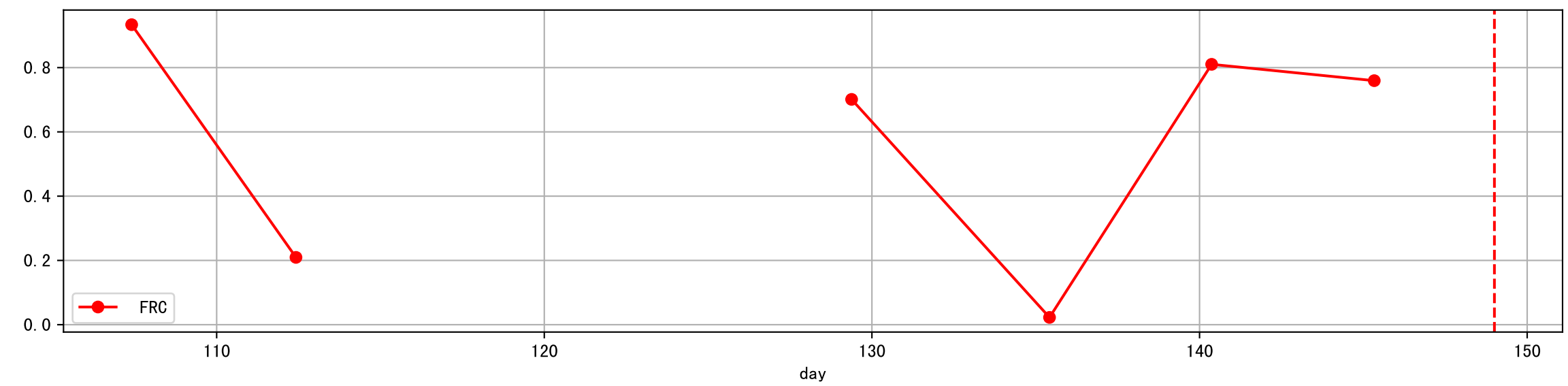


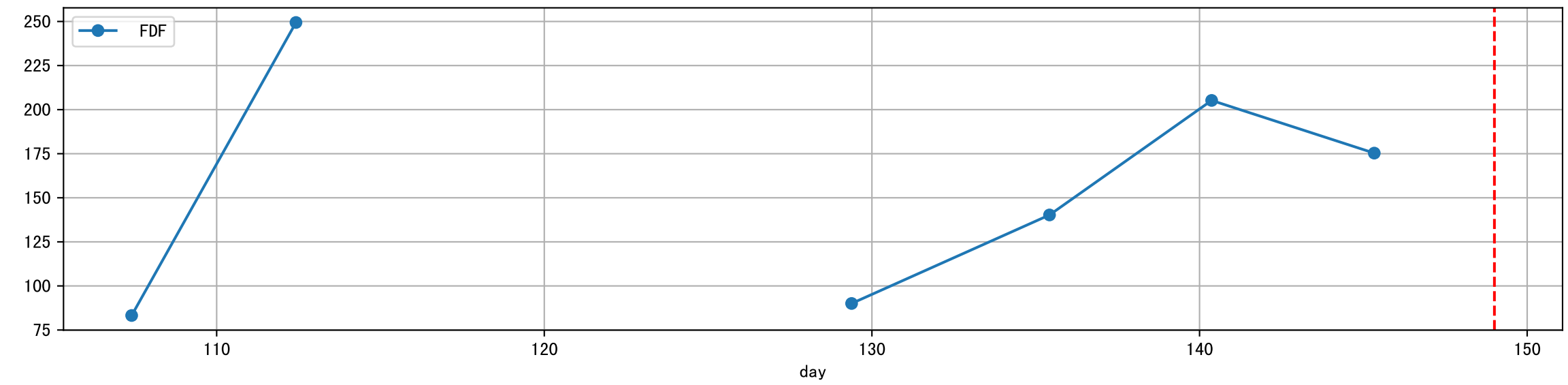


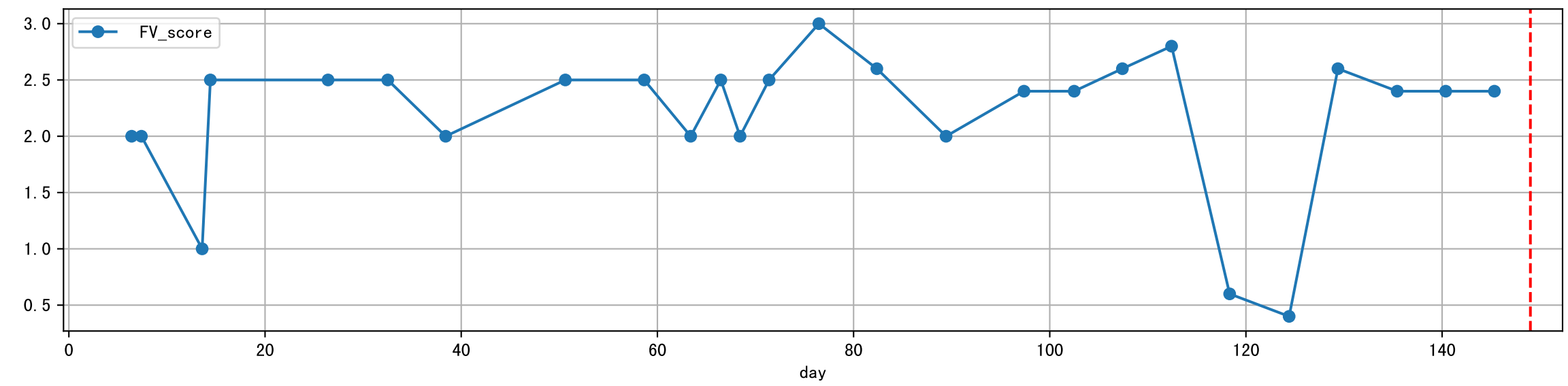
plot dfFv (daily Agg)

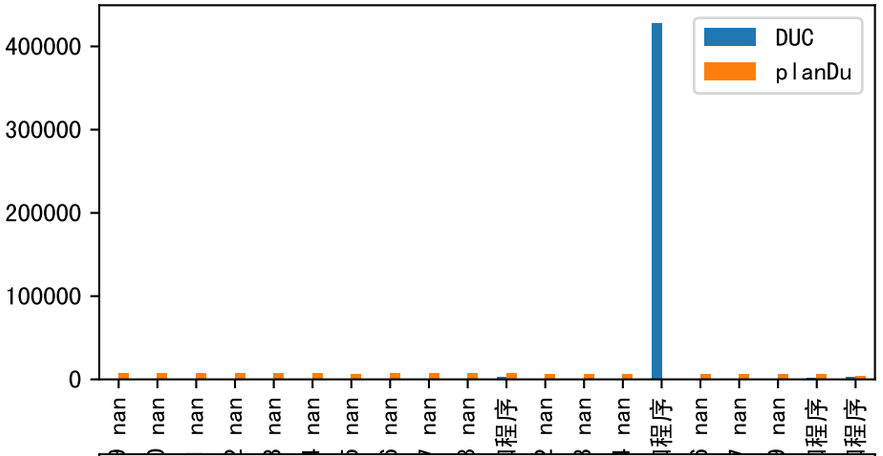


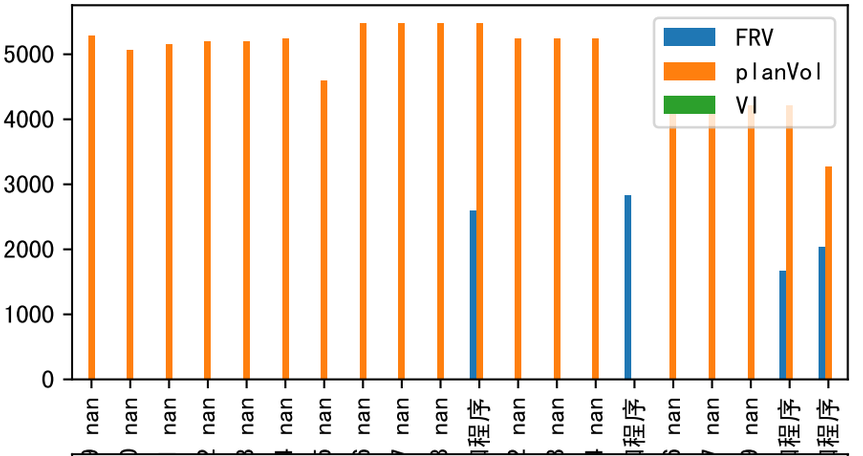


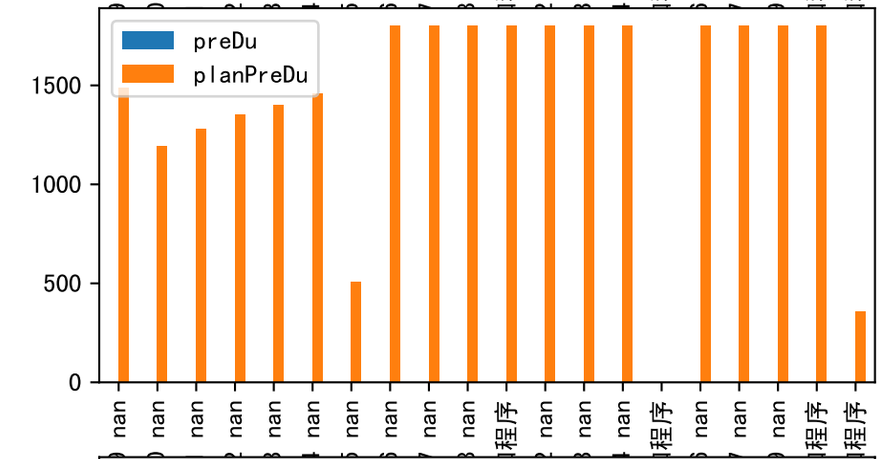


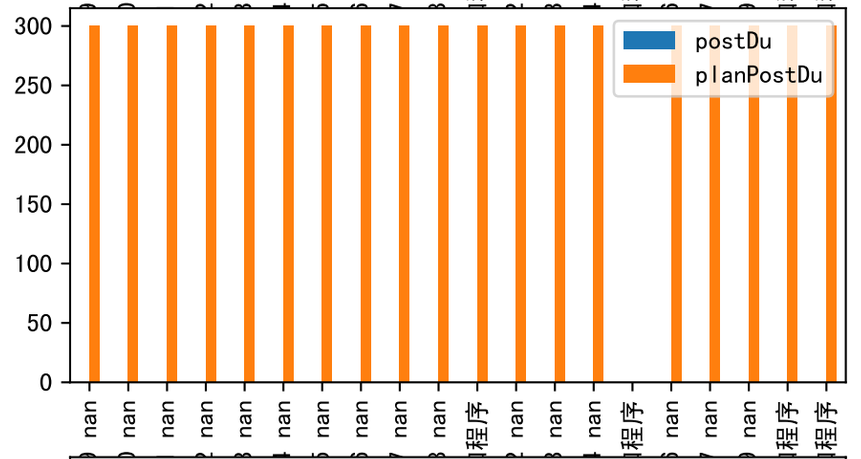


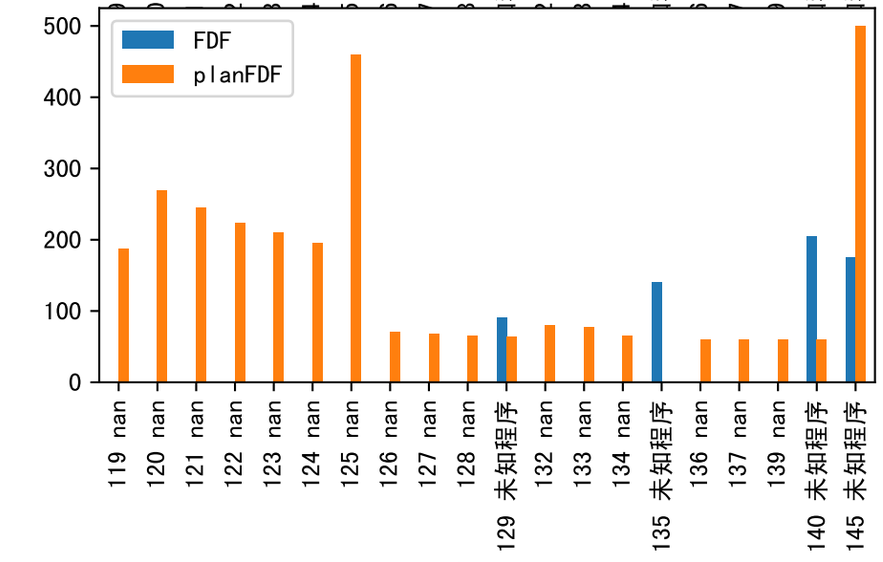


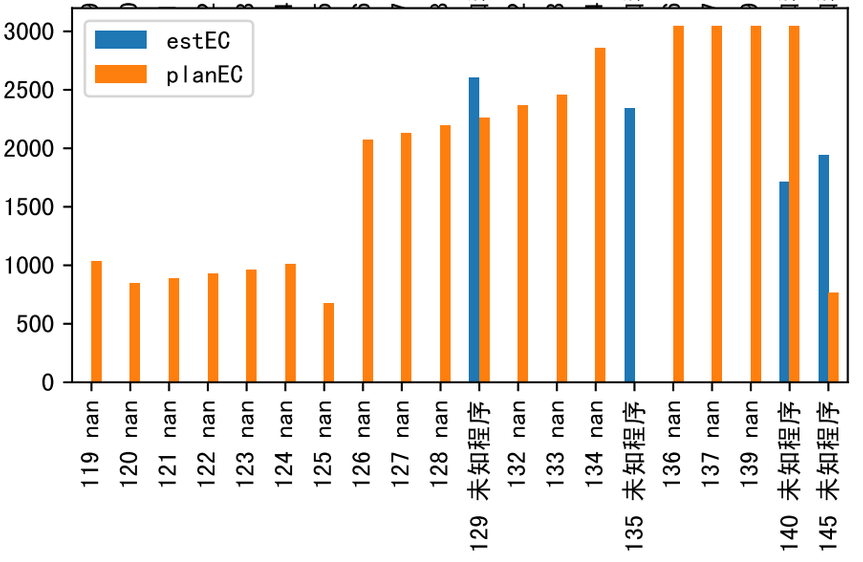

DUC
planDu
400000
300000
200000
100000
0

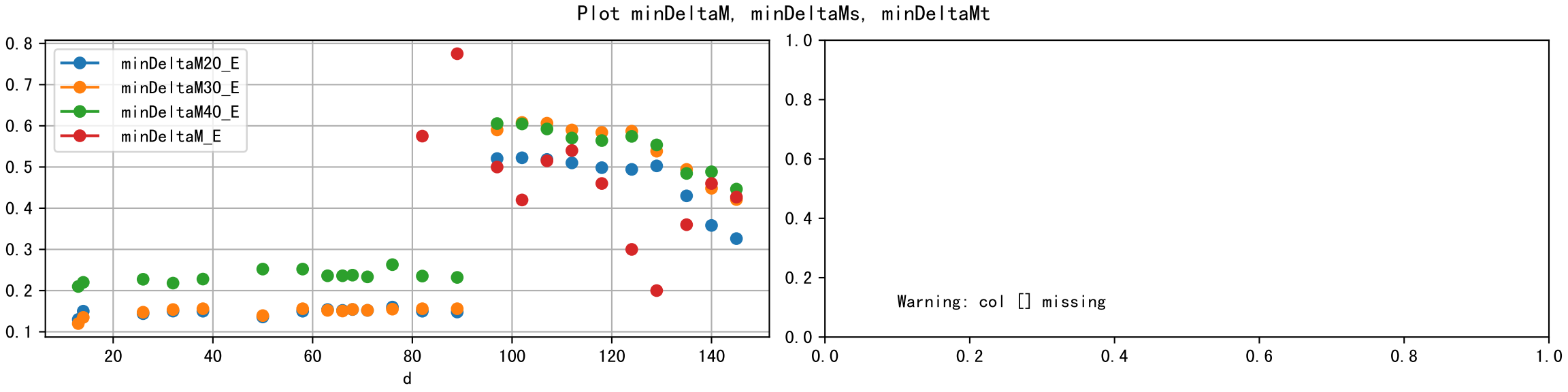

FRV
planVol
VI
5000
4000
3000
2000
1000
0

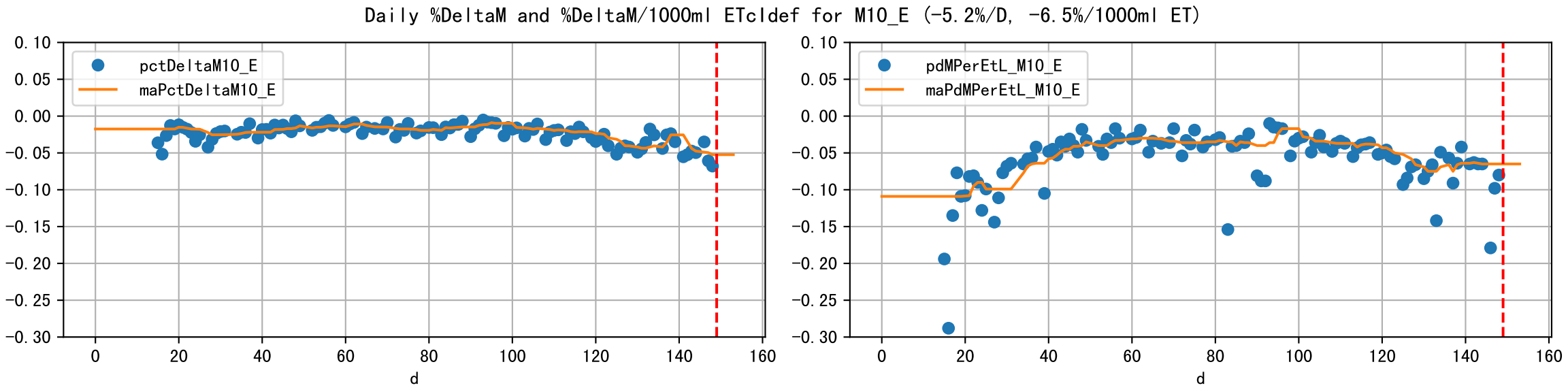

preDu
planPreDu
1500
1000
500
0

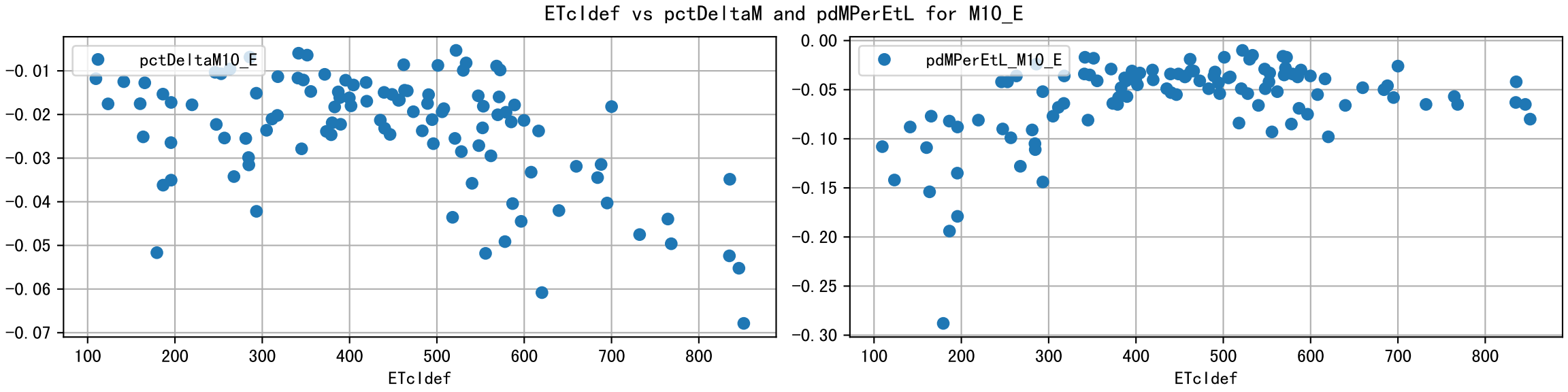

postDu
planPostDu
300
250
200
150
100
50
0

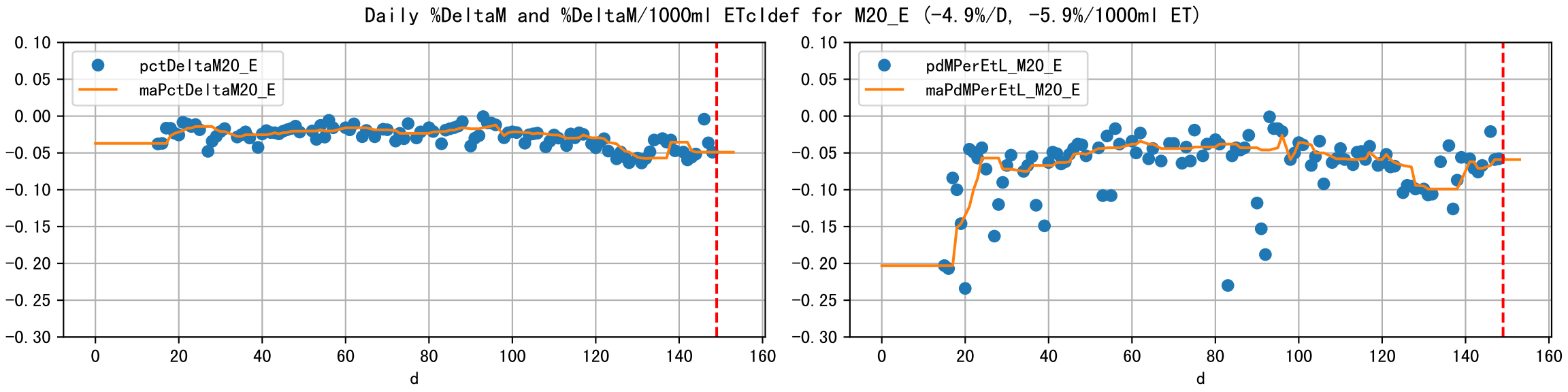

FDF
planFDF
500
400
300
200
100
0
119 nan
120 nan
121 nan
122 nan
123 nan
124 nan
125 nan
126 nan
127 nan
128 nan
129 未知程序
132 nan
133 nan
134 nan
135 未知程序
136 nan
137 nan
139 nan
140 未知程序
145 未知程序

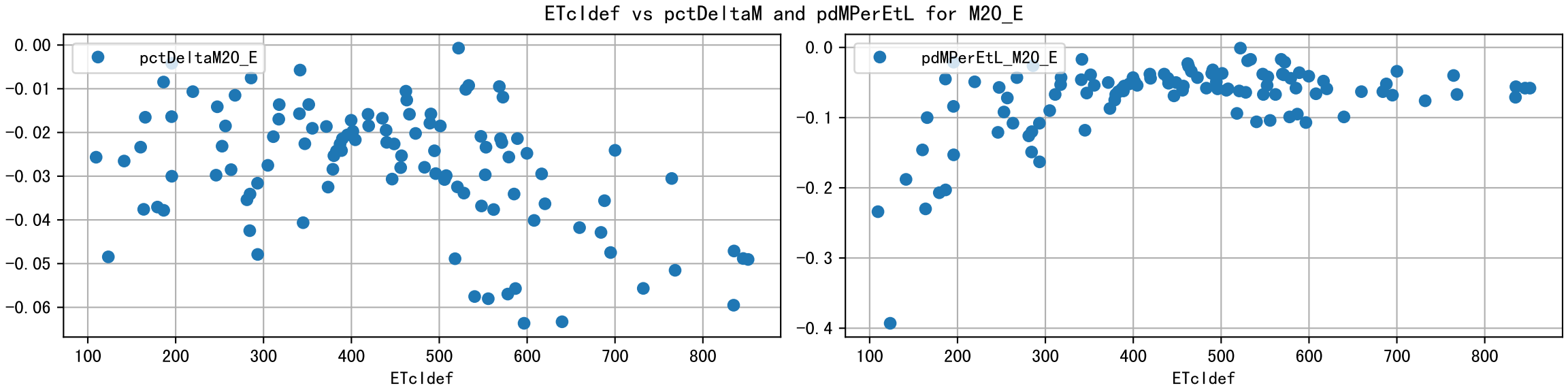

estEC
planEC
3000
2500
2000
1500
1000
500
0
119 nan
120 nan
121 nan
122 nan
123 nan
124 nan
125 nan
126 nan
127 nan
128 nan
129 未知程序
132 nan
133 nan
134 nan
135 未知程序
136 nan
137 nan
139 nan
140 未知程序
145 未知程序

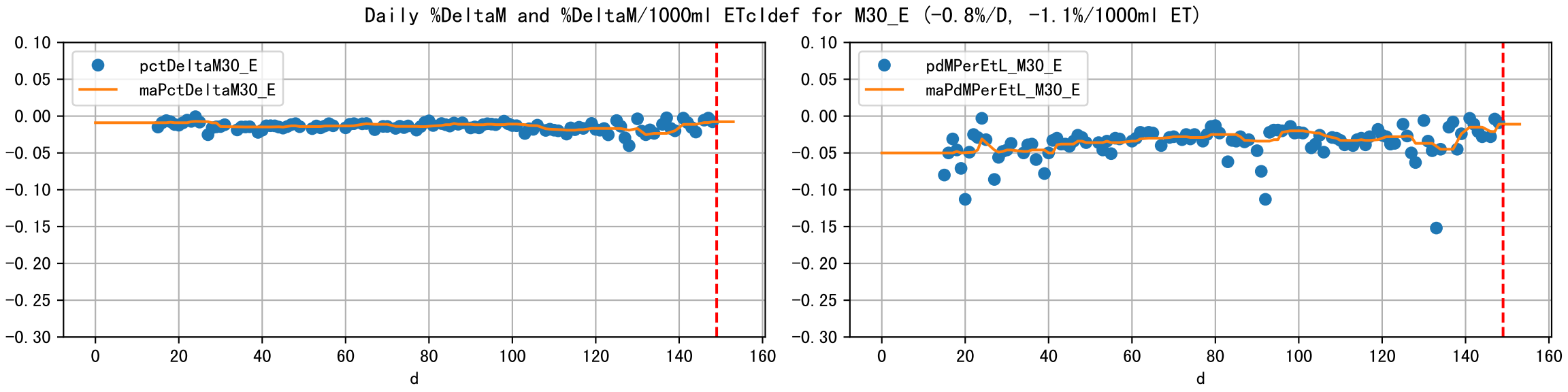

Plot minDeltaM, minDeltaMs, minDeltaMt
minDeltaM20_E
minDeltaM30_E
minDeltaM40_E
minDeltaM_E
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
20
40
60
80
100
120
140
d
1.0
0.8
0.6
0.4
0.2
0.0
0.0
0.2
0.4
0.6
0.8
1.0
Warning: col [] missing

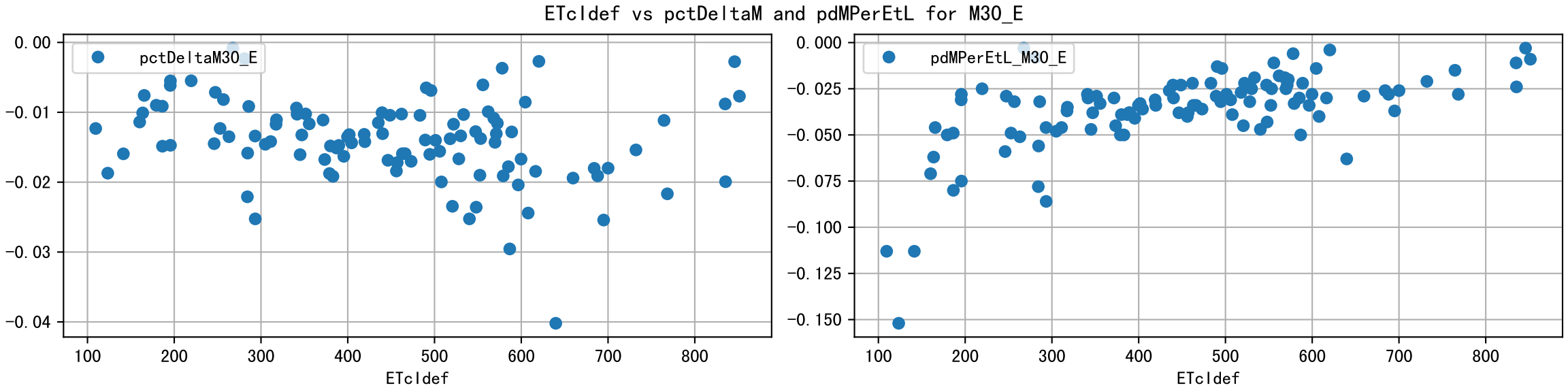

Daily %DeltaM and %DeltaM/1000ml ETcIdef for M10_E (-5.2%/D, -6.5%/1000ml ET)
pctDeltaM10_E
maPctDeltaM10_E
pdMPerEtL_M10_E
maPdMPerEtL_M10_E
d
d

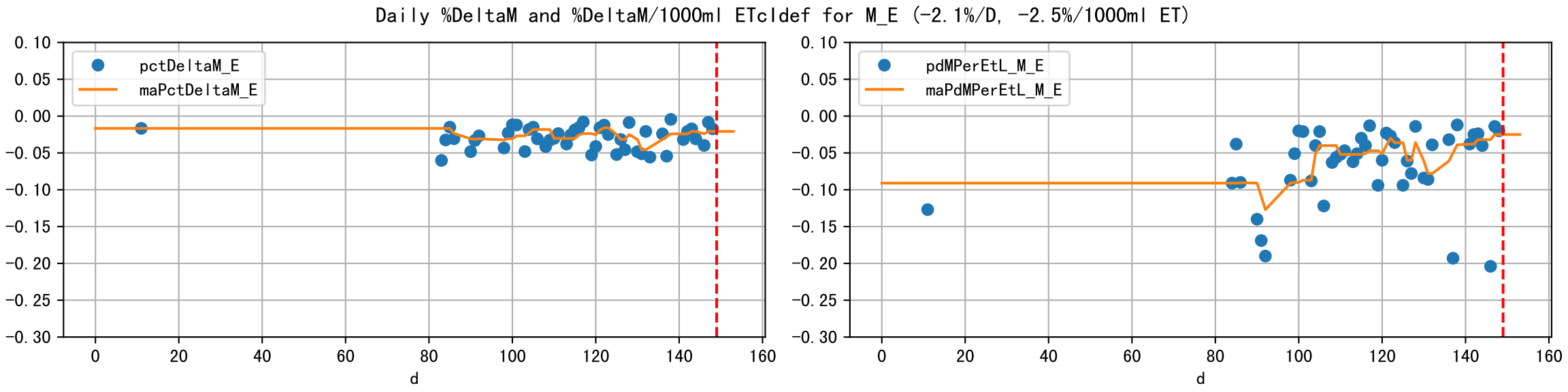

ETcIdef vs pctDeltaM and pdMPerEtL for M10_E
pctDeltaM10_E
-0.01
-0.02
-0.03
-0.04
-0.05
-0.06
-0.07
100
200
300
400
500
600
700
800
ETcIdef
pdMPerEtL_M10_E
0.00
-0.05
-0.10
-0.15
-0.20
-0.25
-0.30
100
200
300
400
500
600
700
800
ETcIdef

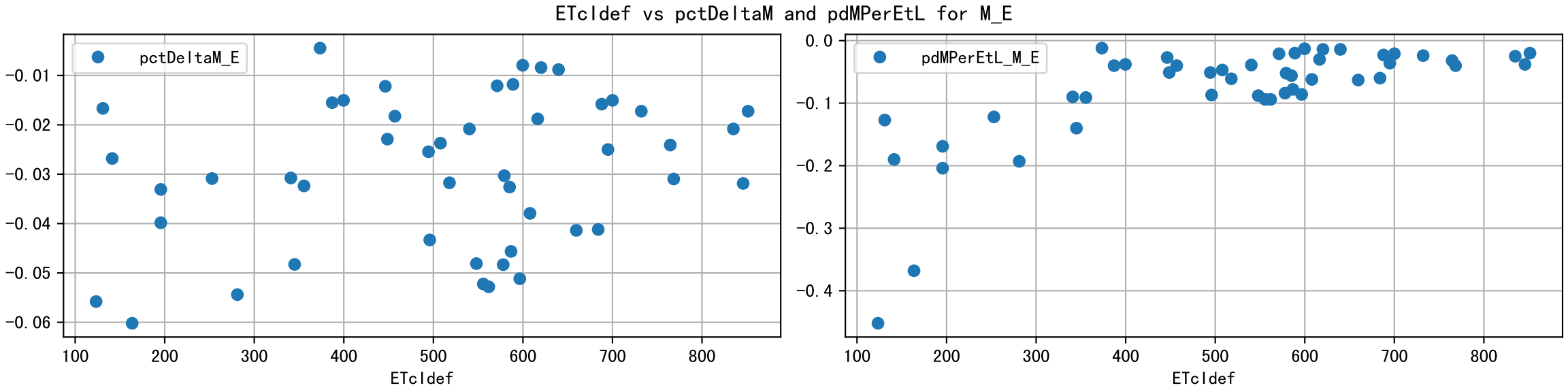

Daily %DeltaM and %DeltaM/1000ml ETcIdef for M20_E (-4.9%/D, -5.9%/1000ml ET)
pctDeltaM20_E
maPctDeltaM20_E
pdMPerEtL_M20_E
maPdMPerEtL_M20_E
0.10
0.05
0.00
-0.05
-0.10
-0.15
-0.20
-0.25
-0.30
0
20
40
60
80
100
120
140
160
d

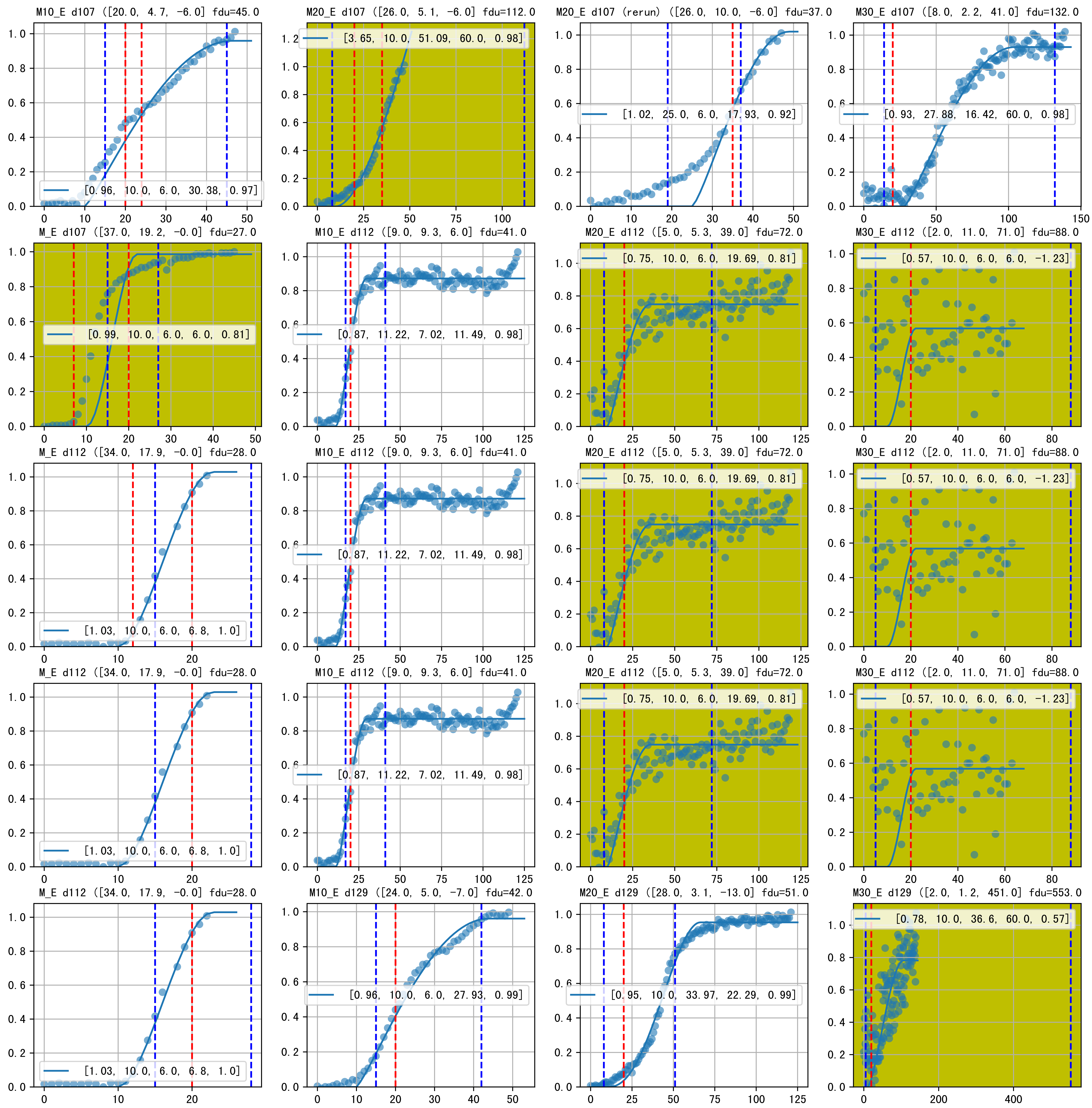

ETcIdef vs pctDeltaM and pdMPerEtL for M20_E
pctDeltaM20_E
0.00
-0.01
-0.02
-0.03
-0.04
-0.05
-0.06
100
200
300
400
500
600
700
800
ETcIdef
pdMPerEtL_M20_E
0.0
-0.1
-0.2
-0.3
-0.4
100
200
300
400
500
600
700
800
ETcIdef

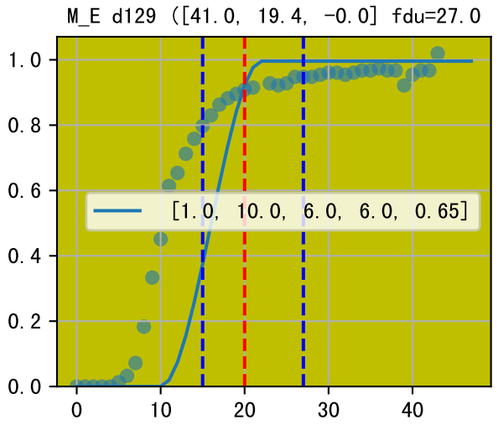

Daily %DeltaM and %DeltaM/1000ml ETcIdef for M30_E (-0.8%/D, -1.1%/1000ml ET)
pctDeltaM30_E
maPctDeltaM30_E
pdMPerEtL_M30_E
maPdMPerEtL_M30_E
0.10
0.05
0.00
-0.05
-0.10
-0.15
-0.20
-0.25
-0.30
0
20
40
60
80
100
120
140
160
d

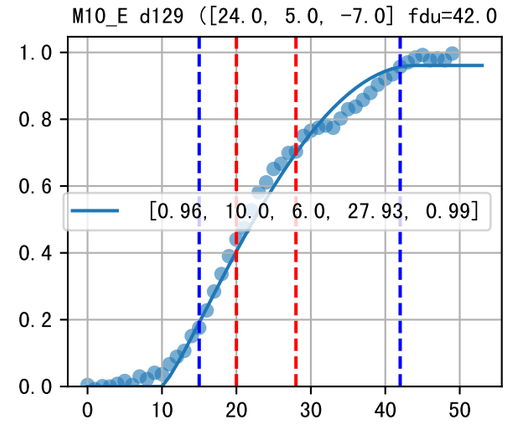

ETcIdef vs pctDeltaM and pdMPerEtL for M30_E
pctDeltaM30_E
0.00
−0.01
−0.02
−0.03
−0.04
100
200
300
400
500
600
700
800
ETcIdef
pdMPerEtL_M30_E
0.000
−0.025
−0.050
−0.075
−0.100
−0.125
−0.150
100
200
300
400
500
600
700
800
ETcIdef

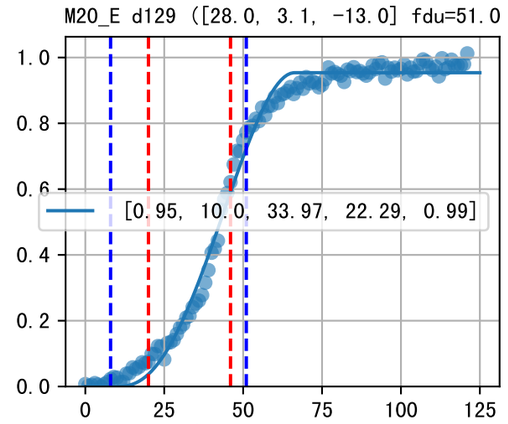

Daily %DeltaM and %DeltaM/1000ml ETcldef for M_E (-2.1%/D, -2.5%/1000ml ET)
pctDeltaM_E
maPctDeltaM_E
pdMPerEtL_M_E
maPdMPerEtL_M_E
0.10
0.05
0.00
-0.05
-0.10
-0.15
-0.20
-0.25
-0.30
0
20
40
60
80
100
120
140
160
d

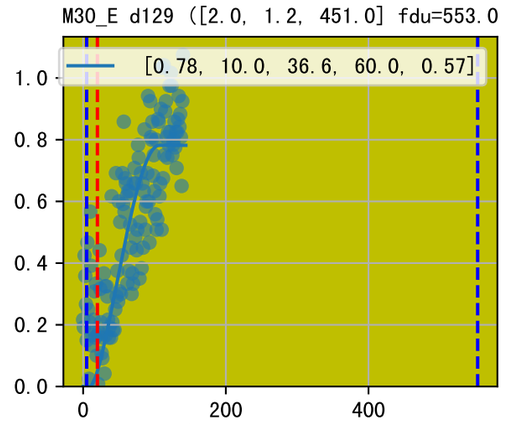

ETcIdef vs pctDeltaM and pdMPerEtL for M_E
pctDeltaM_E
pdMPerEtL_M_E
ETcIdef
ETcIdef
-0.01
-0.02
-0.03
-0.04
-0.05
-0.06
0.0
-0.1
-0.2
-0.3
-0.4
100
200
300
400
500
600
700
800

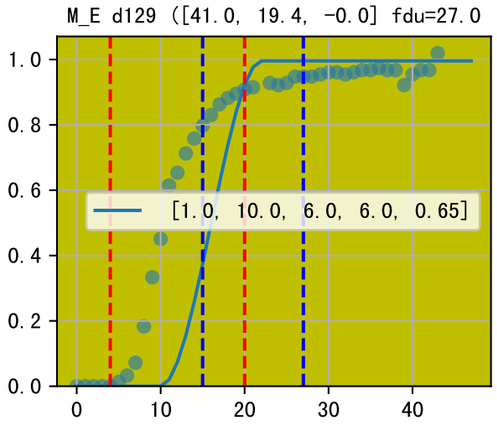

M10_E d107 ([20.0, 4.7, -6.0] fdu=45.0
[0.96, 10.0, 6.0, 30.38, 0.97]
M20_E d107 ([26.0, 5.1, -6.0] fdu=112.0
[3.65, 10.0, 51.09, 60.0, 0.98]
M20_E d107 (rerun) ([26.0, 10.0, -6.0] fdu=37.0
[1.02, 25.0, 6.0, 17.93, 0.92]
M30_E d107 ([8.0, 2.2, 41.0] fdu=132.0
[0.93, 27.88, 16.42, 60.0, 0.98]
M_E d107 ([37.0, 19.2, -0.0] fdu=27.0
[0.99, 10.0, 6.0, 6.0, 0.81]
M10_E d112 ([9.0, 9.3, 6.0] fdu=41.0
[0.87, 11.22, 7.02, 11.49, 0.98]
M20_E d112 ([5.0, 5.3, 39.0] fdu=72.0
[0.75, 10.0, 6.0, 19.69, 0.81]
M30_E d112 ([2.0, 11.0, 71.0] fdu=88.0
[0.57, 10.0, 6.0, 6.0, -1.23]
M_E d112 ([34.0, 17.9, -0.0] fdu=28.0
[1.03, 10.0, 6.0, 6.8, 1.0]
M10_E d112 ([9.0, 9.3, 6.0] fdu=41.0
[0.87, 11.22, 7.02, 11.49, 0.98]
M20_E d112 ([5.0, 5.3, 39.0] fdu=72.0
[0.75, 10.0, 6.0, 19.69, 0.81]
M30_E d112 ([2.0, 11.0, 71.0] fdu=88.0
[0.57, 10.0, 6.0, 6.0, -1.23]
M_E d112 ([34.0, 17.9, -0.0] fdu=28.0
[1.03, 10.0, 6.0, 6.8, 1.0]
M10_E d112 ([9.0, 9.3, 6.0] fdu=41.0
[0.87, 11.22, 7.02, 11.49, 0.98]
M20_E d112 ([5.0, 5.3, 39.0] fdu=72.0
[0.75, 10.0, 6.0, 19.69, 0.81]
M30_E d112 ([2.0, 11.0, 71.0] fdu=88.0
[0.57, 10.0, 6.0, 6.0, -1.23]
M_E d112 ([34.0, 17.9, -0.0] fdu=28.0
[1.03, 10.0, 6.0, 6.8, 1.0]
M10_E d129 ([24.0, 5.0, -7.0] fdu=42.0
[0.96, 10.0, 6.0, 27.93, 0.99]
M20_E d129 ([28.0, 3.1, -13.0] fdu=51.0
[0.95, 10.0, 33.97, 22.29, 0.99]
M30_E d129 ([2.0, 1.2, 451.0] fdu=553.0
[0.78, 10.0, 36.6, 60.0, 0.57]

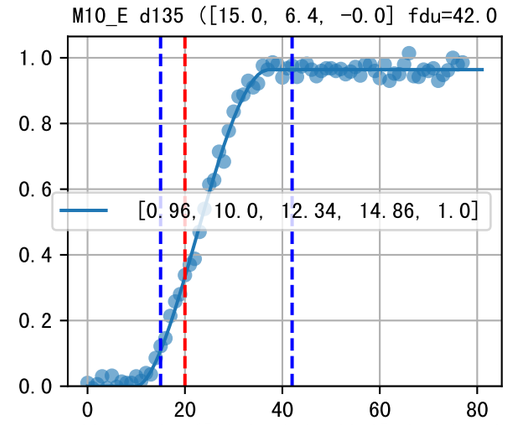

M_E d129 ([41.0, 19.4, -0.0] fdu=27.0
[1.0, 10.0, 6.0, 6.0, 0.65]

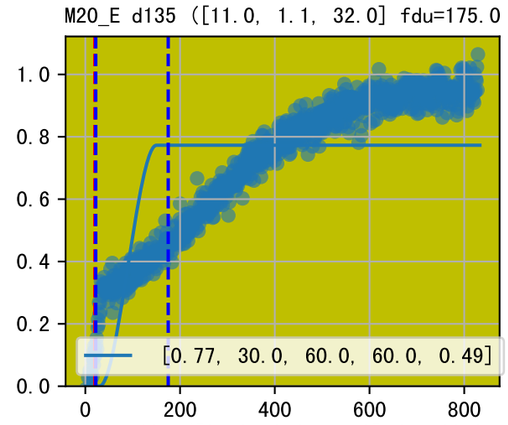

M10_E d129 ([24.0, 5.0, -7.0] fdu=42.0
[0.96, 10.0, 6.0, 27.93, 0.99]

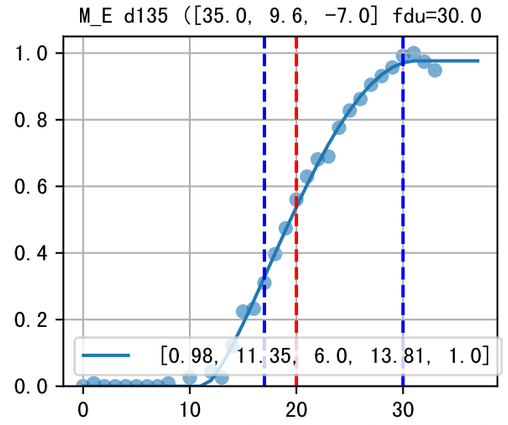

M20_E d129 ([28.0, 3.1, -13.0] fdu=51.0
[0.95, 10.0, 33.97, 22.29, 0.99]

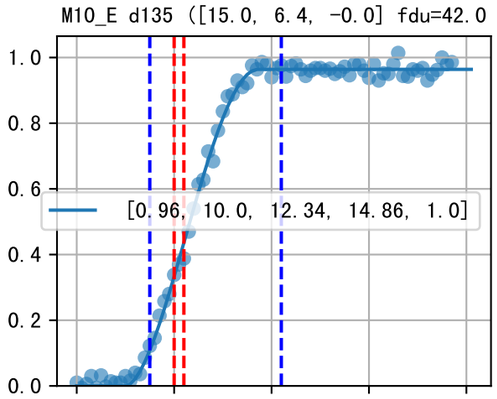

M30_E d129 ([2.0, 1.2, 451.0] fdu=553.0
[0.78, 10.0, 36.6, 60.0, 0.57]

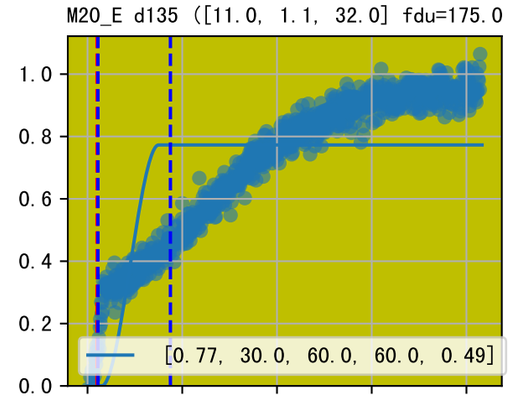

M_E d129 ([41.0, 19.4, -0.0] fdu=27.0
[1.0, 10.0, 6.0, 6.0, 0.65]

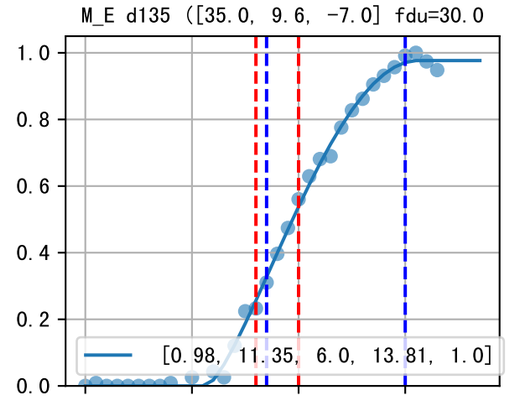

M10_E d135 ([15.0, 6.4, -0.0] fdu=42.0
[0.96, 10.0, 12.34, 14.86, 1.0]

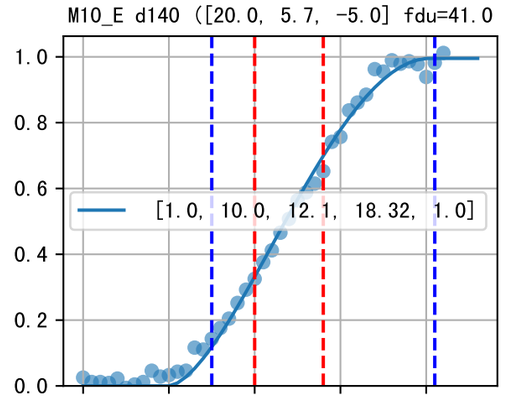

M20_E d135 ([11.0, 1.1, 32.0] fdu=175.0
[0.77, 30.0, 60.0, 60.0, 0.49]

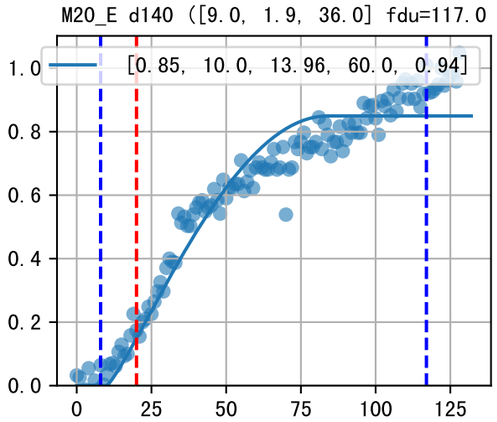

M_E d135 ([35.0, 9.6, -7.0] fdu=30.0
[0.98, 11.35, 6.0, 13.81, 1.0]

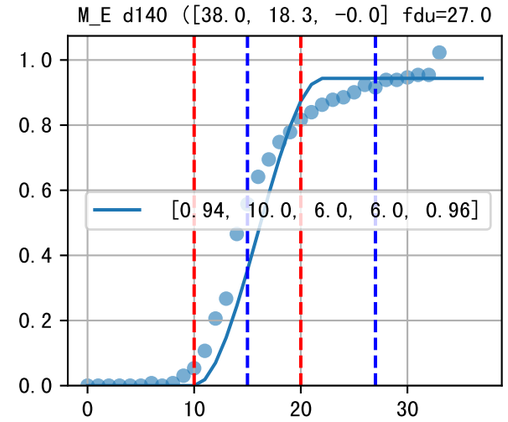

M10_E d135 ([15.0, 6.4, -0.0] fdu=42.0
[0.96, 10.0, 12.34, 14.86, 1.0]

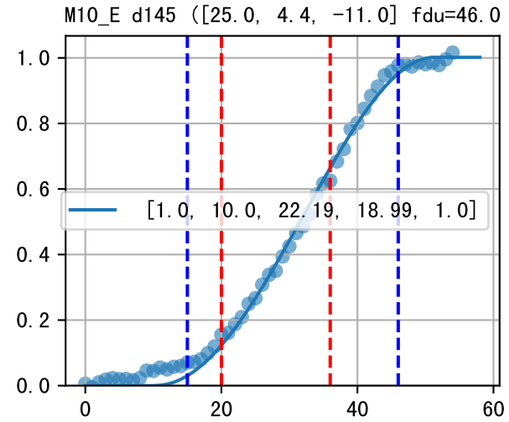

M20_E d135 ([11.0, 1.1, 32.0] fdu=175.0
[0.77, 30.0, 60.0, 60.0, 0.49]

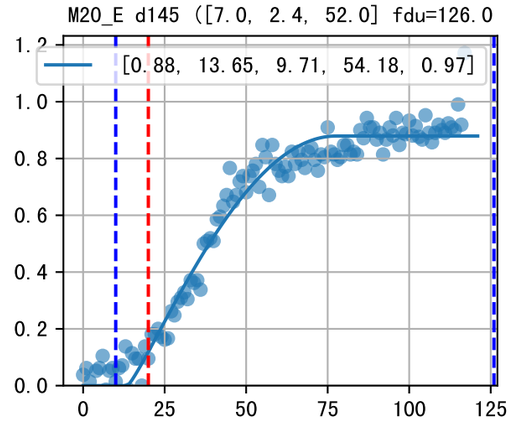

M_E d135 ([35.0, 9.6, -7.0] fdu=30.0
[0.98, 11.35, 6.0, 13.81, 1.0]

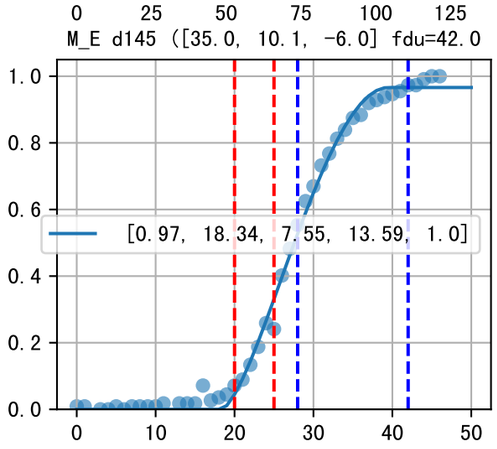

M10_E d140 ([20.0, 5.7, -5.0] fdu=41.0
[1.0, 10.0, 12.1, 18.32, 1.0]

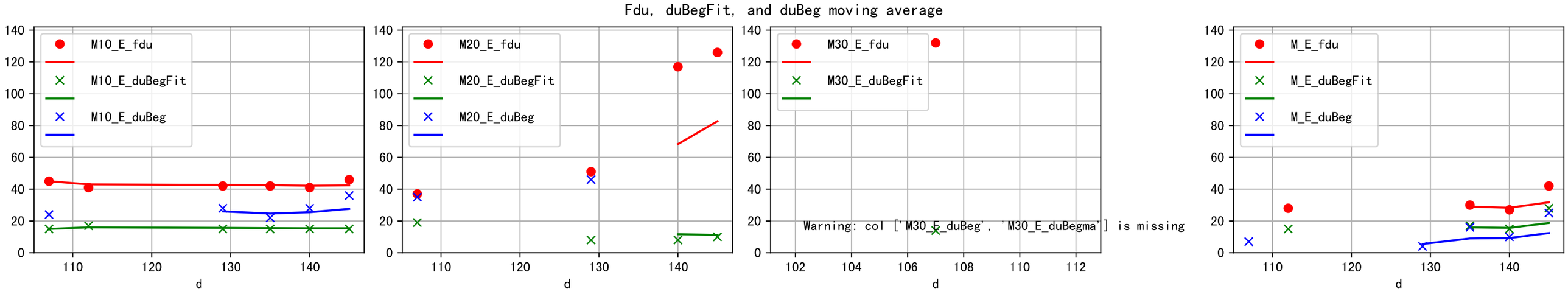

M20_E d140 ([9.0, 1.9, 36.0] fdu=117.0
[0.85, 10.0, 13.96, 60.0, 0.94]

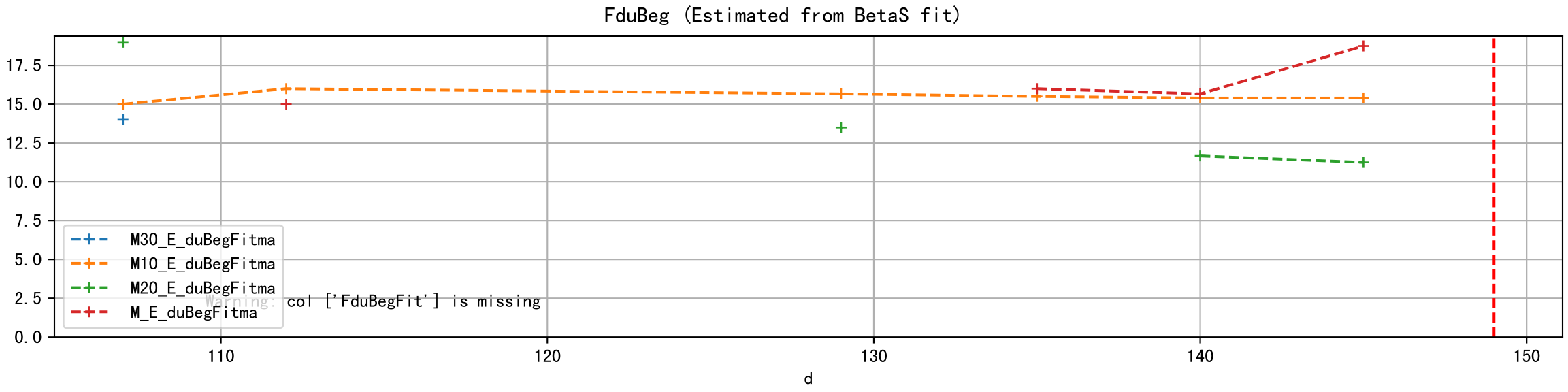

M_E d140 ([38.0, 18.3, -0.0] fdu=27.0
[0.94, 10.0, 6.0, 6.0, 0.96]

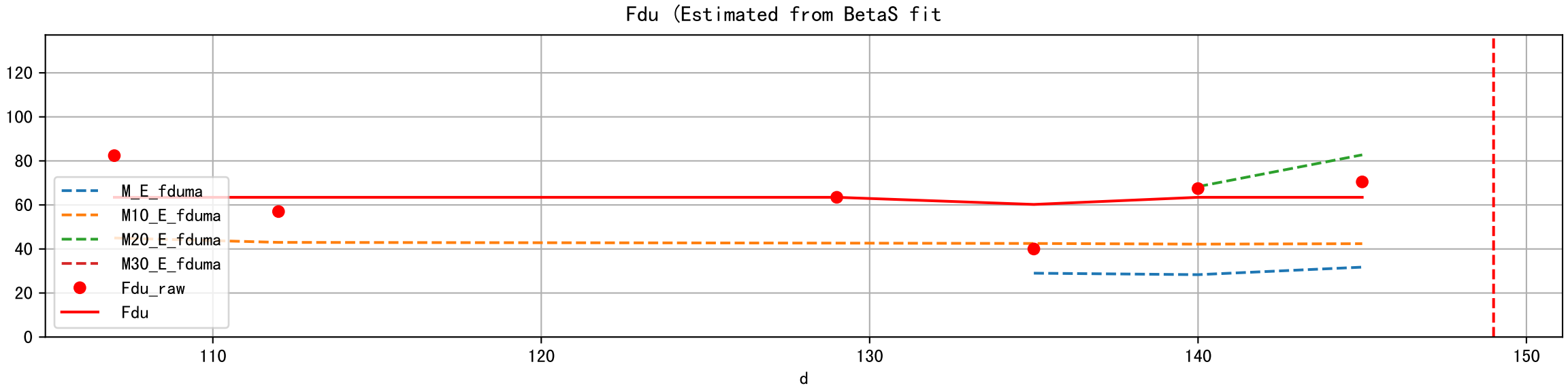

M10_E d145 ([25.0, 4.4, -11.0] fdu=46.0
[1.0, 10.0, 22.19, 18.99, 1.0]

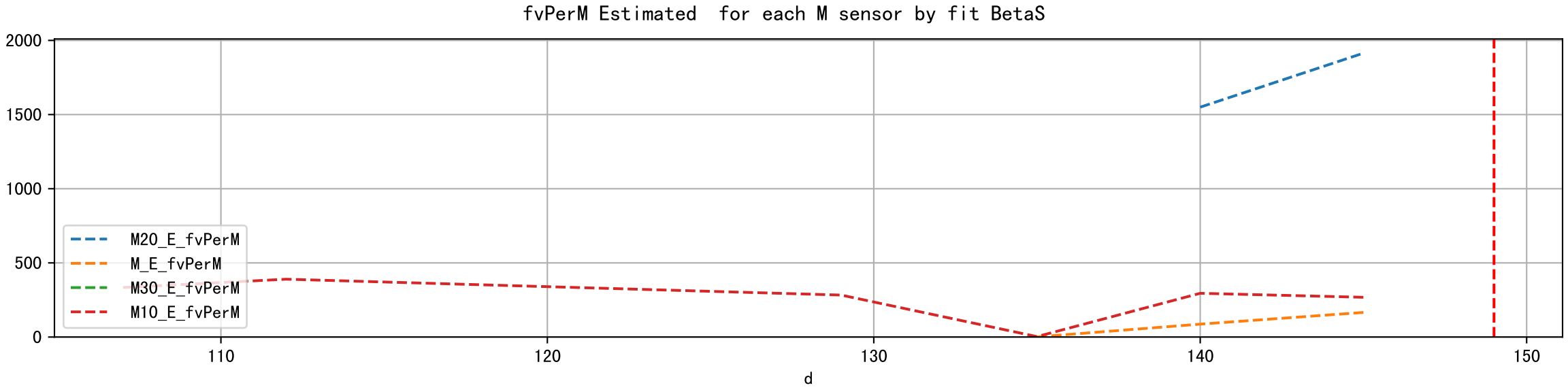

M20_E d145 ([7.0, 2.4, 52.0] fdu=126.0
[0.88, 13.65, 9.71, 54.18, 0.97]

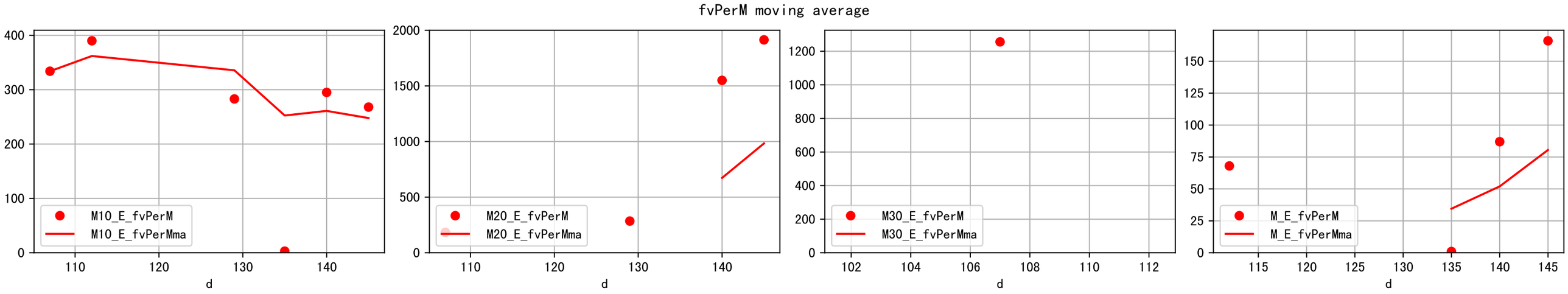

M_E d145 ([35.0, 10.1, -6.0] fdu=42.0
[0.97, 18.34, 7.55, 13.59, 1.0]

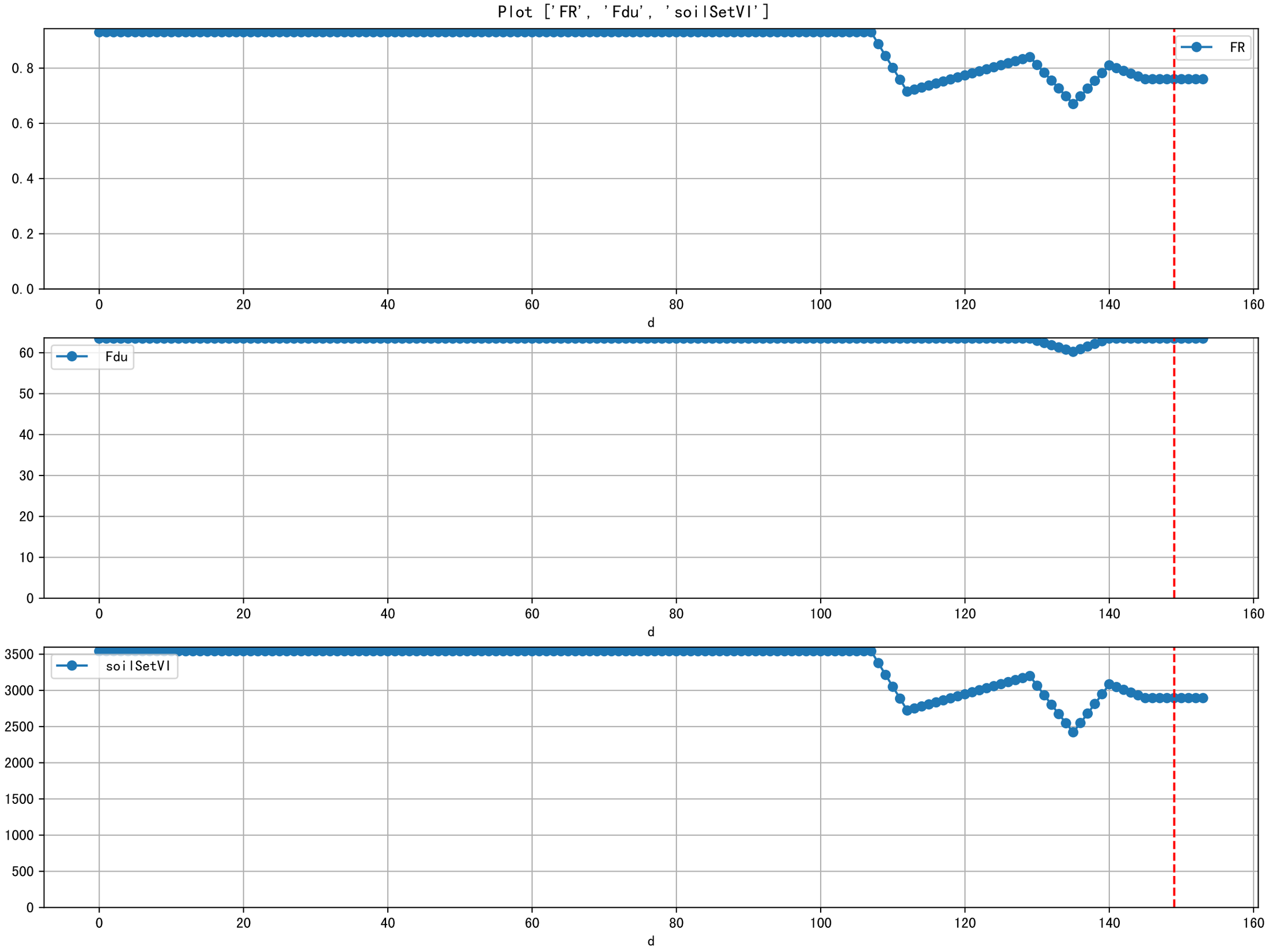

Fdu, duBegFit, and duBeg moving average
M10_E_fdu
M10_E_duBegFit
M10_E_duBeg
M20_E_fdu
M20_E_duBegFit
M20_E_duBeg
M30_E_fdu
M30_E_duBegFit
Warning: col ['M30_E_duBeg', 'M30_E_duBegma'] is missing
M_E_fdu
M_E_duBegFit
M_E_duBeg
d


FduBeg (Estimated from BetaS fit)
17.5
15.0
12.5
10.0
7.5
5.0
2.5
0.0
110
120
130
140
150
d
M30_E_duBegFitma
M10_E_duBegFitma
M20_E_duBegFitma
M_E_duBegFitma
Warning: col ['FduBegFit'] is missing

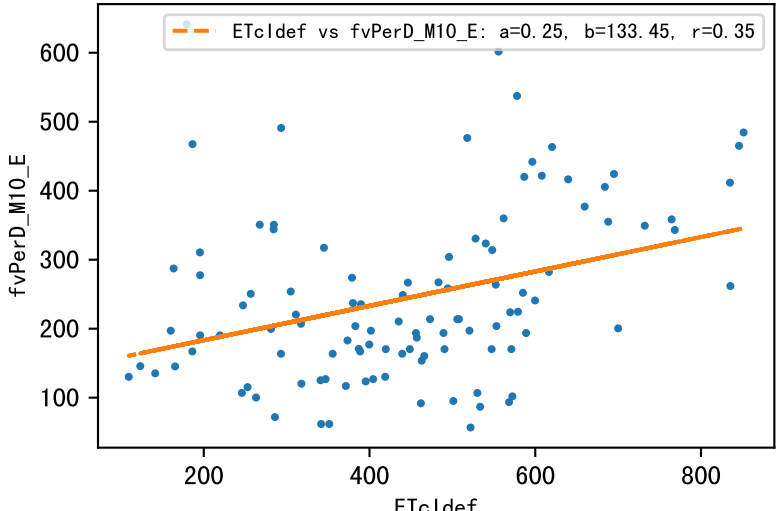

Fdu (Estimated from BetaS fit
M_E_fduma
M10_E_fduma
M20_E_fduma
M30_E_fduma
Fdu_raw
Fdu
0
20
40
60
80
100
120
110
120
130
140
150
d

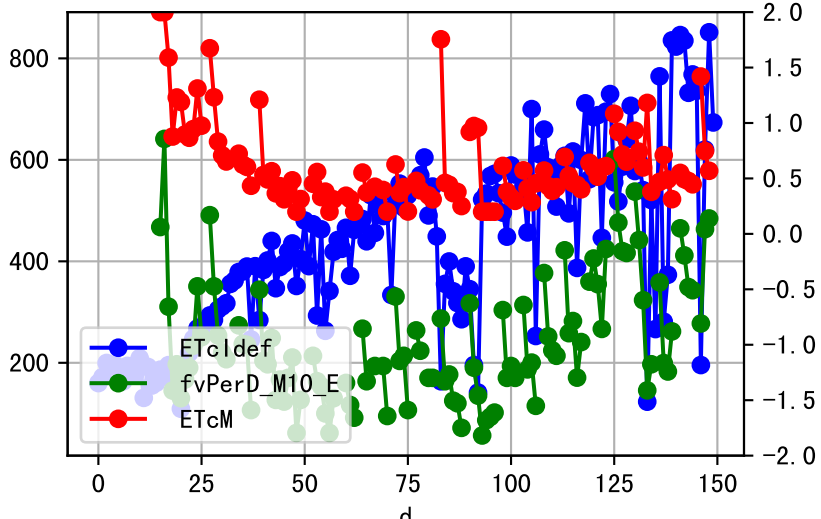

fvPerM Estimated for each M sensor by fit BetaS
2000
1500
1000
500
0
110
120
130
140
150
d
M20_E_fvPerM
M_E_fvPerM
M30_E_fvPerM
M10_E_fvPerM

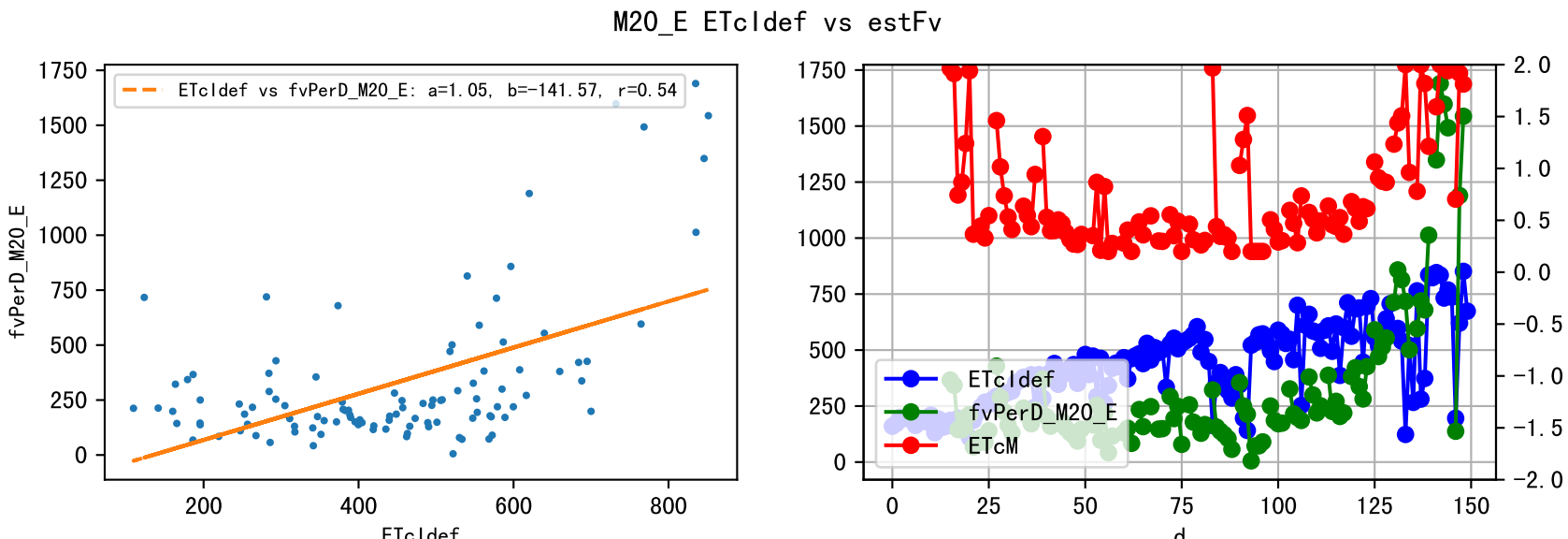

fvPerM moving average
M10_E_fvPerM
M10_E_fvPerMma
M20_E_fvPerM
M20_E_fvPerMma
M30_E_fvPerM
M30_E_fvPerMma
M_E_fvPerM
M_E_fvPerMma
d


Plot ['FR', 'Fdu', 'soilSetVI']
FR
0.0
0.2
0.4
0.6
0.8
0
20
40
60
80
100
120
140
160
d
Fdu
0
10
20
30
40
50
60
d
soilSetVI
0
500
1000
1500
2000
2500
3000
3500
d

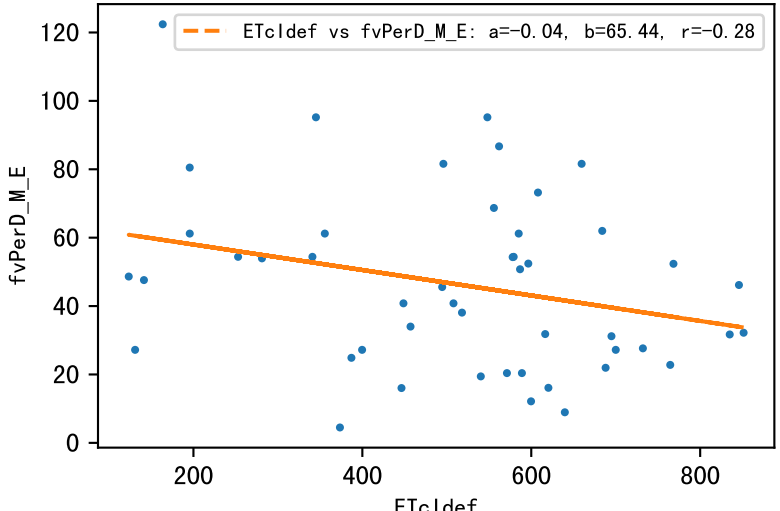
M10_E ETcIdef vs estFv

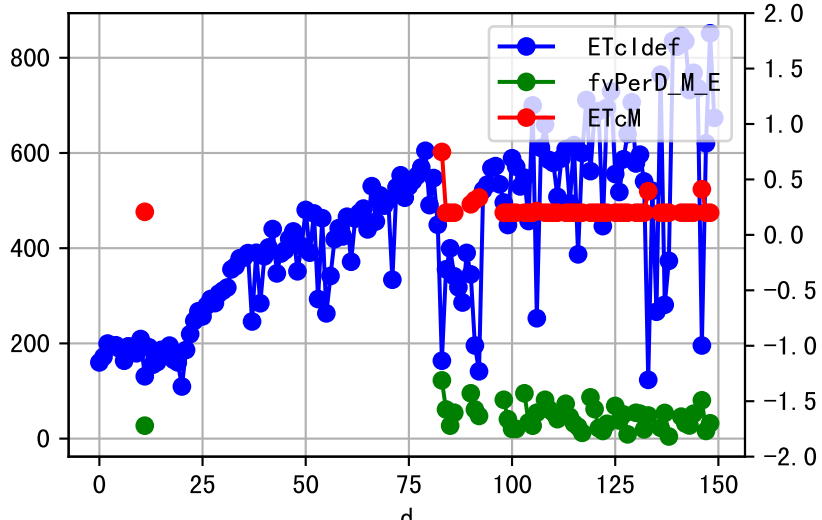


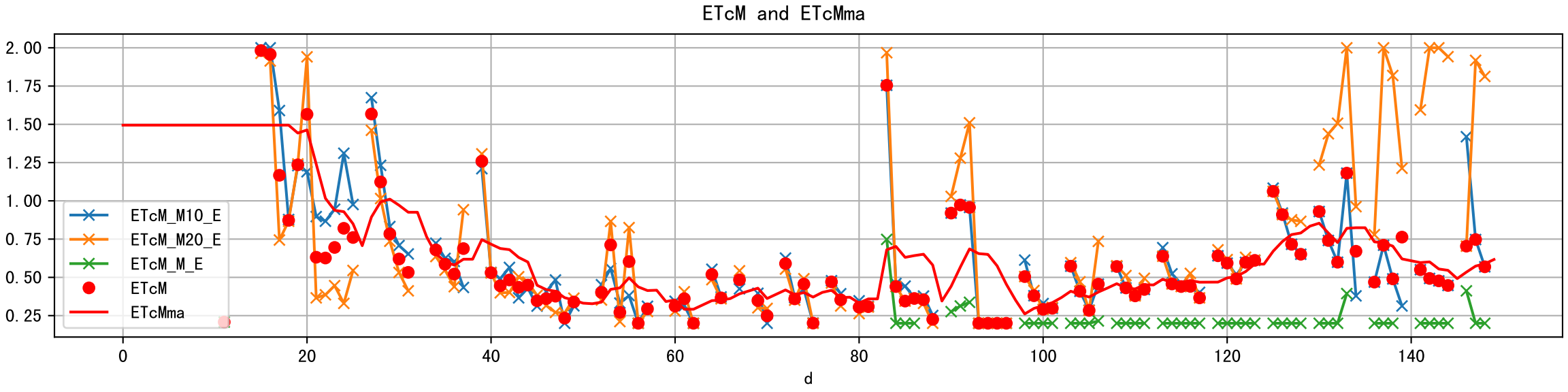



M20_E ETcIdef vs estFv
ETcIdef vs fvPerD_M20_E: a=1.05, b=-141.57, r=0.54
fvPerD_M20_E
ETcIdef
ETcIdef
fvPerD_M20_E
ETcM
d

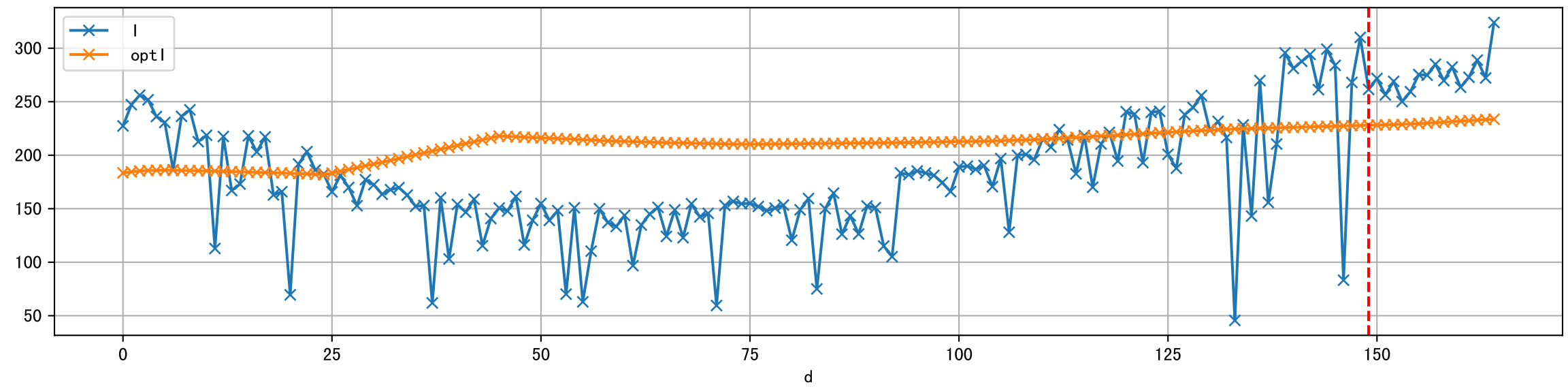
M_E ETcldef vs estFv

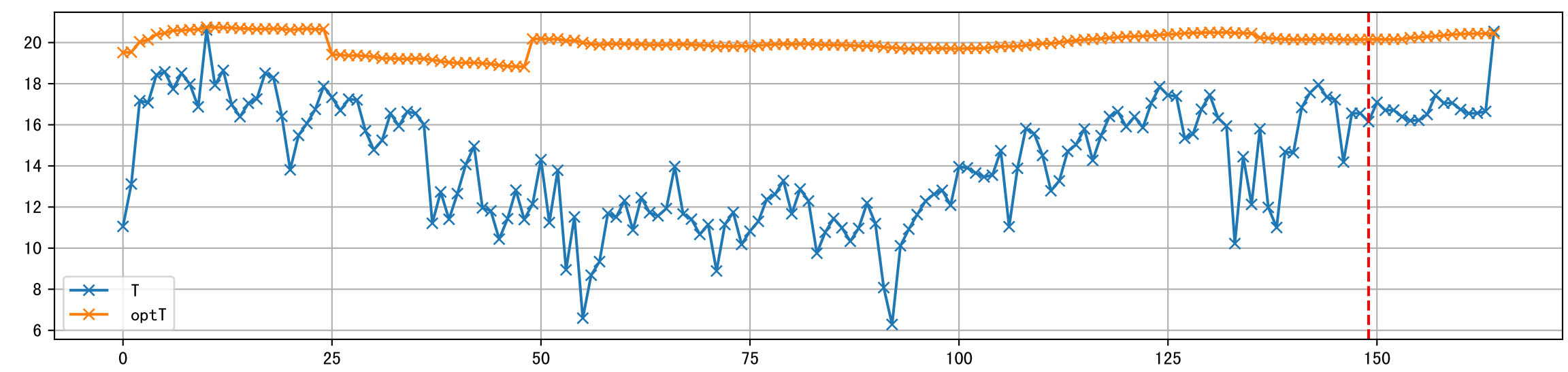


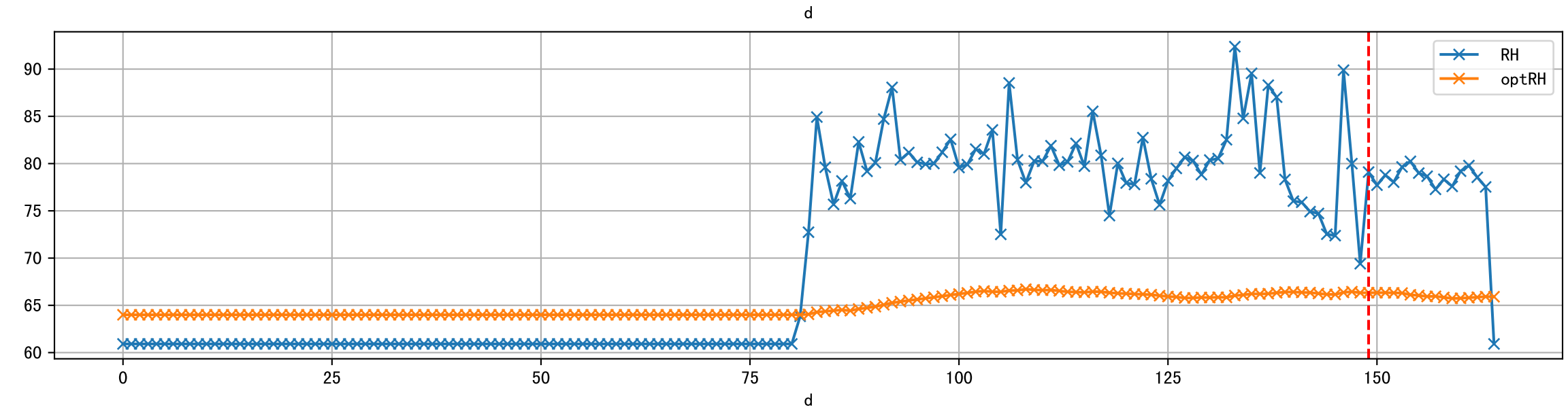


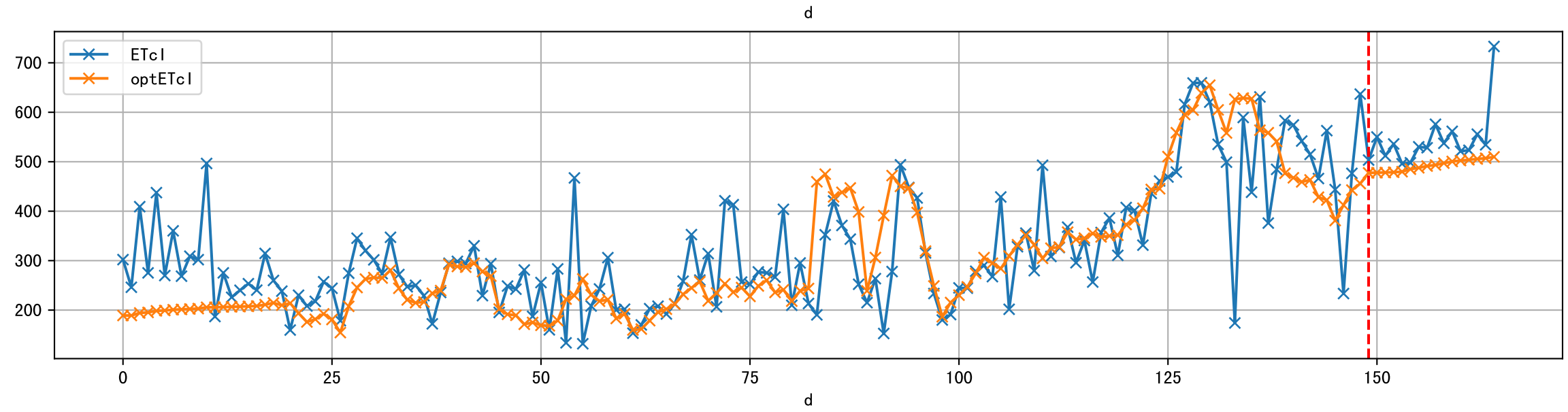

ETcM and ETcMma
2.00
1.75
1.50
1.25
1.00
0.75
0.50
0.25
0
20
40
60
80
100
120
140
d
ETcM_M10_E
ETcM_M20_E
ETcM_M_E
ETcM
ETcMma

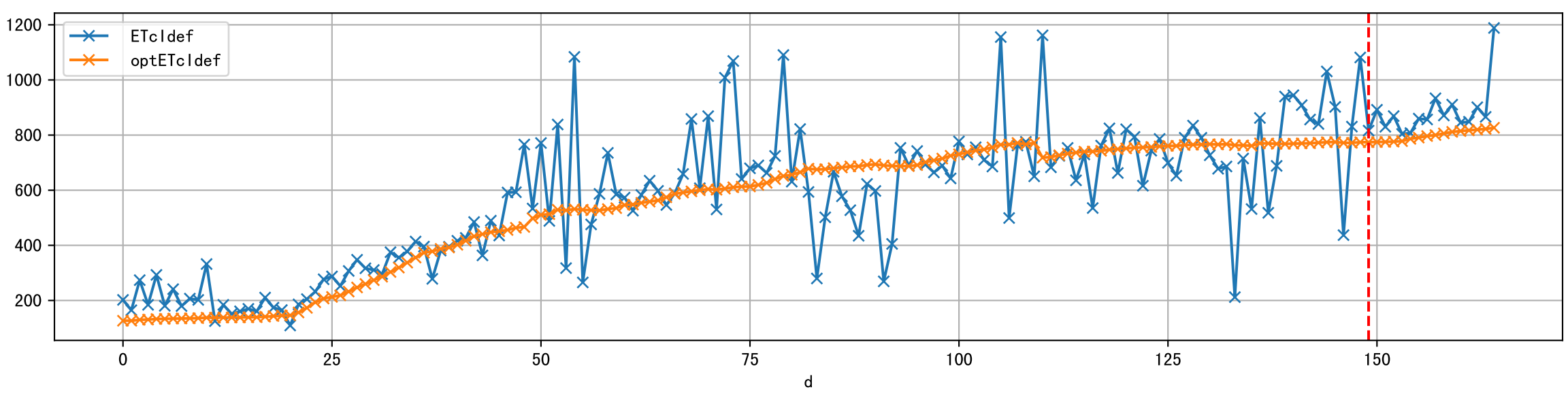
I'], ['T', 'optT'], ['RH', 'optRH'], ['ETcI', 'optETcI'], ['ETcIdef', 'optETcIdef'], ['ETo', 'optETo'], 'LAI', ['optEtRate', 'optEtRateDef', '

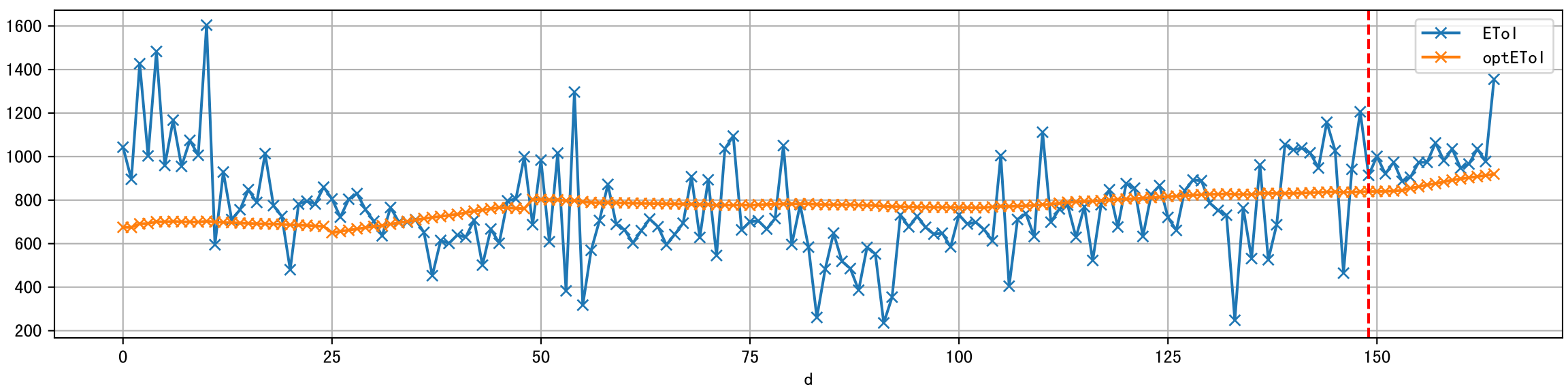


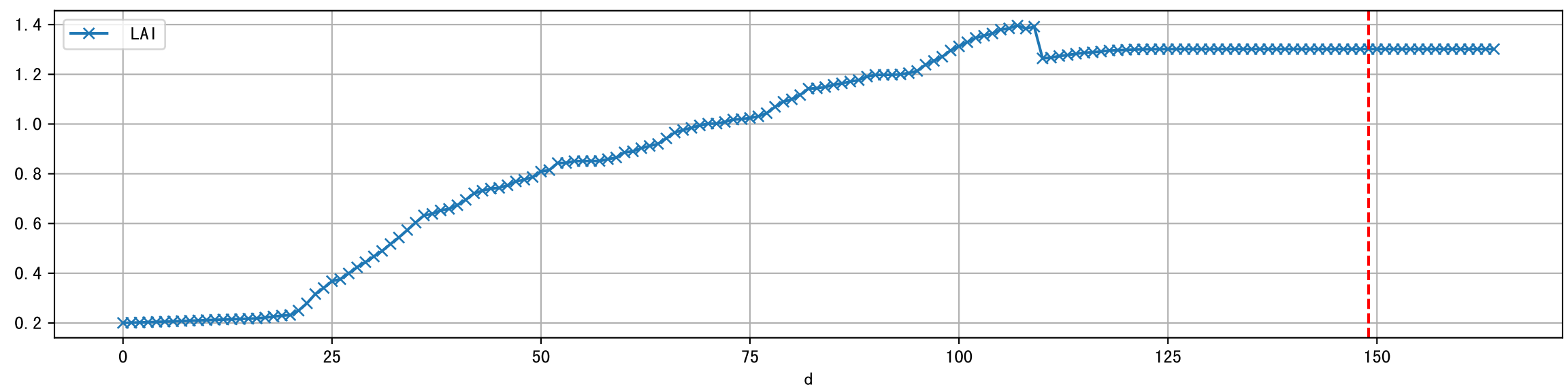


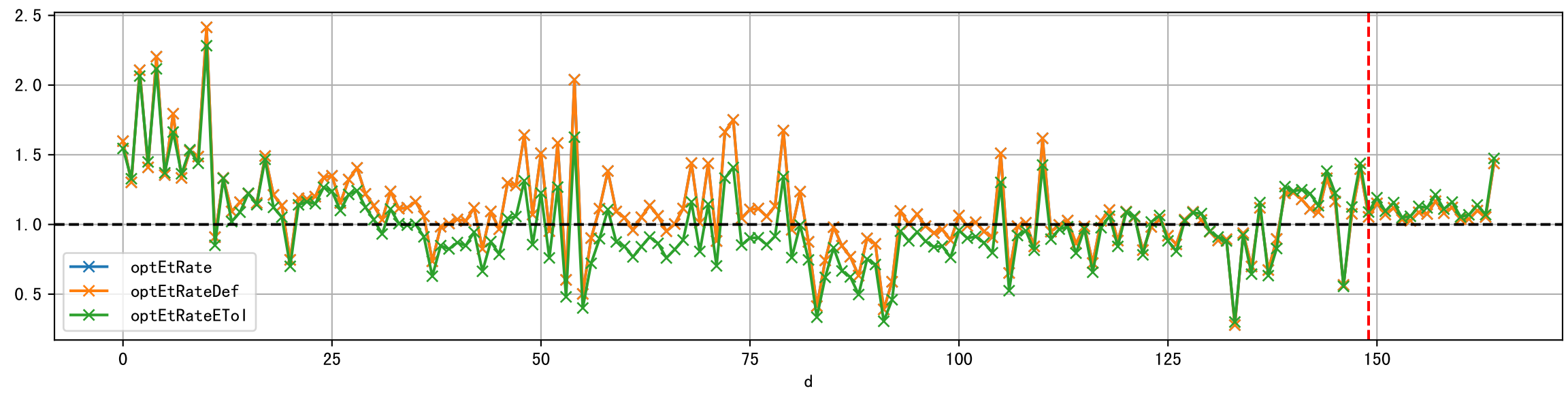


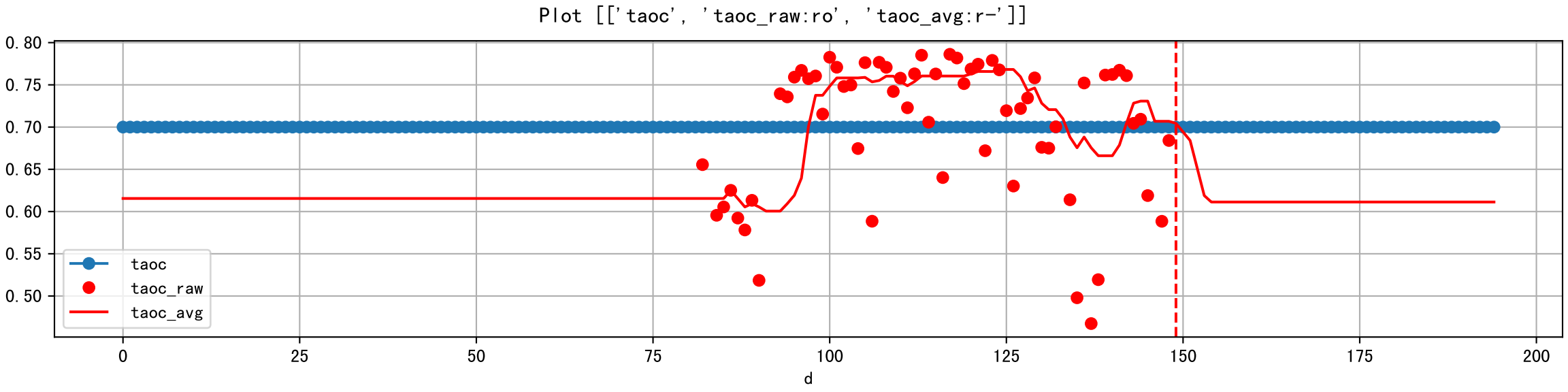




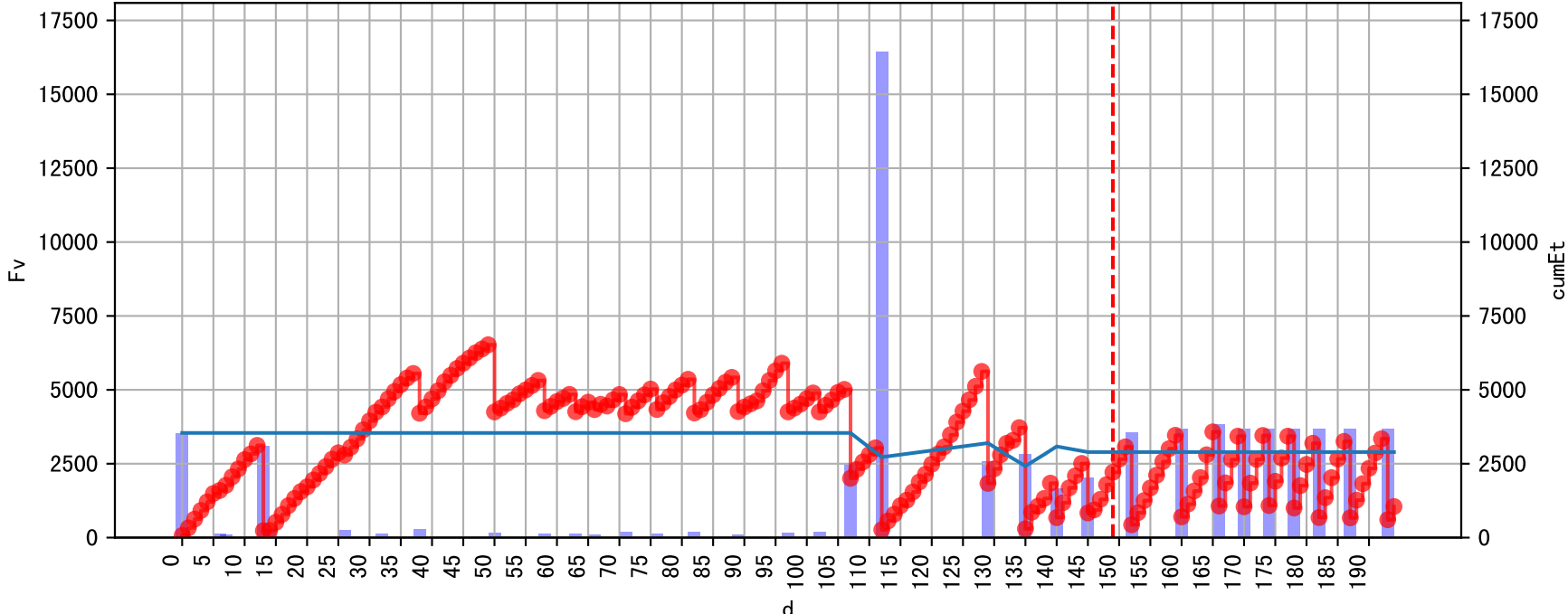


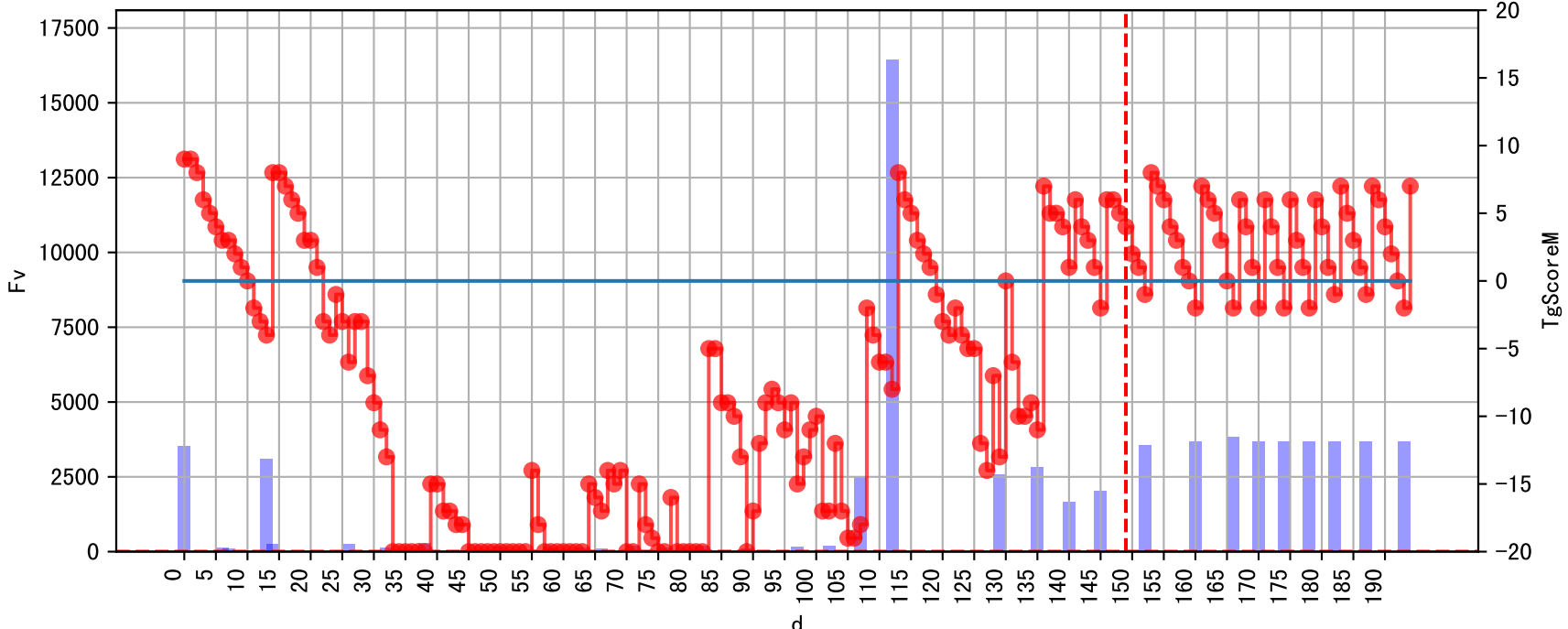




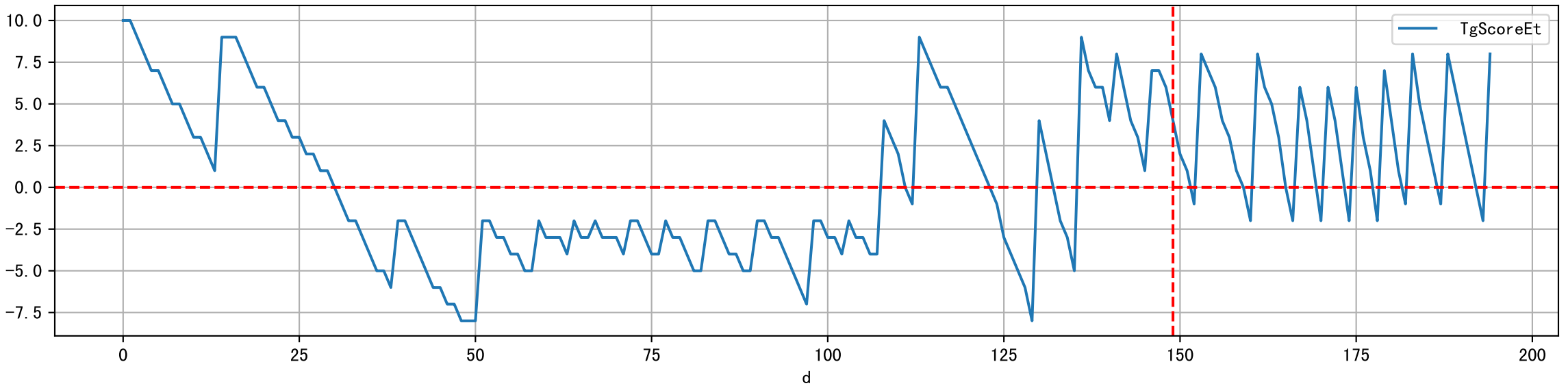

Plot [['taoc', 'taoc_raw:ro', 'taoc_avg:r-']]
0.80
0.75
0.70
0.65
0.60
0.55
0.50
taoc
taoc_raw
taoc_avg
0
25
50
75
100
125
150
175
200
d

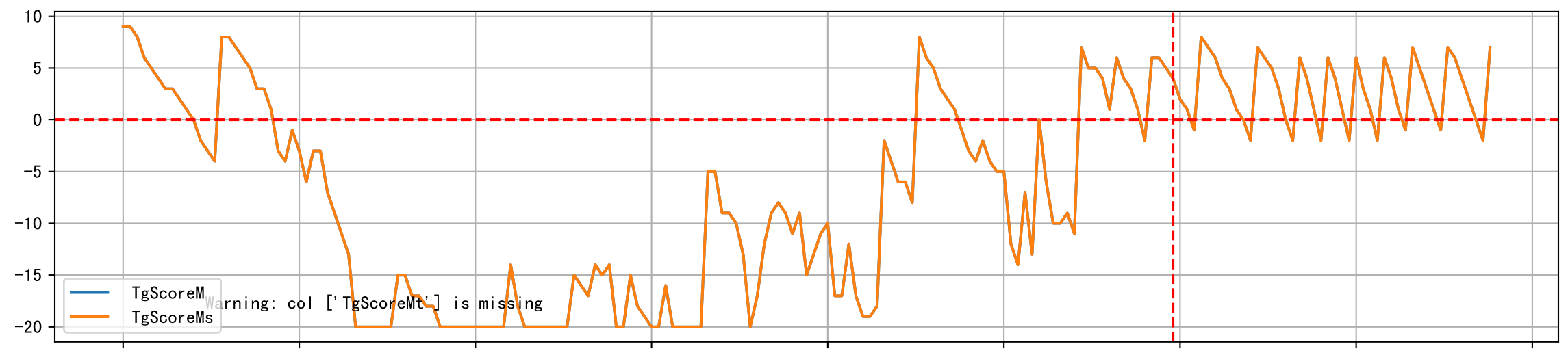
	d	note	fz	fzStockID	expFDF	expEC	preDu	fzDu	postDu	fzSt
:00:00	140.0	发现灌溉，未预期	丰码有品果期肥	1118.0	205.2	1718.0	0.0	2058.0	0.0	
:00:00	145.0	如期灌溉	丰码有品果期肥	1124.0	175.3	1937.0	0.0	2680.0	0.0	
:00:00	152.0	预期灌溉	丰码有品果期肥	1124	500.0	774.0	360.0	4040.0	300.0	
:00:00	160.0	预期灌溉，土壤肥已过量，逐渐减肥	丰码有品果期肥	1124	500.0	776.0	360.0	4189.0	300.0	
:00:00	166.0	预期灌溉	丰码有品果期肥	TBD	442.7	755.0	566.0	4189.0	300.0	
:00:00	170.0	预期灌溉	清水	TBD	500.0	363.0	360.0	4189.0	300.0	


Fv
cumEt
17500
15000
12500
10000
7500
5000
2500
0
0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120 125 130 135 140 145 150 155 160 165 170 175 180 185 190

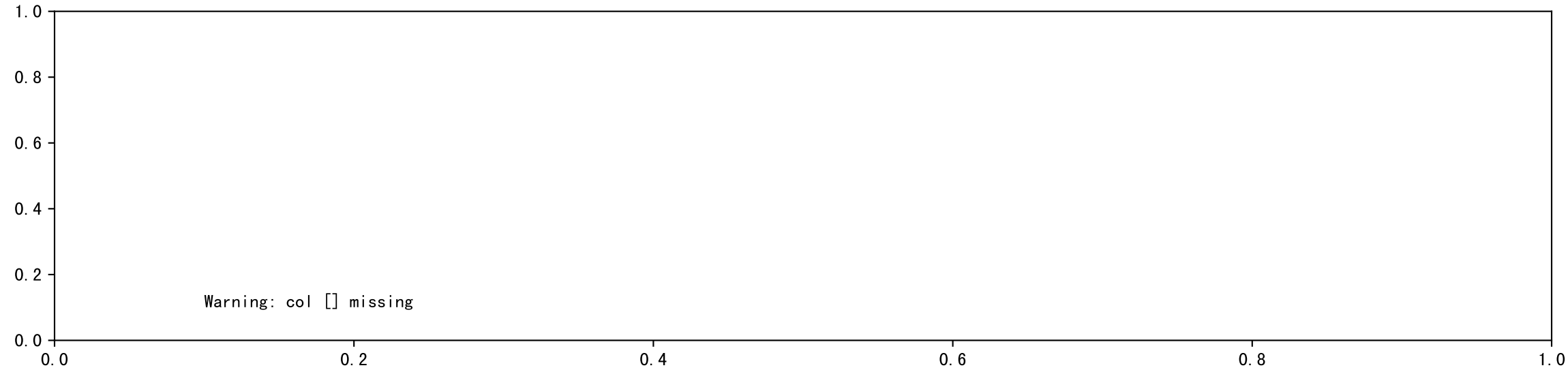

Fv
TgScoreM
17500
15000
12500
10000
7500
5000
2500
0
20
15
10
5
0
−5
−10
−15
−20
0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120 125 130 135 140 145 150 155 160 165 170 175 180 185 190

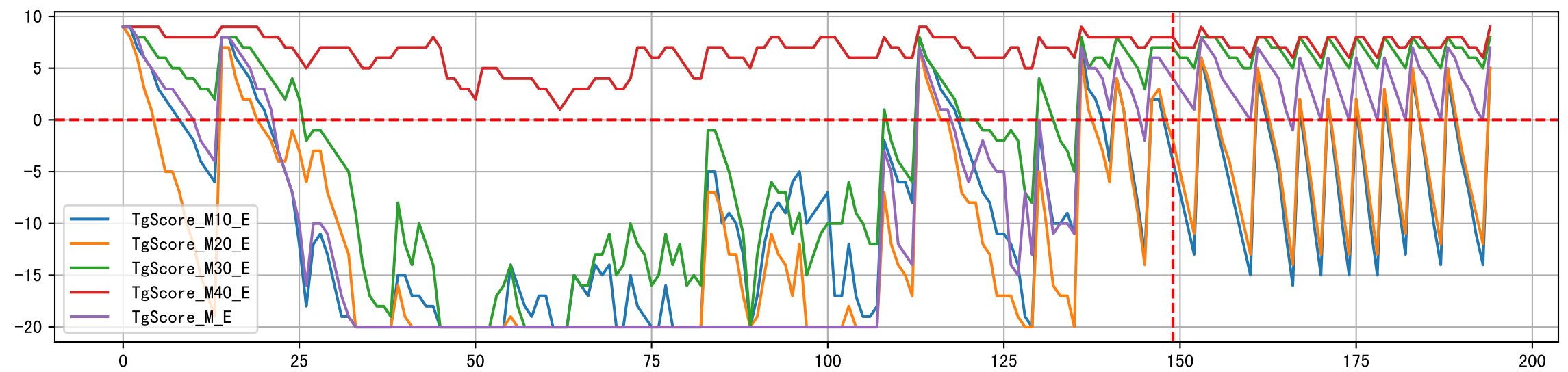
Fg Trigger Score (by Et and sensor)

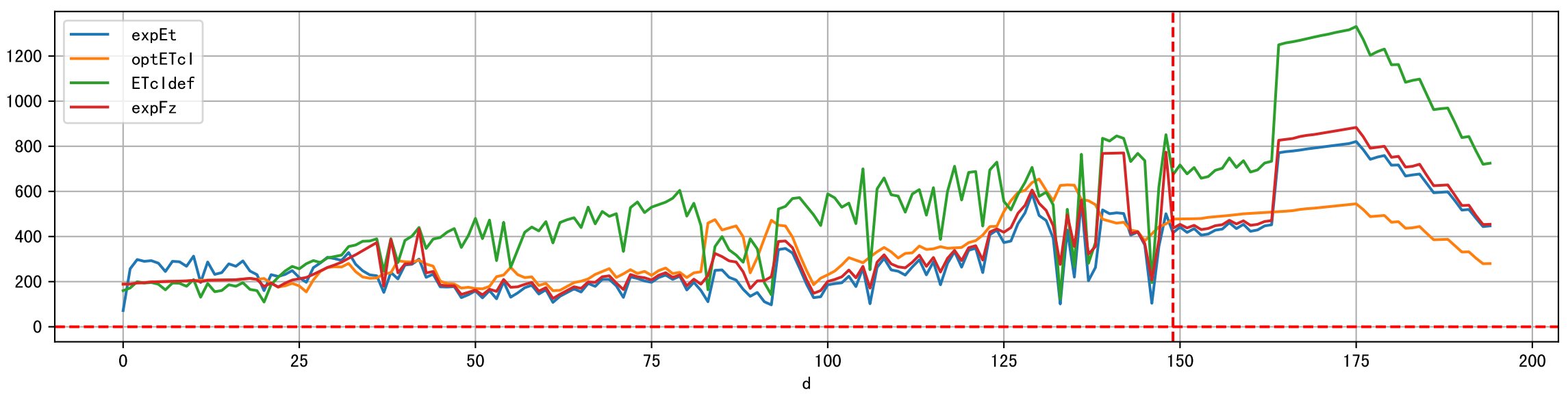


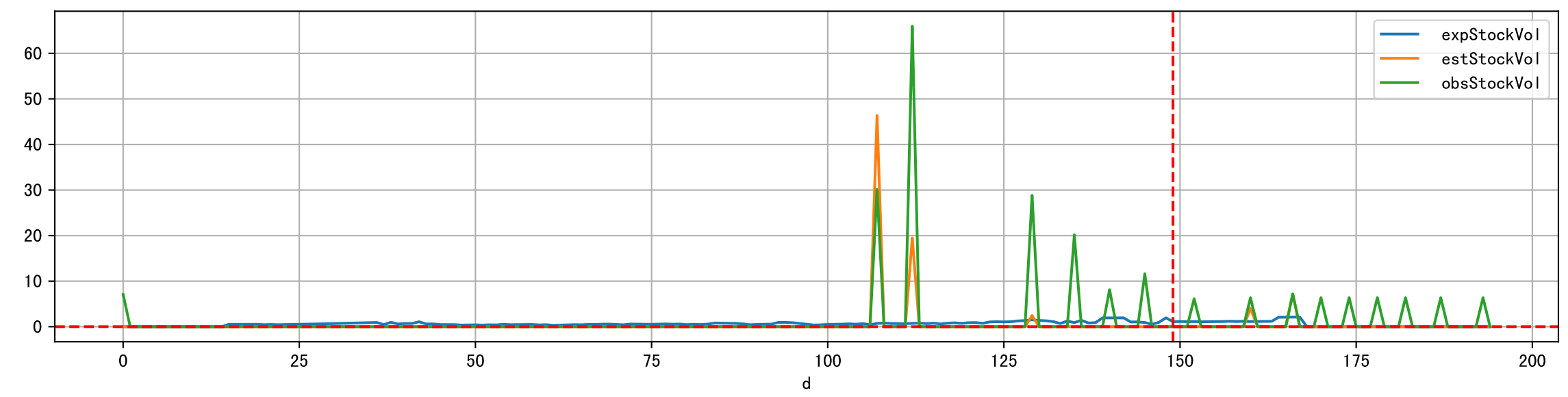


d

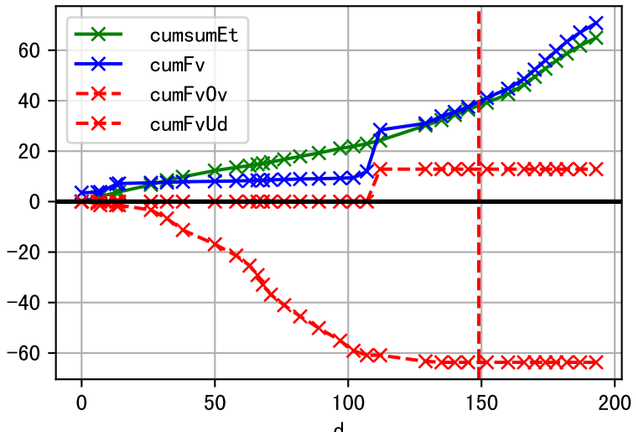


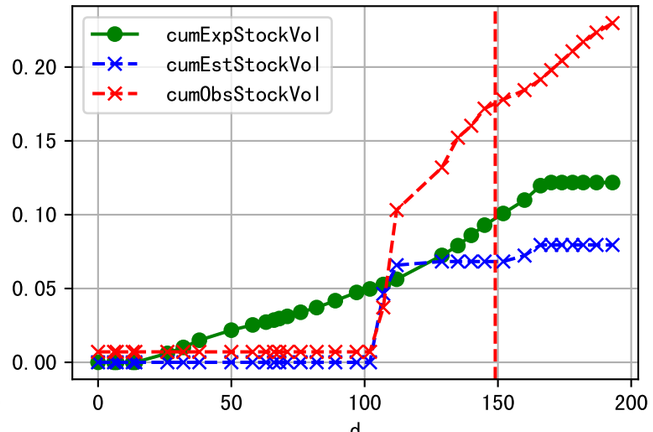


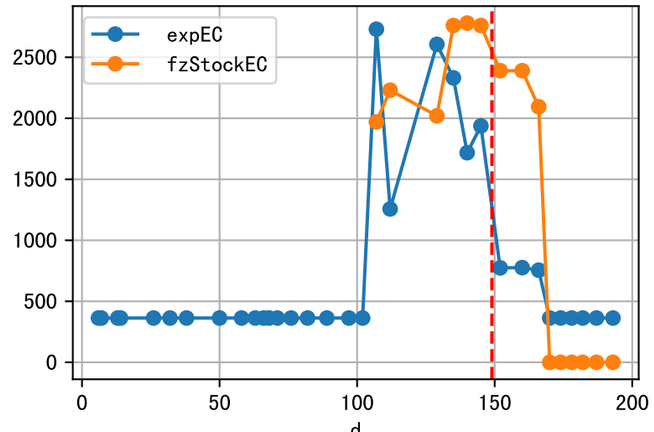


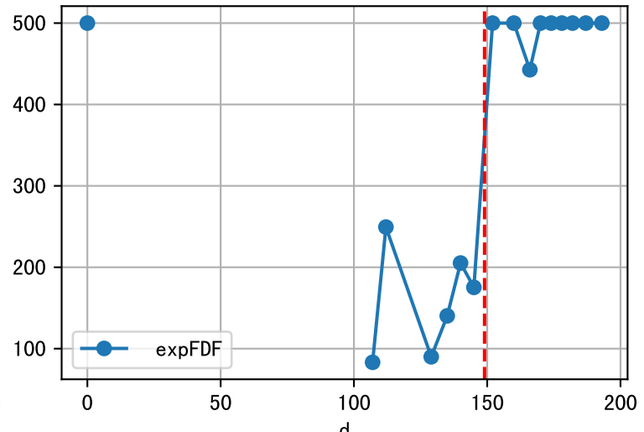


Plot liquid fertilizer usage

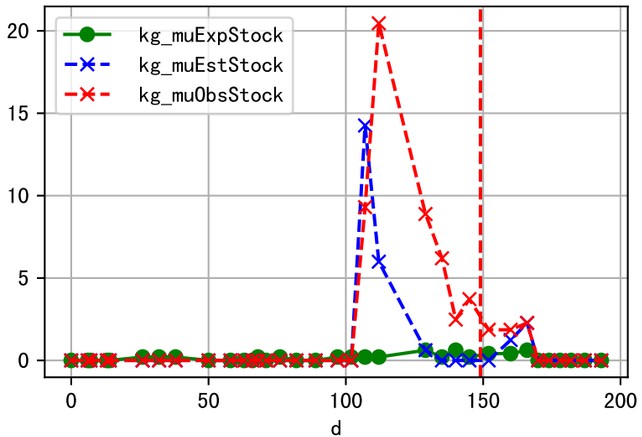


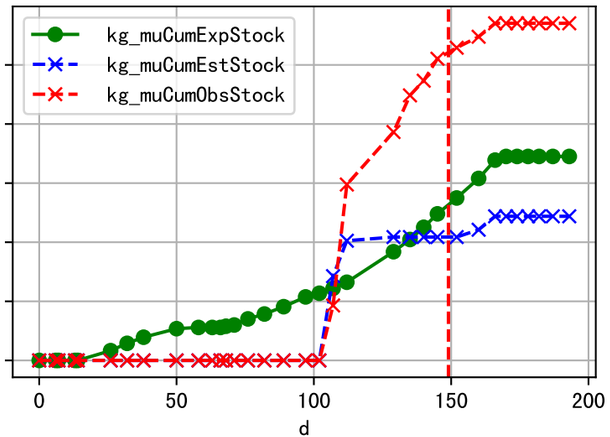


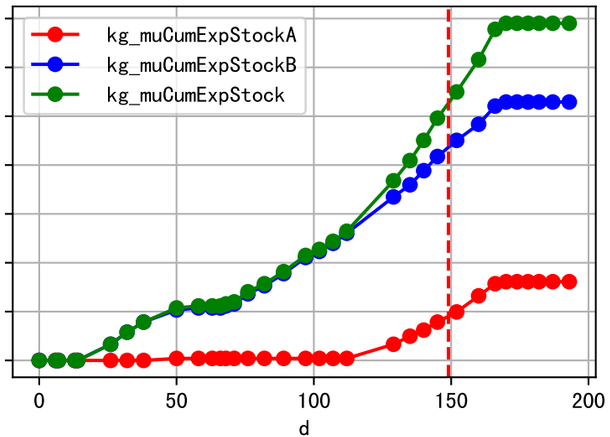


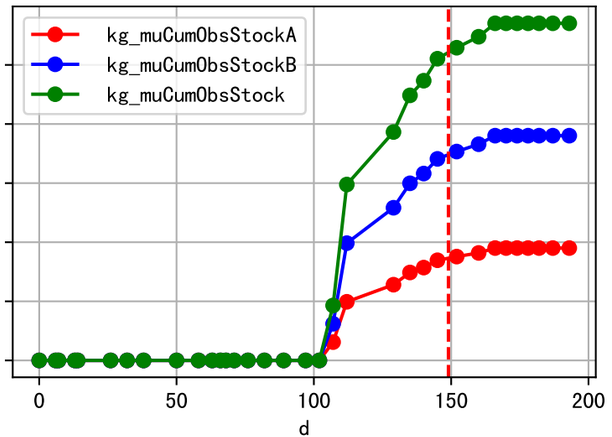


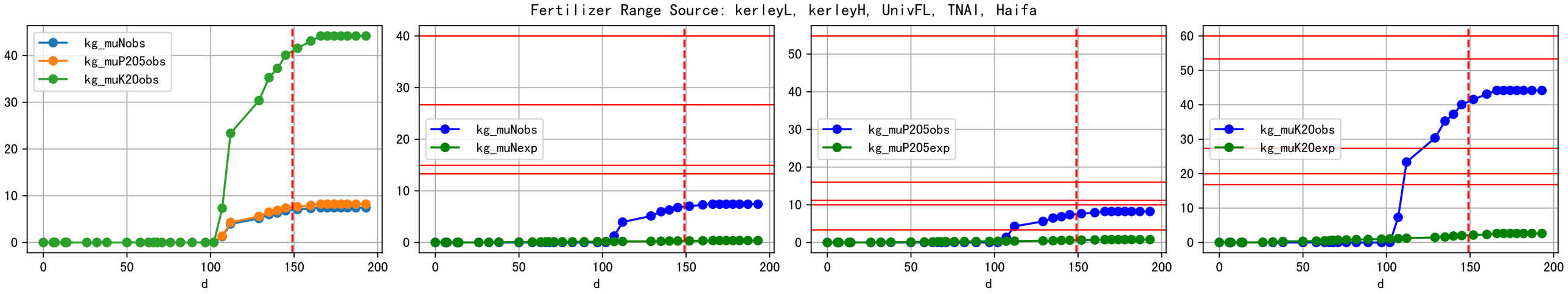
Plot solid fertilizer (kg/mu) usage










Fertilizer Range Source: kerleyL, kerleyH, UnivFL, TNAI, Haifa
kg_muNobs
kg_muP2O5obs
kg_muK2Oobs
kg_muNobs
kg_muNexp
kg_muP2O5obs
kg_muP2O5exp
kg_muK2Oobs
kg_muK2Oexp
d
d
d
d