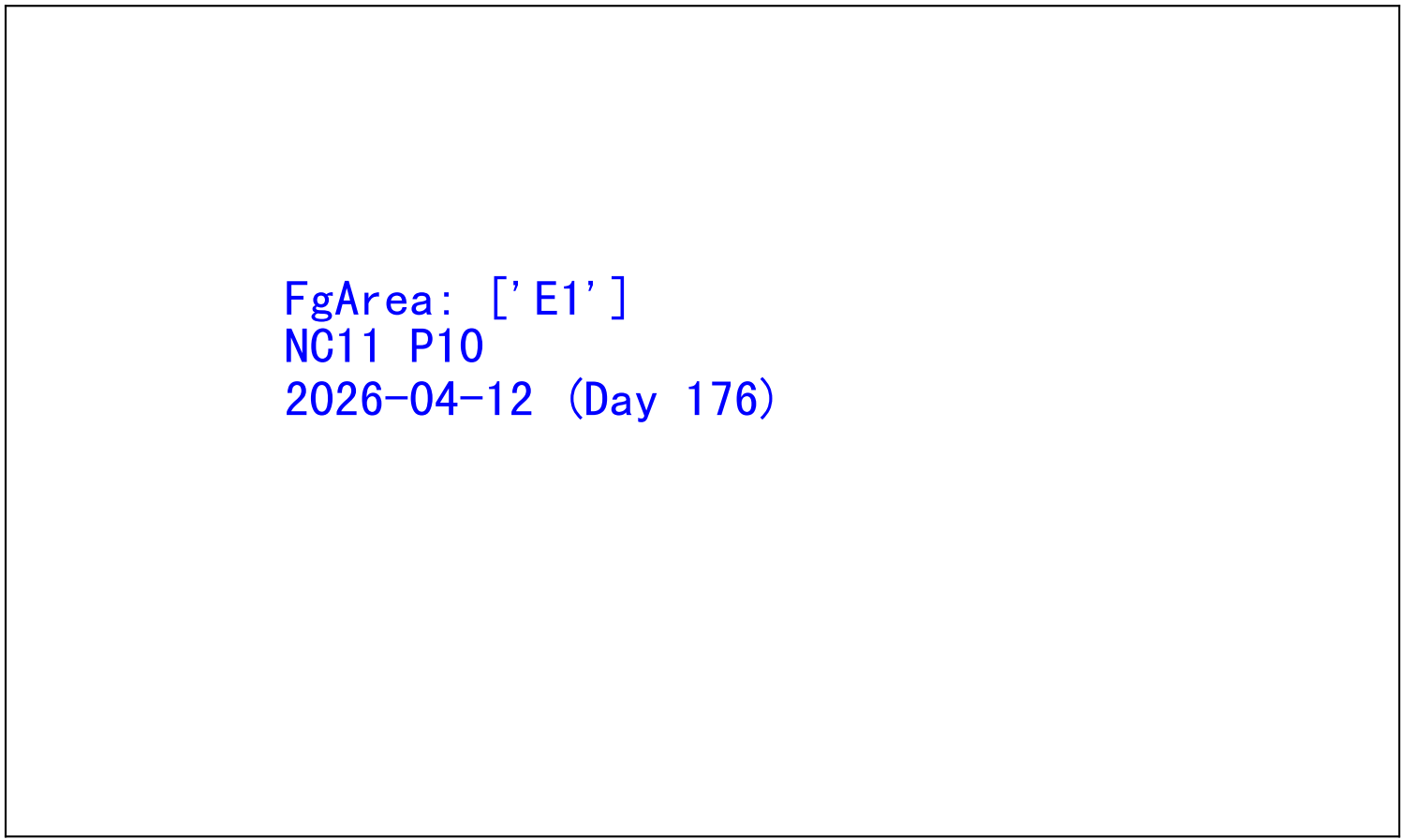
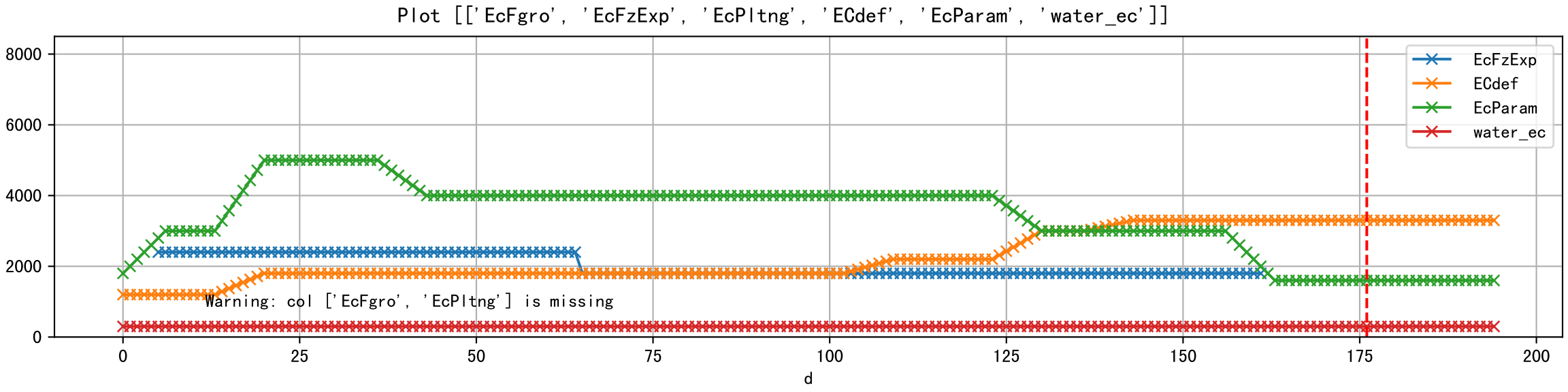
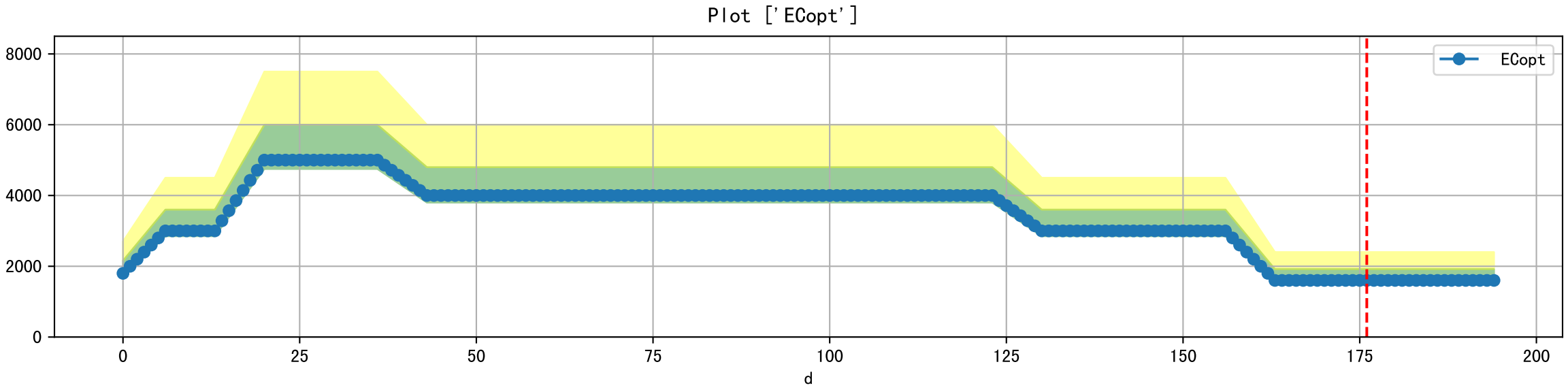
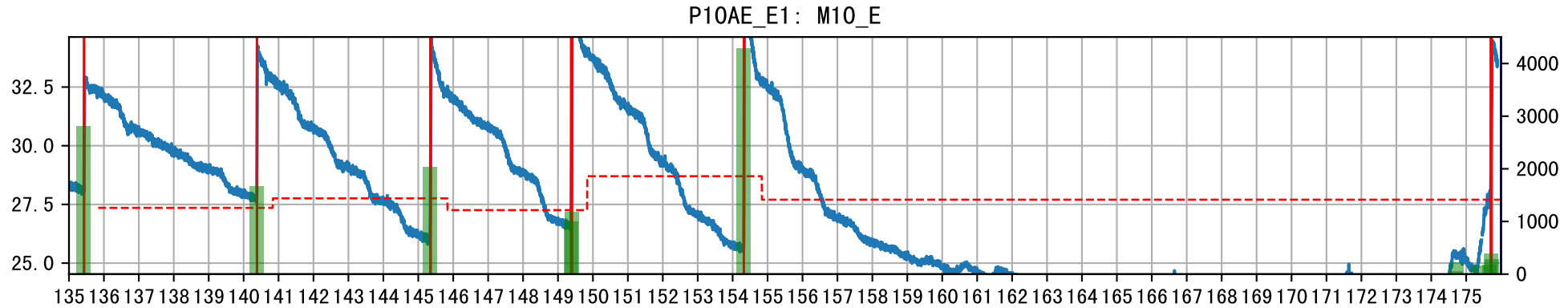
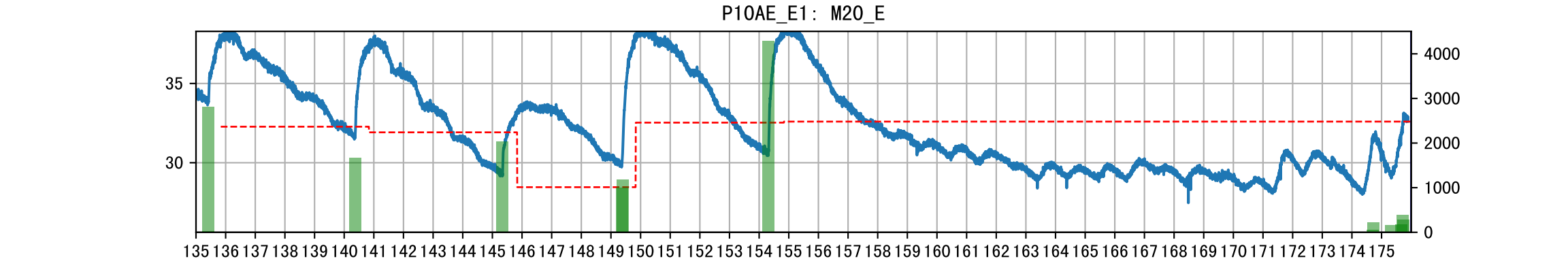
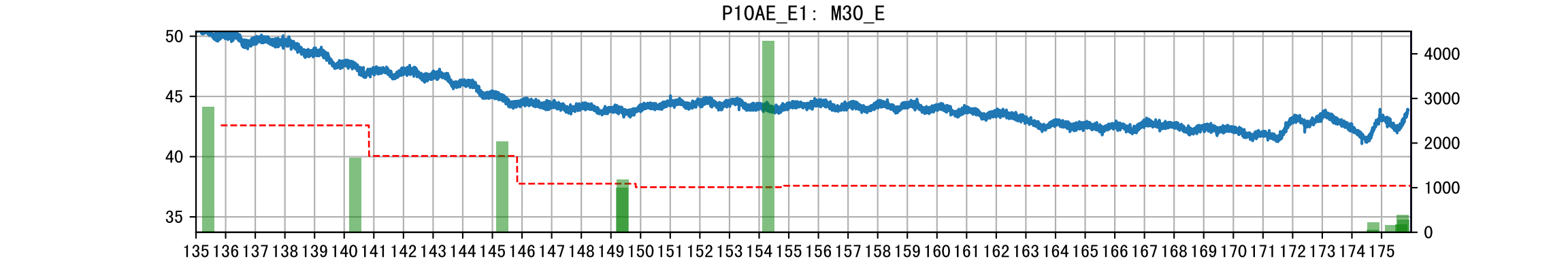

FgArea: ['E1']
NC11 P10
2026-04-12 (Day 176)

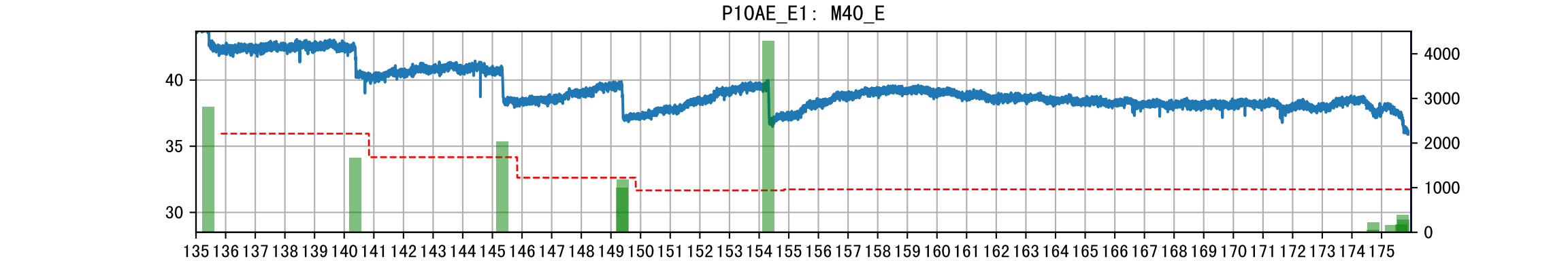

Plot [['EcFgro', 'EcFzExp', 'EcPltng', 'ECdef', 'EcParam', 'water_ec']]
EcFzExp
ECdef
EcParam
water_ec
Warning: col ['EcFgro', 'EcPltng'] is missing
8000
6000
4000
2000
0
0
25
50
75
100
125
150
175
200
d

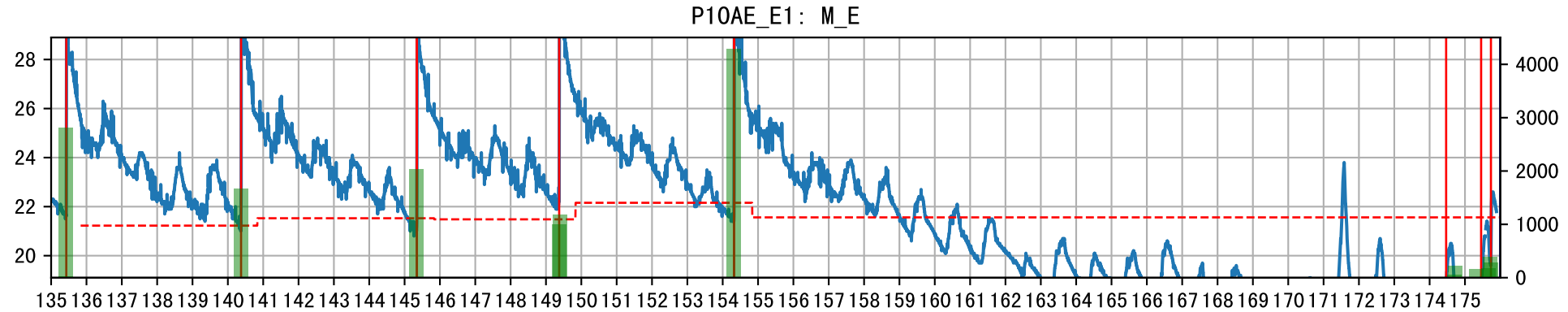

Plot ['ECopt']
ECopt
8000
6000
4000
2000
0
0
25
50
75
100
125
150
175
200
d


P10AE_E1: M10_E
32.5
30.0
27.5
25.0
4000
3000
2000
1000
0
135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175

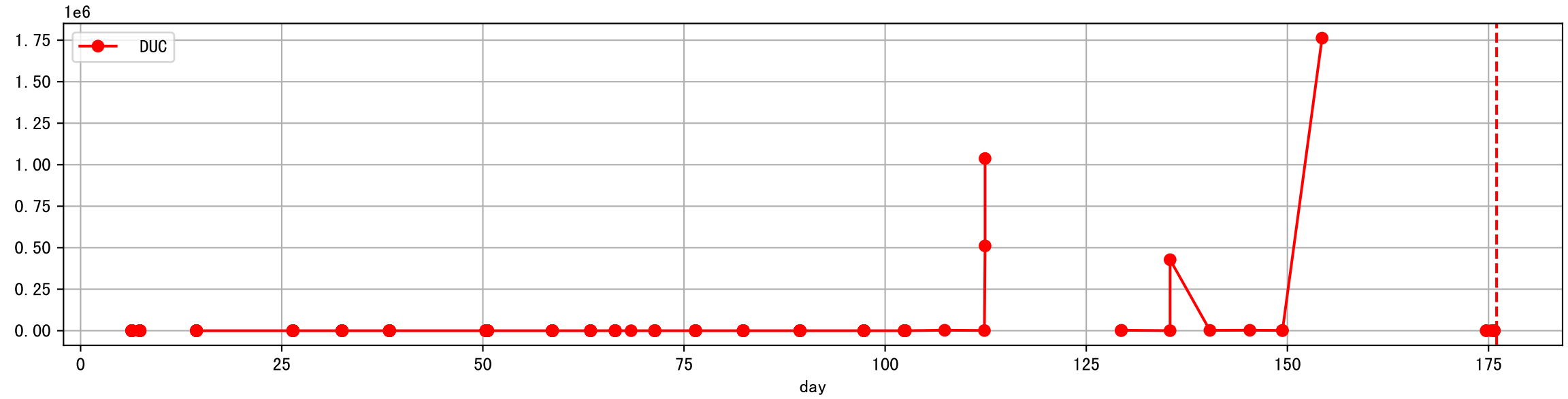

P10AE_E1: M20_E
35
30
4000
3000
2000
1000
0
135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175

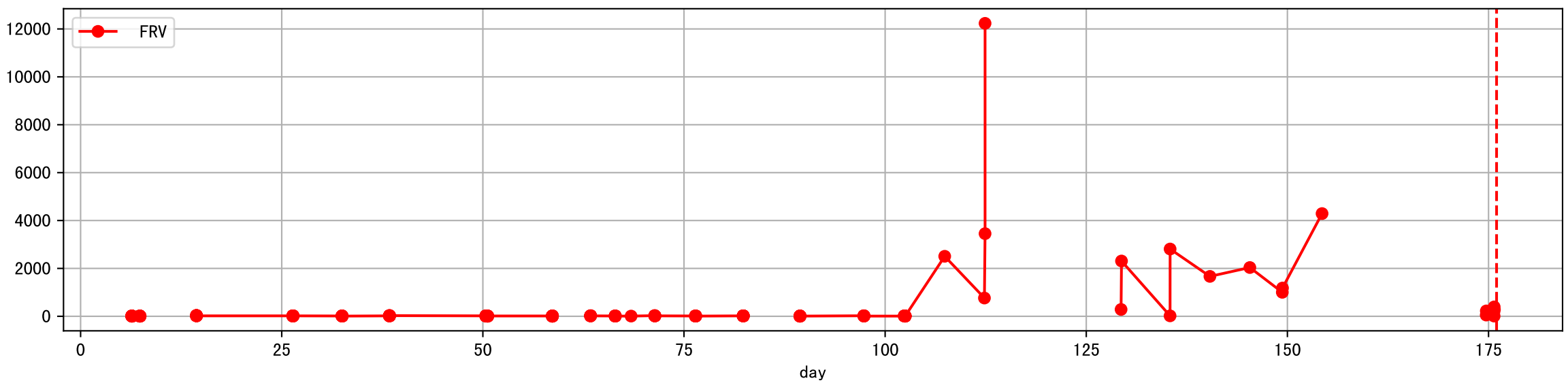

P10AE_E1: M30_E
50
45
40
35
4000
3000
2000
1000
0
135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175

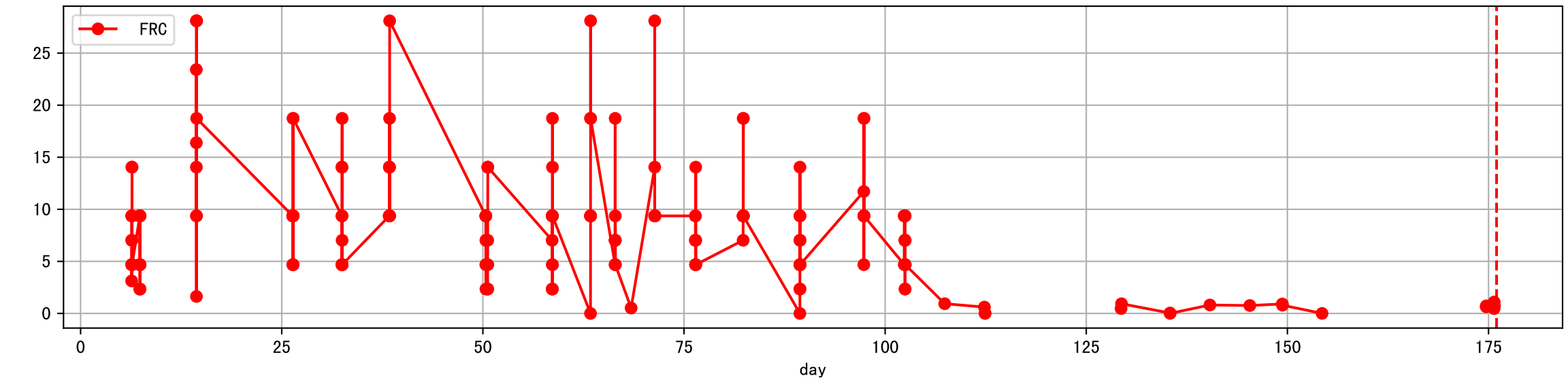

P10AE_E1: M40_E
40
35
30
4000
3000
2000
1000
0
135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175

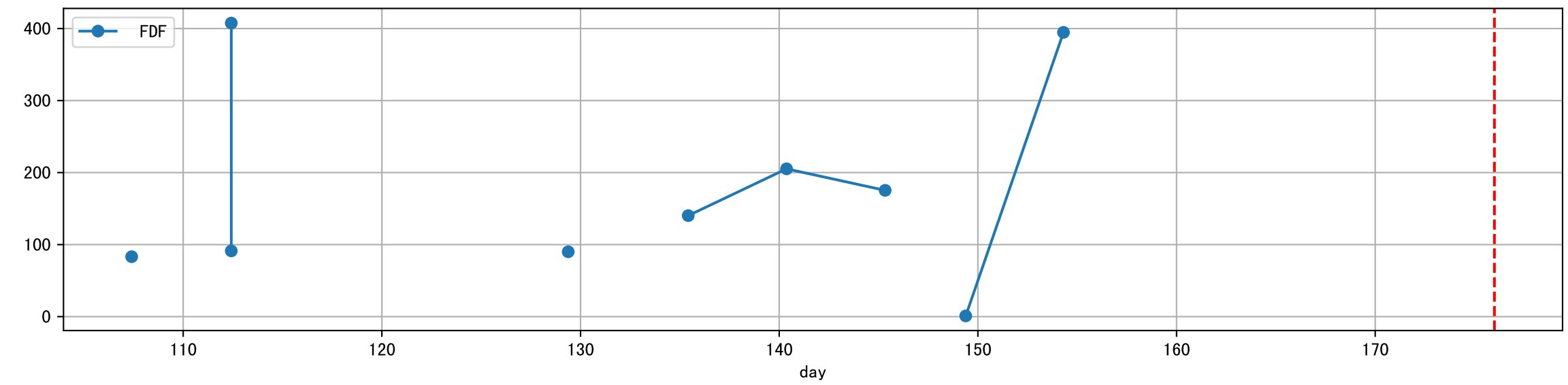

P10AE_E1: M_E
28
26
24
22
20
4000
3000
2000
1000
0
135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175

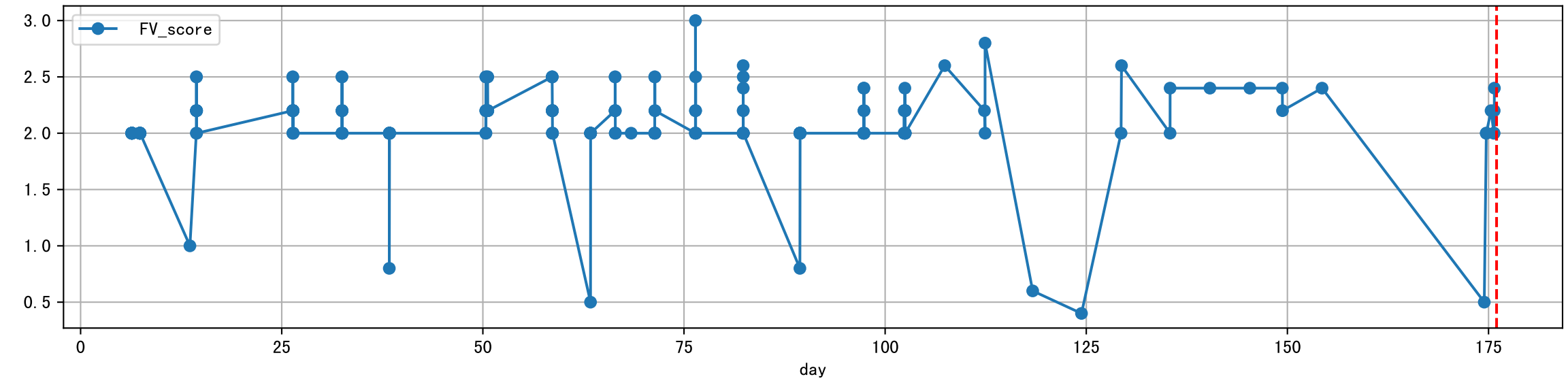
plot dfFv


1e6
DUC
1.75
1.50
1.25
1.00
0.75
0.50
0.25
0.00
0
25
50
75
100
125
150
175
day

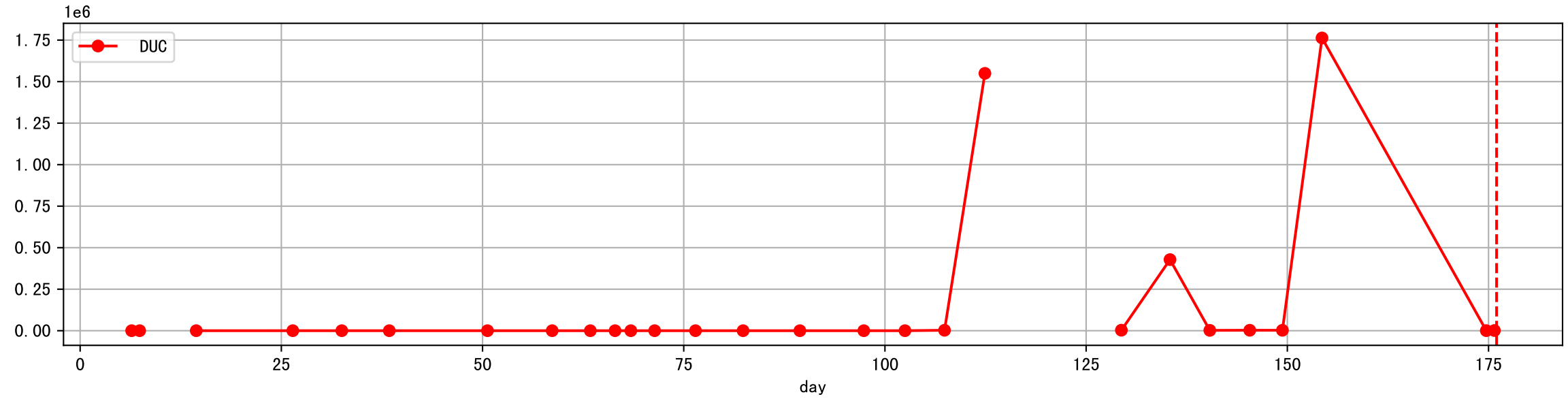

FRV
12000
10000
8000
6000
4000
2000
0
0
25
50
75
100
125
150
175
day

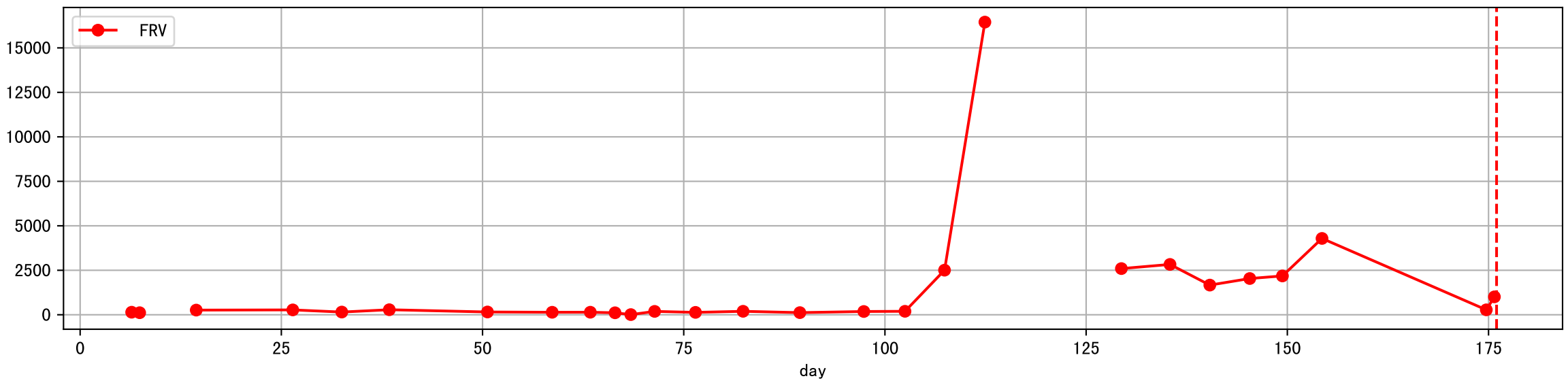

FRC
25
20
15
10
5
0
0
25
50
75
100
125
150
175
day

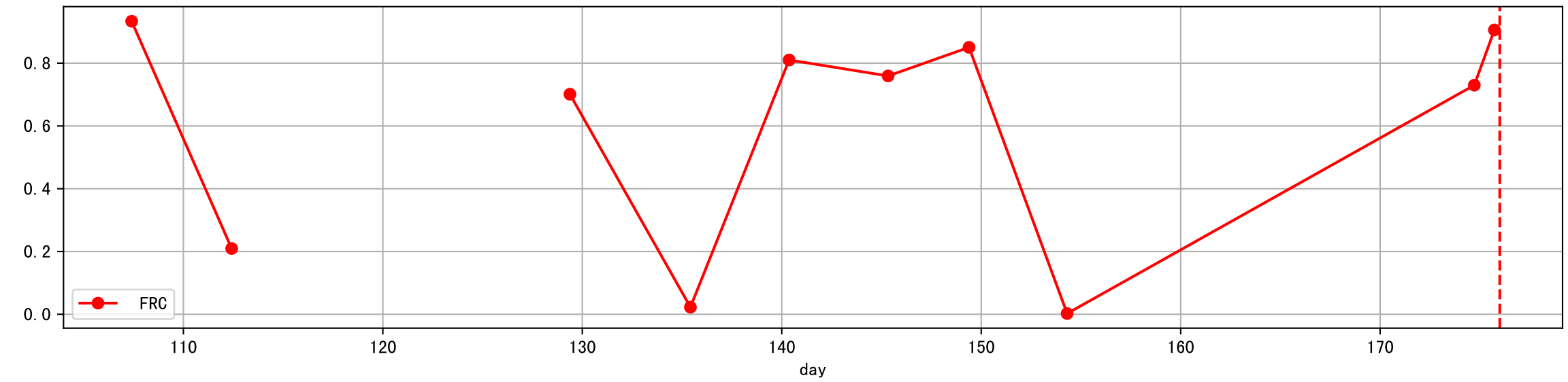

FDF
400
300
200
100
0
110
120
130
140
150
160
170
day

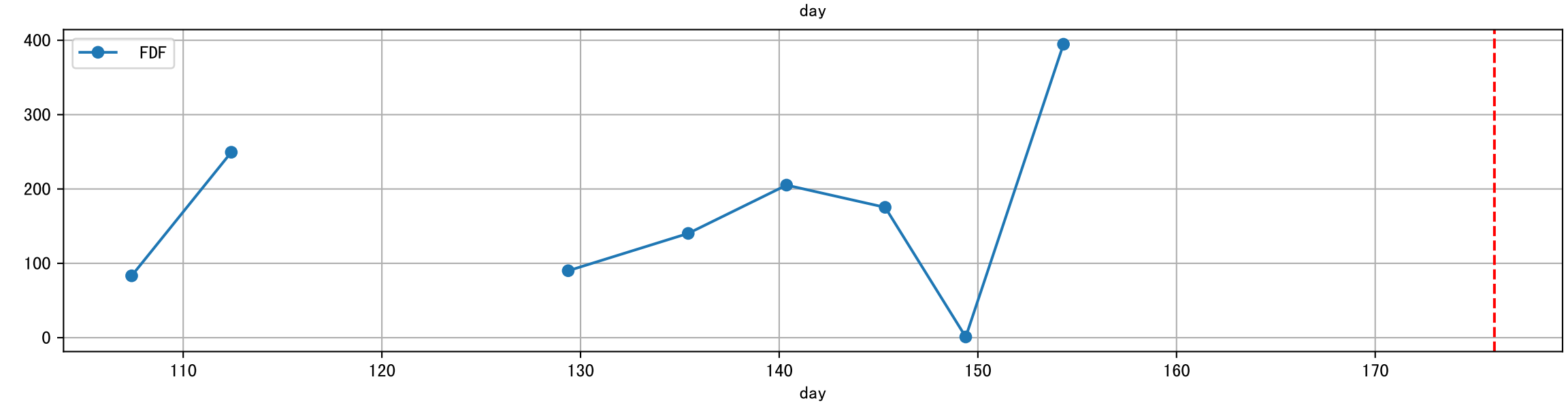

FV_score
3.0
2.5
2.0
1.5
1.0
0.5
0
25
50
75
100
125
150
175
day

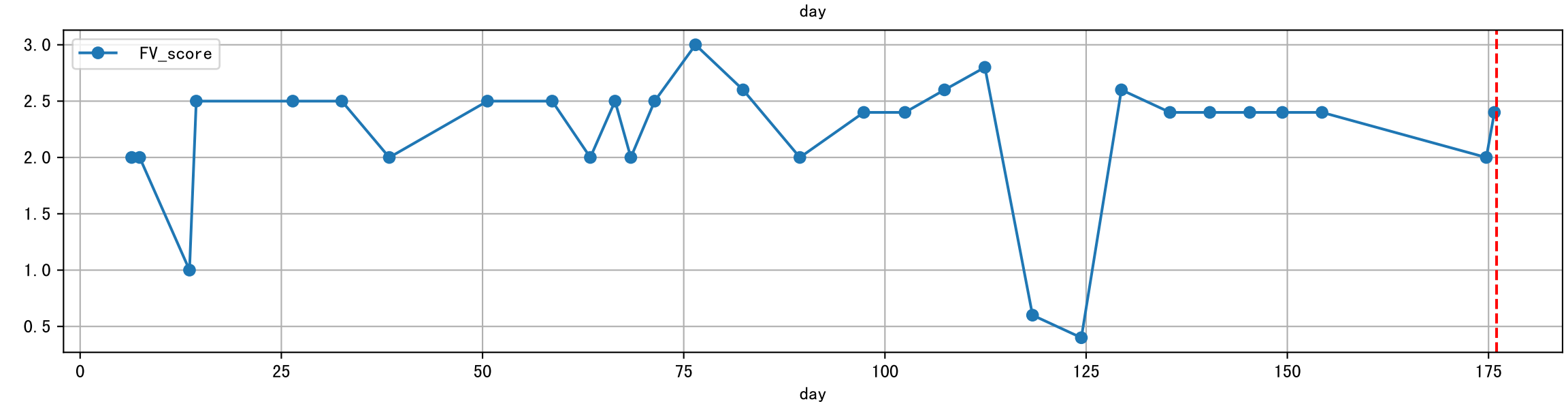
plot dfFv (daily Agg)

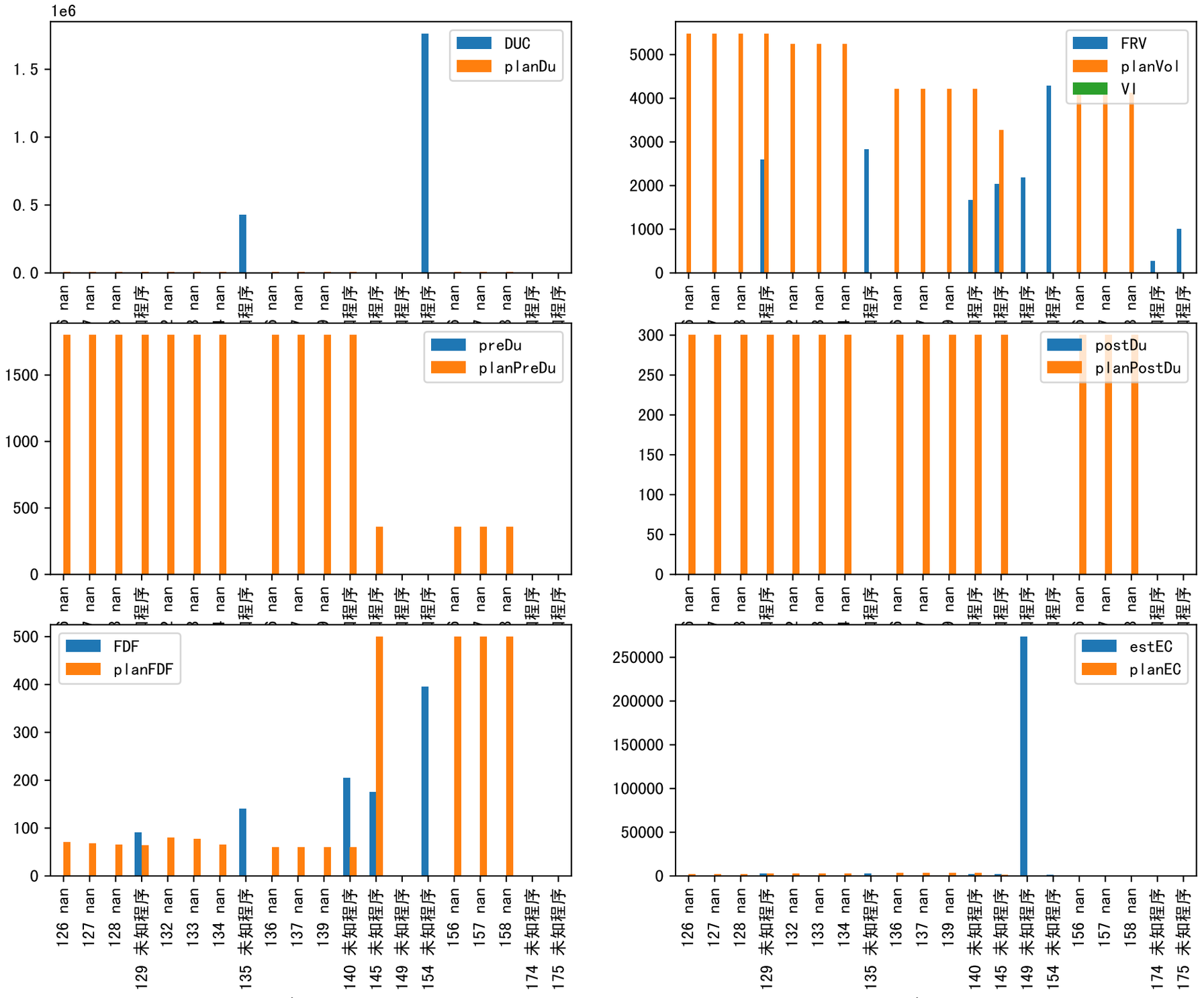


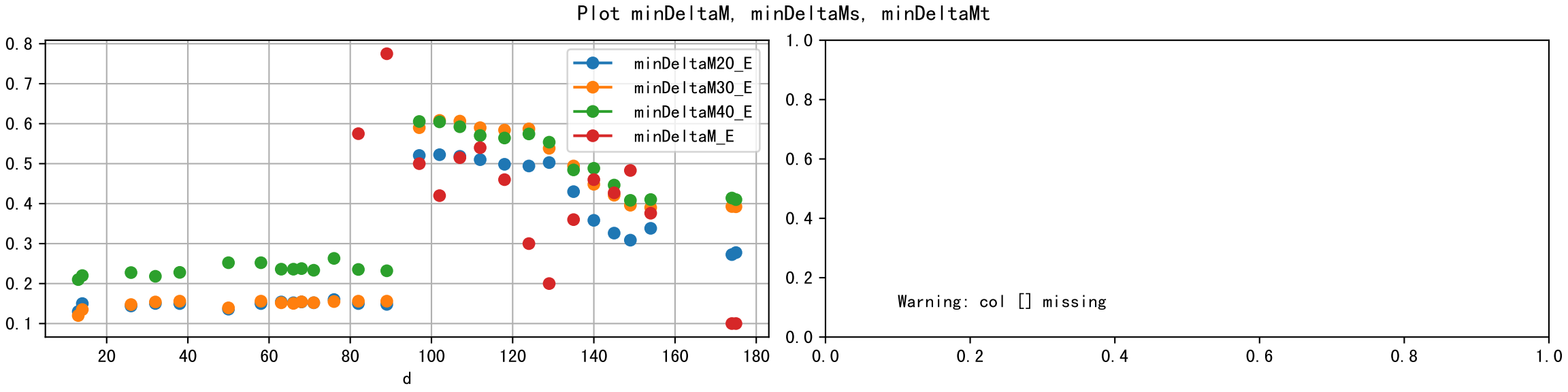


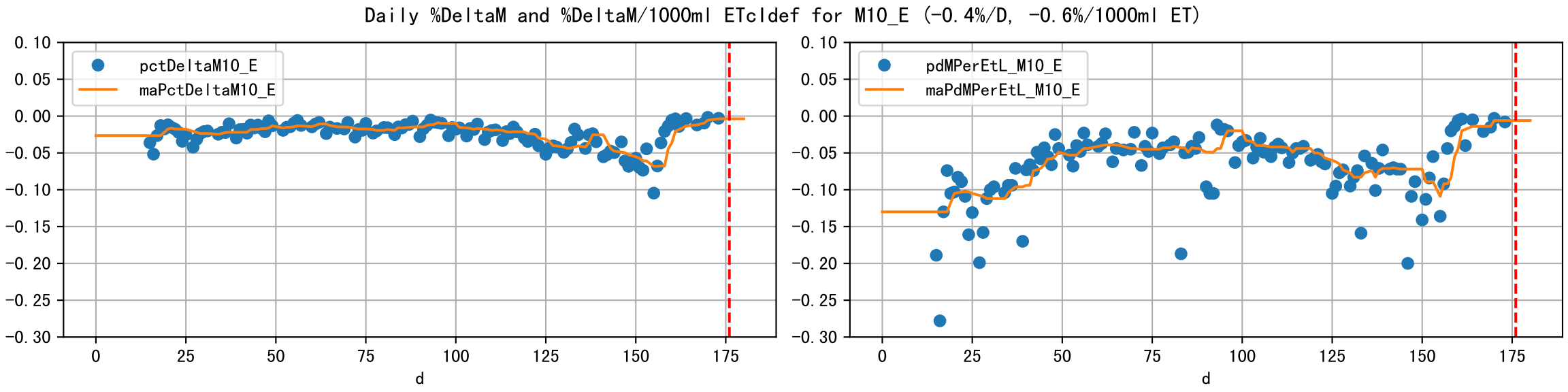


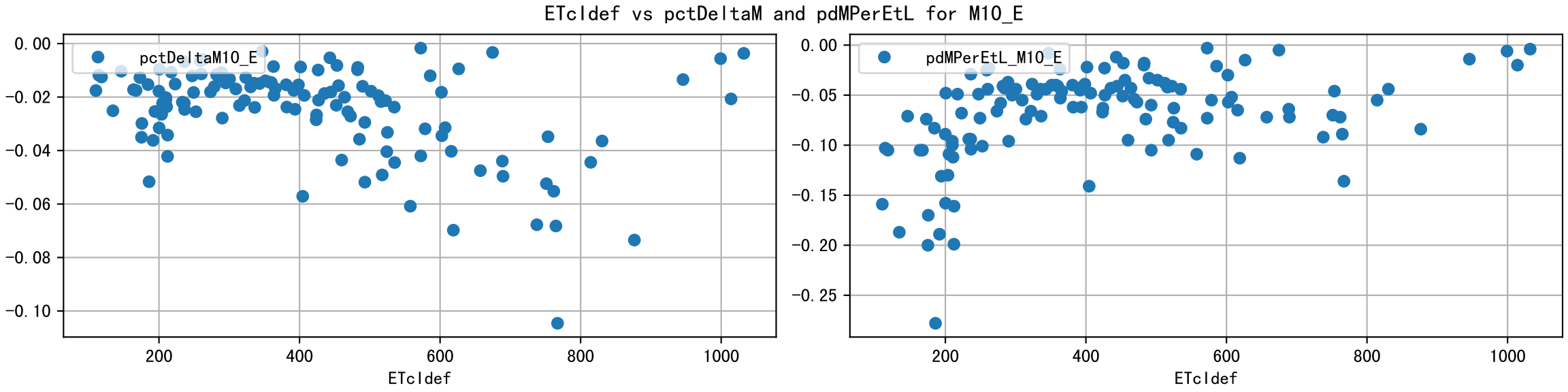


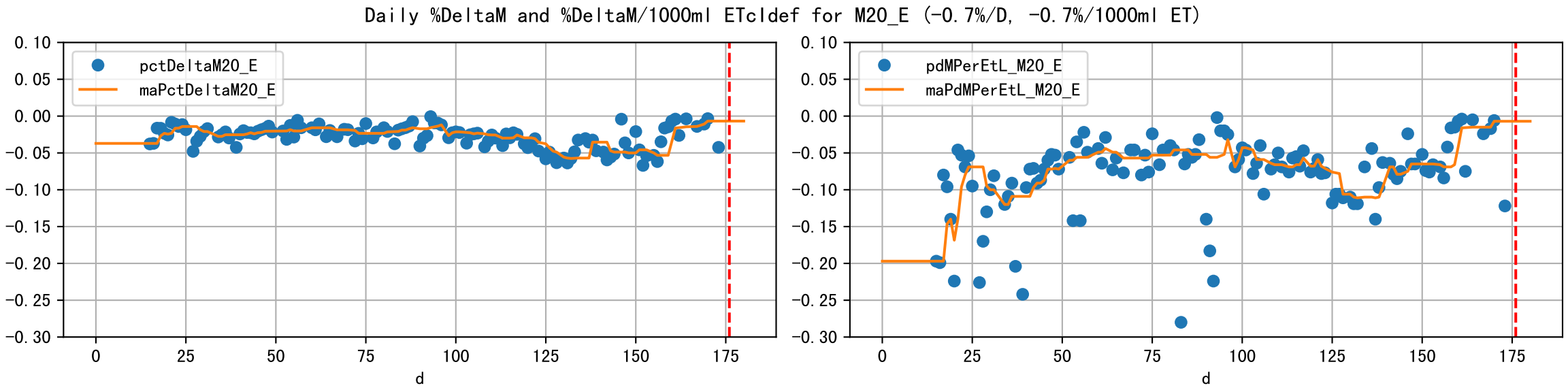


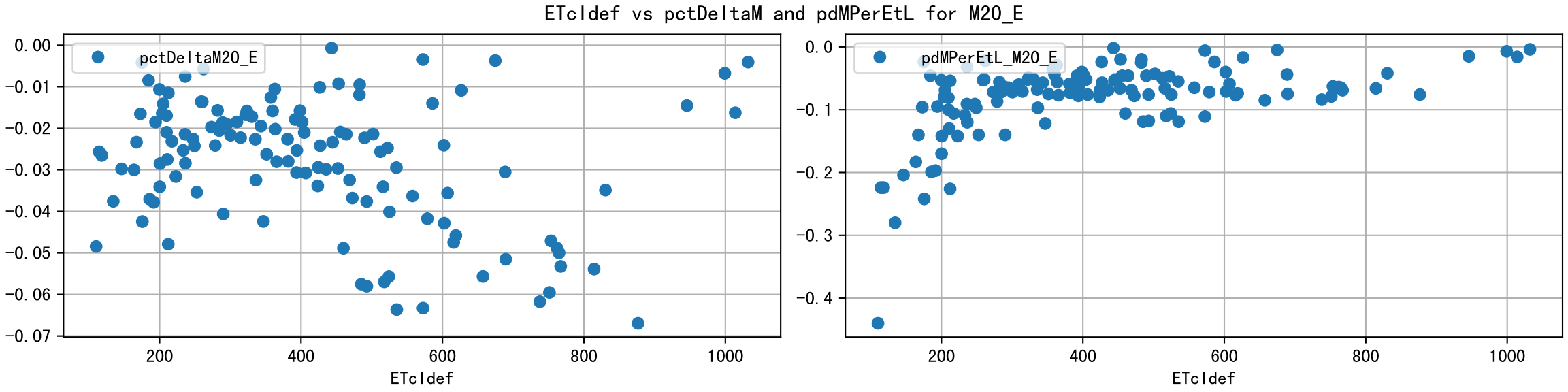

1e6
DUC
planDu
FRV
planVol
VI
preDu
planPreDu
postDu
planPostDu
FDF
planFDF
estEC
planEC

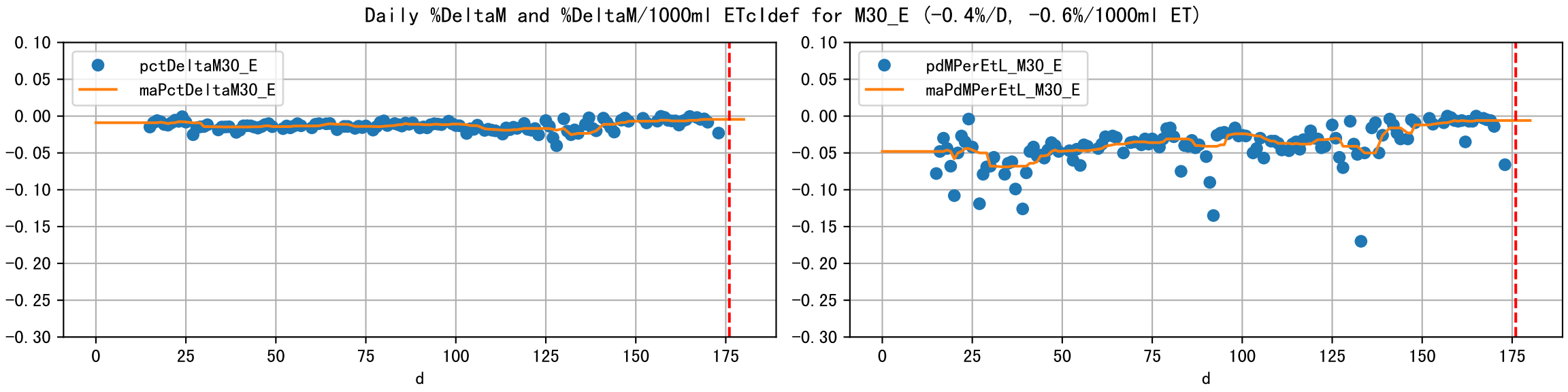

Plot minDeltaM, minDeltaMs, minDeltaMt
minDeltaM20_E
minDeltaM30_E
minDeltaM40_E
minDeltaM_E
d
Warning: col [] missing

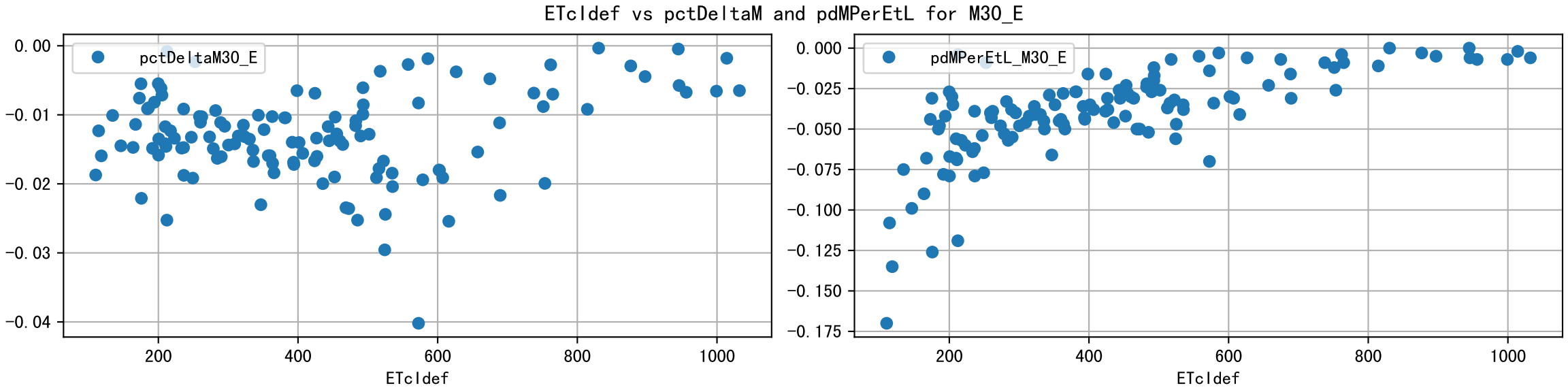

Daily %DeltaM and %DeltaM/1000ml ETcIdef for M10_E (-0.4%/D, -0.6%/1000ml ET)
pctDeltaM10_E
maPctDeltaM10_E
pdMPerEtL_M10_E
maPdMPerEtL_M10_E
0.10
0.05
0.00
-0.05
-0.10
-0.15
-0.20
-0.25
-0.30
0
25
50
75
100
125
150
175
d

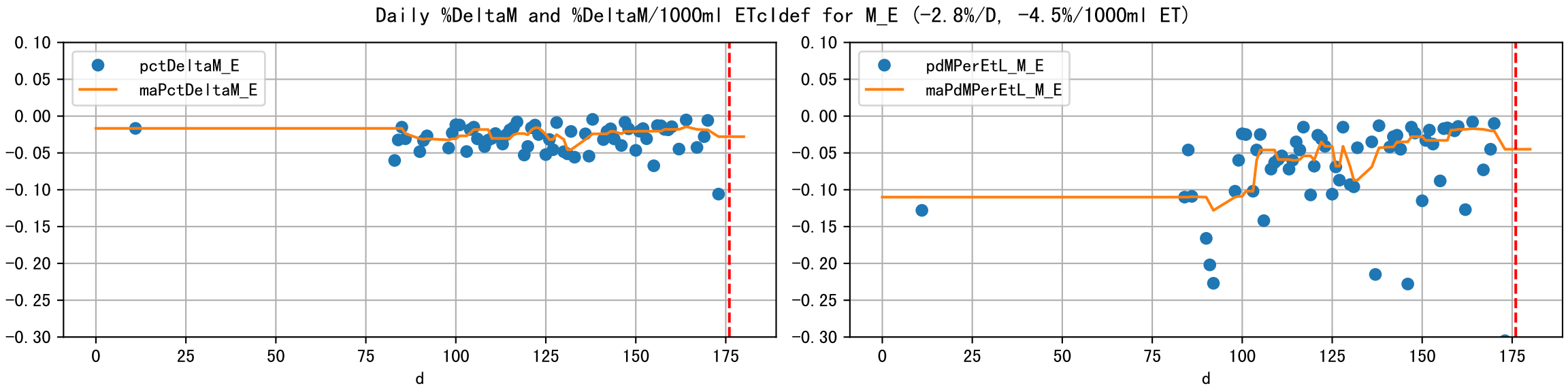

ETcIdef vs pctDeltaM and pdMPerEtL for M10_E
pctDeltaM10_E
pdMPerEtL_M10_E
0.00
−0.02
−0.04
−0.06
−0.08
−0.10
−0.05
−0.15
−0.20
−0.25
200
400
600
800
1000
ETcIdef

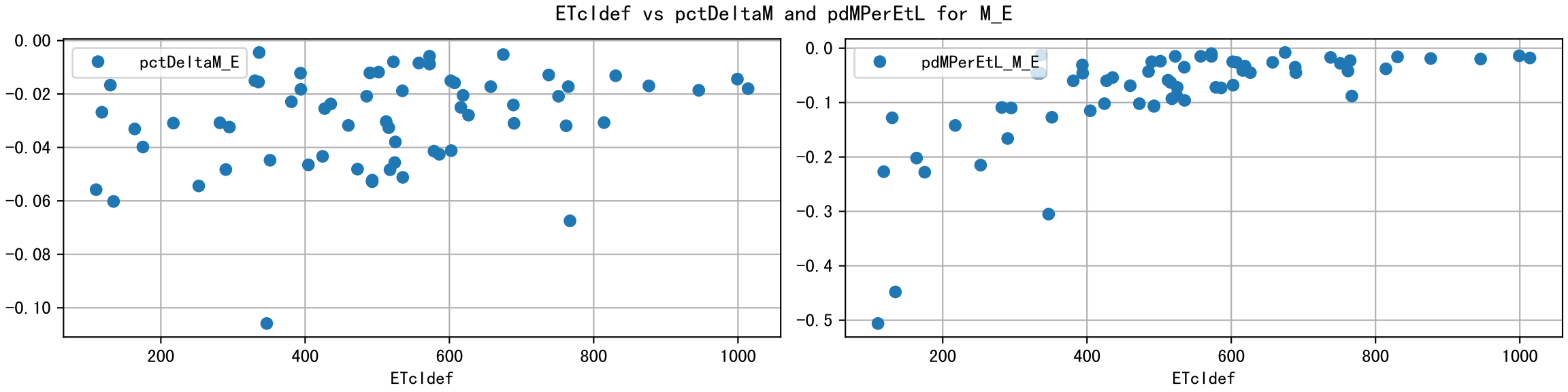

Daily %DeltaM and %DeltaM/1000ml ETcIdef for M20_E (-0.7%/D, -0.7%/1000ml ET)
pctDeltaM20_E
maPctDeltaM20_E
pdMPerEtL_M20_E
maPdMPerEtL_M20_E
0.10
0.05
0.00
−0.05
−0.10
−0.15
−0.20
−0.25
−0.30
0
25
50
75
100
125
150
175
d

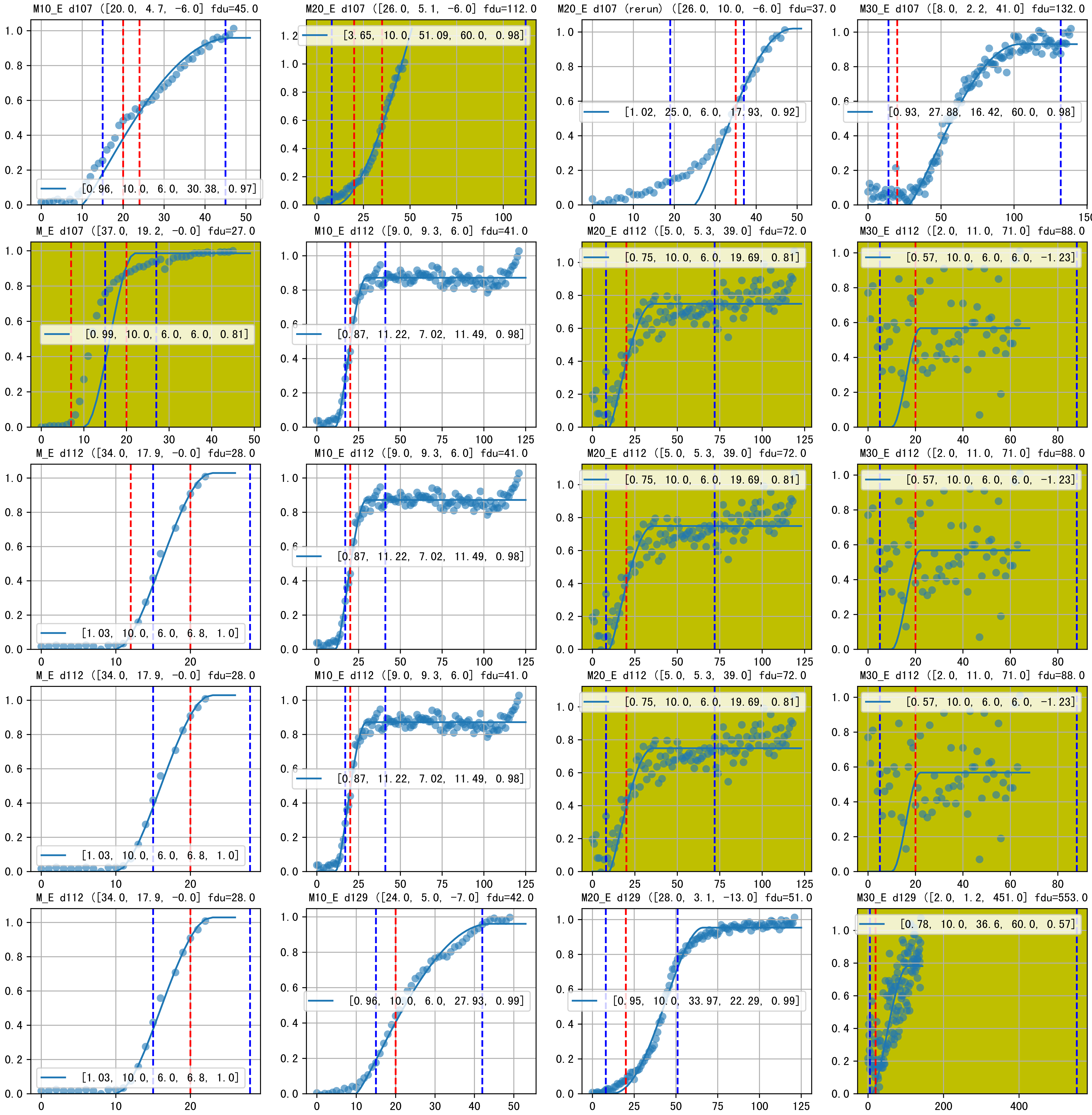

ETcIdef vs pctDeltaM and pdMPerEtL for M20_E
pctDeltaM20_E
0.00
-0.01
-0.02
-0.03
-0.04
-0.05
-0.06
-0.07
200
400
600
800
1000
ETcIdef
pdMPerEtL_M20_E
0.0
-0.1
-0.2
-0.3
-0.4
200
400
600
800
1000
ETcIdef


Daily %DeltaM and %DeltaM/1000ml ETcIdef for M30_E (-0.4%/D, -0.6%/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
25
50
75
100
125
150
175
d

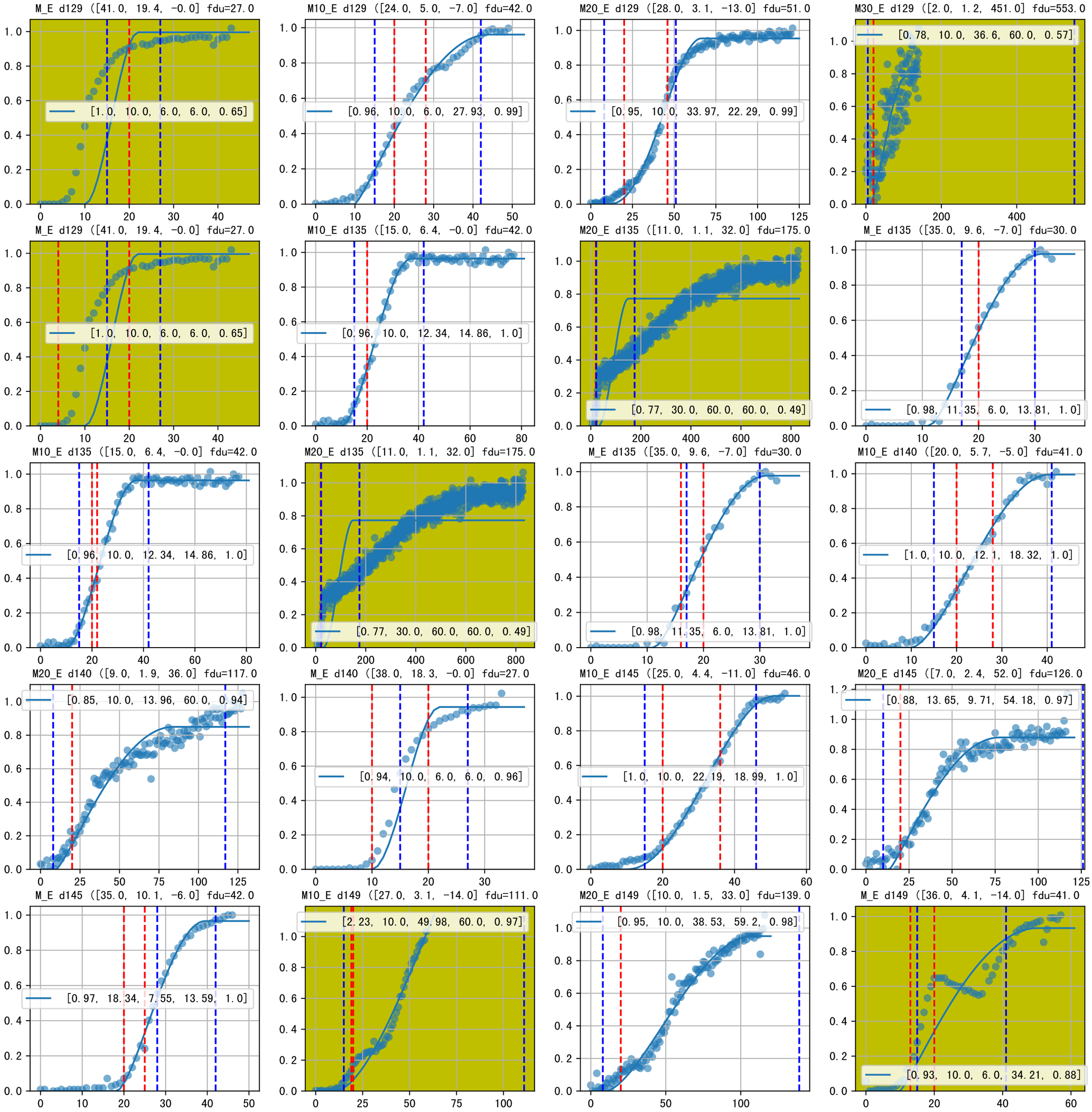

ETcIdef vs pctDeltaM and pdMPerEtL for M30_E
pctDeltaM30_E
0.00
-0.01
-0.02
-0.03
-0.04
200
400
600
800
1000
ETcIdef
pdMPerEtL_M30_E
0.000
-0.025
-0.050
-0.075
-0.100
-0.125
-0.150
-0.175
200
400
600
800
1000
ETcIdef

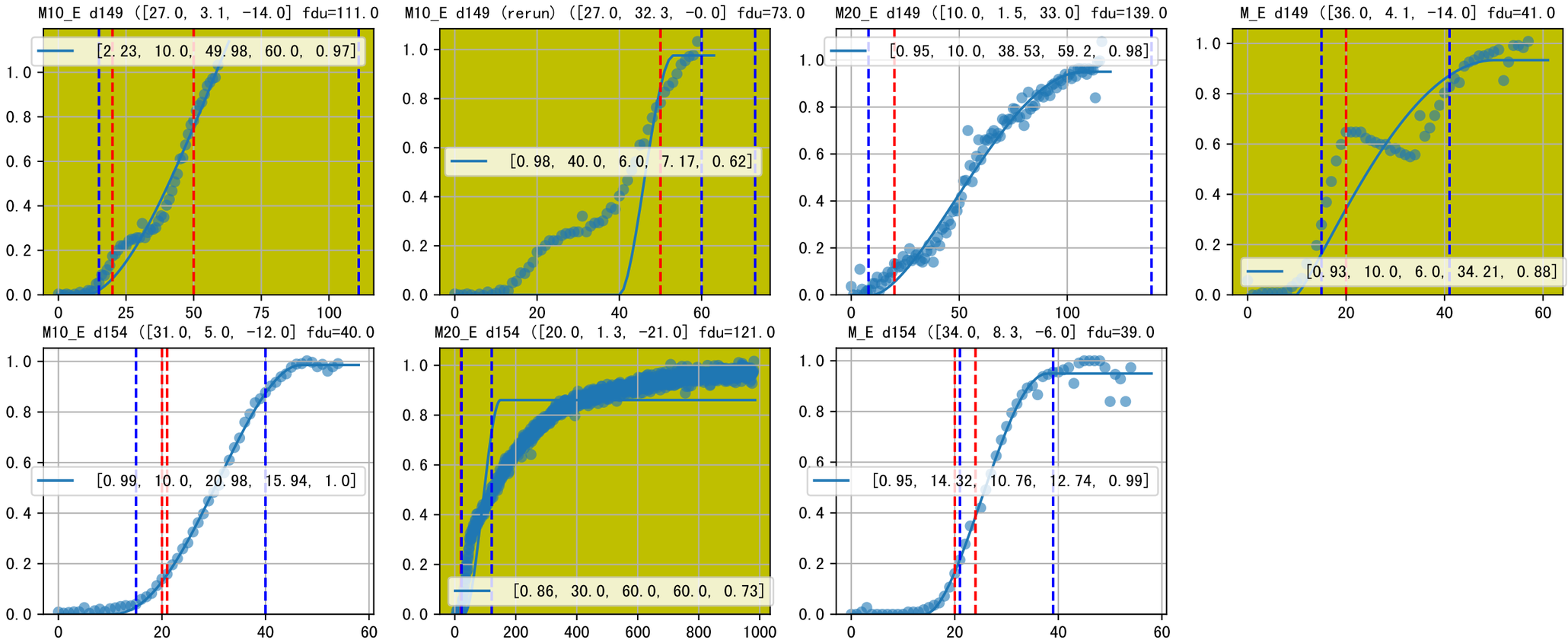

Daily %DeltaM and %DeltaM/1000ml ETcIdef for M_E (-2.8%/D, -4.5%/1000ml ET)
pctDeltaM_E
maPctDeltaM_E
pdMPerEtL_M_E
maPdMPerEtL_M_E
0.10
0.05
0.00
-0.05
-0.10
-0.15
-0.20
-0.25
-0.30
0
25
50
75
100
125
150
175
d

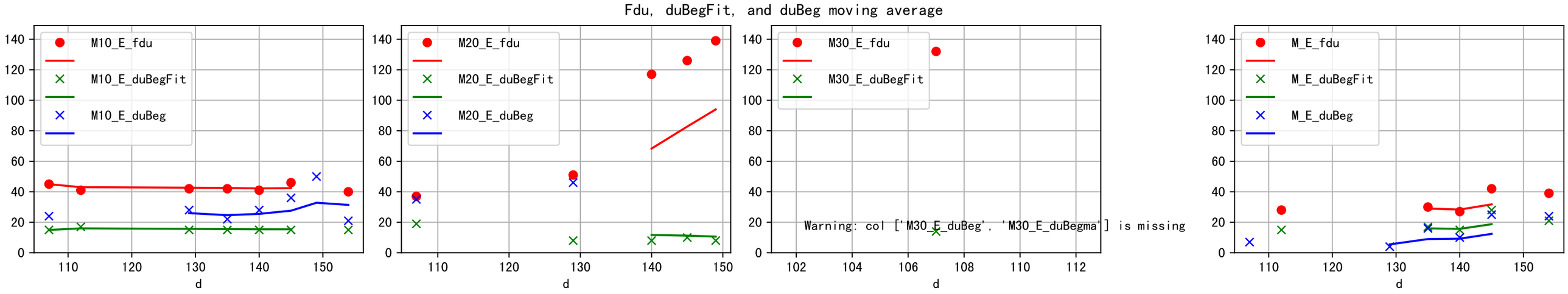

ETcIdef vs pctDeltaM and pdMPerEtL for M_E
pctDeltaM_E
pdMPerEtL_M_E
ETcIdef
ETcIdef
0.00
−0.02
−0.04
−0.06
−0.08
−0.10
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
200
400
600
800
1000

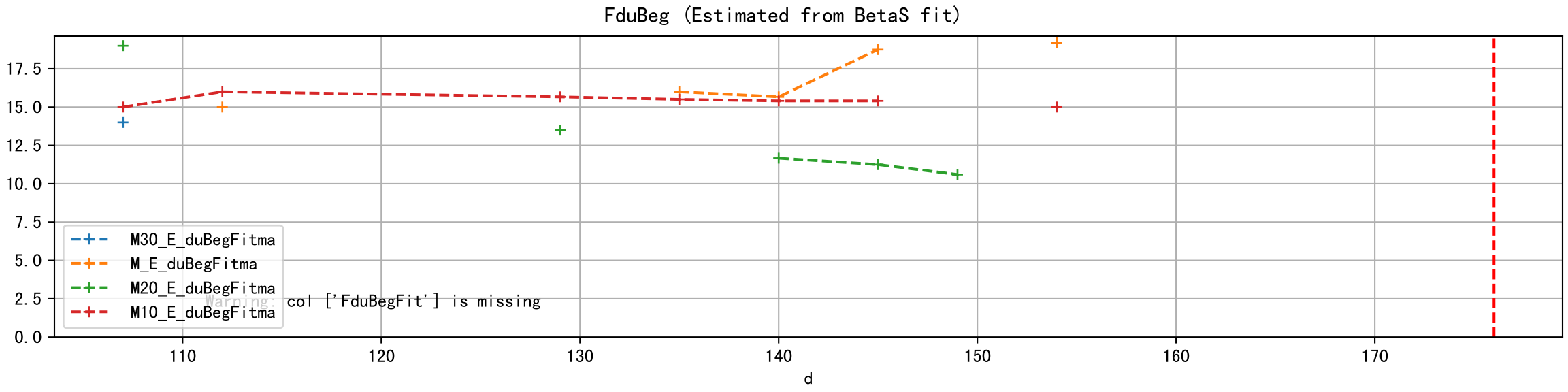


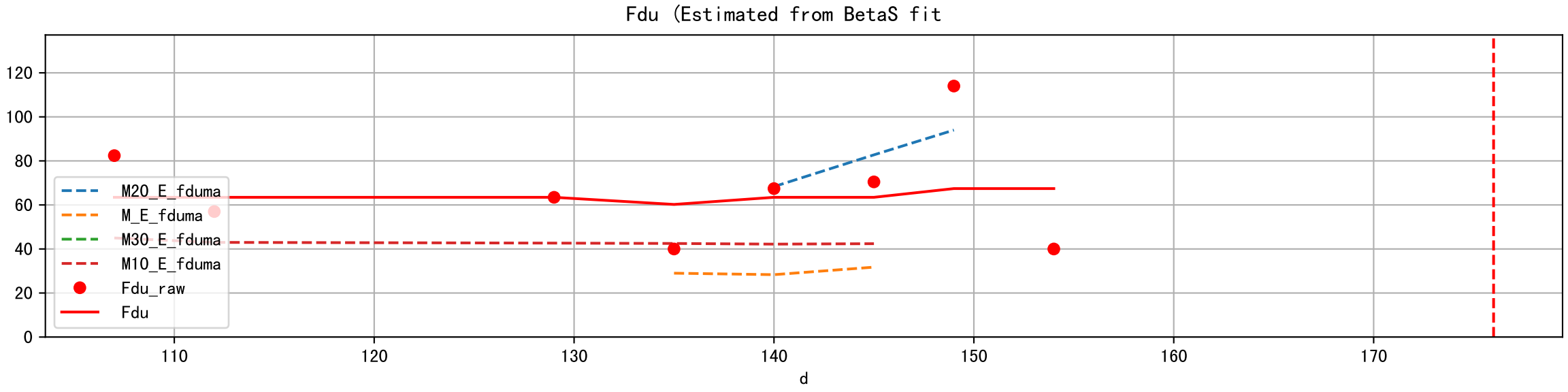
M10_E d107 ([20.0, 4.7, -6.0] fdu=45.0
[0.96, 10.0, 6.0, 30.38, 0.97]
M20_E d107 ([26.0, 5.1, -6.0] fdu=112.0
[3.65, 10.0, 51.09, 60.0, 0.98]
M20_E d107 (rerun) ([26.0, 10.0, -6.0] fdu=37.0
[1.02, 25.0, 6.0, 17.93, 0.92]
M30_E d107 ([8.0, 2.2, 41.0] fdu=132.0
[0.93, 27.88, 16.42, 60.0, 0.98]
M_E d107 ([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]

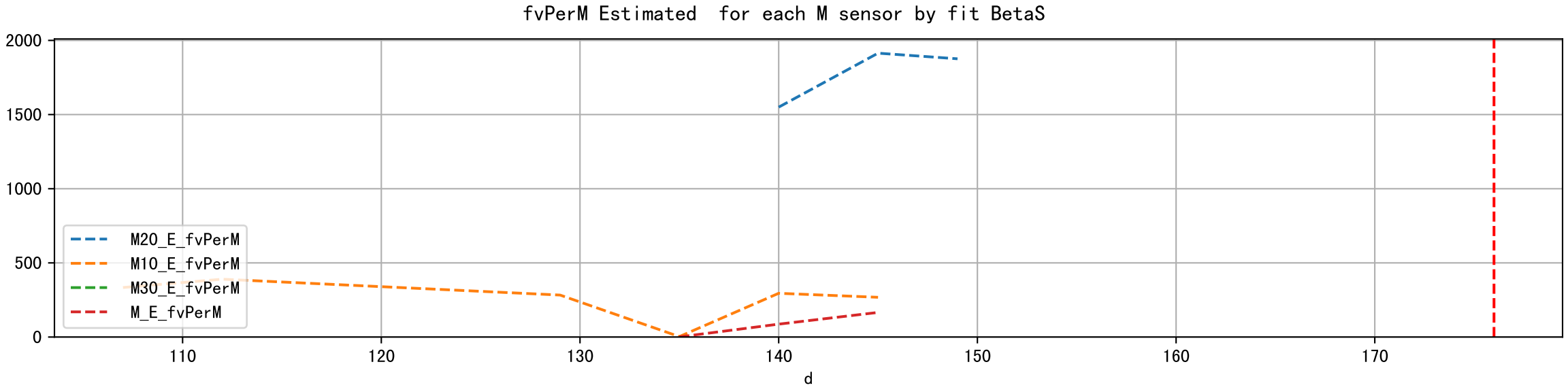

M_E d129 ([41.0, 19.4, -0.0] fdu=27.0
[1.0, 10.0, 6.0, 6.0, 0.65]
M10_E d129 ([24.0, 5.0, -7.0] fdu=42.0
[0.96, 10.0, 6.0, 27.93, 0.99]
M20_E d129 ([28.0, 3.1, -13.0] fdu=51.0
[0.95, 10.0, 33.97, 22.29, 0.99]
M30_E d129 ([2.0, 1.2, 451.0] fdu=553.0
[0.78, 10.0, 36.6, 60.0, 0.57]
M_E d129 ([41.0, 19.4, -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]
M10_E d149 ([27.0, 3.1, -14.0] fdu=111.0
[2.23, 10.0, 49.98, 60.0, 0.97]
M20_E d149 ([10.0, 1.5, 33.0] fdu=139.0
[0.95, 10.0, 38.53, 59.2, 0.98]
M_E d149 ([36.0, 4.1, -14.0] fdu=41.0
[0.93, 10.0, 6.0, 34.21, 0.88]

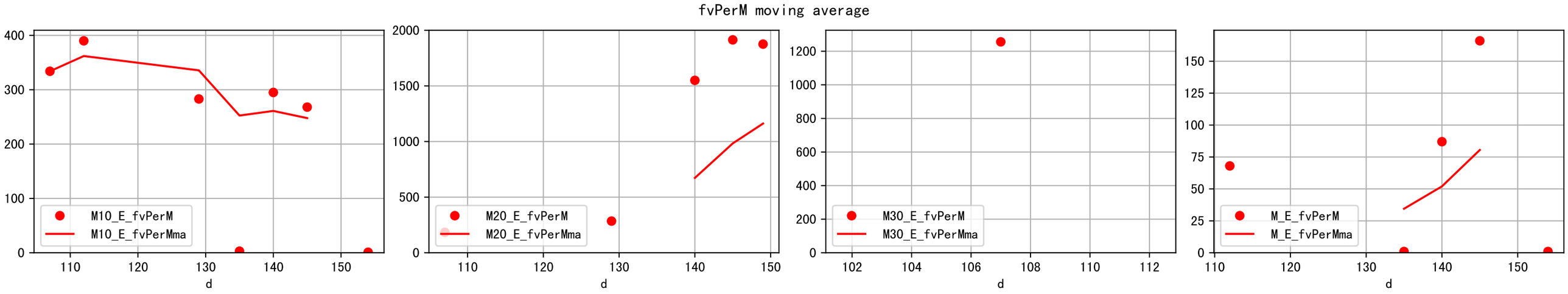

M10_E d149 ([27.0, 3.1, -14.0] fdu=111.0
[2.23, 10.0, 49.98, 60.0, 0.97]
M10_E d149 (rerun) ([27.0, 32.3, -0.0] fdu=73.0
[0.98, 40.0, 6.0, 7.17, 0.62]
M20_E d149 ([10.0, 1.5, 33.0] fdu=139.0
[0.95, 10.0, 38.53, 59.2, 0.98]
M_E d149 ([36.0, 4.1, -14.0] fdu=41.0
[0.93, 10.0, 6.0, 34.21, 0.88]
M10_E d154 ([31.0, 5.0, -12.0] fdu=40.0
[0.99, 10.0, 20.98, 15.94, 1.0]
M20_E d154 ([20.0, 1.3, -21.0] fdu=121.0
[0.86, 30.0, 60.0, 60.0, 0.73]
M_E d154 ([34.0, 8.3, -6.0] fdu=39.0
[0.95, 14.32, 10.76, 12.74, 0.99]

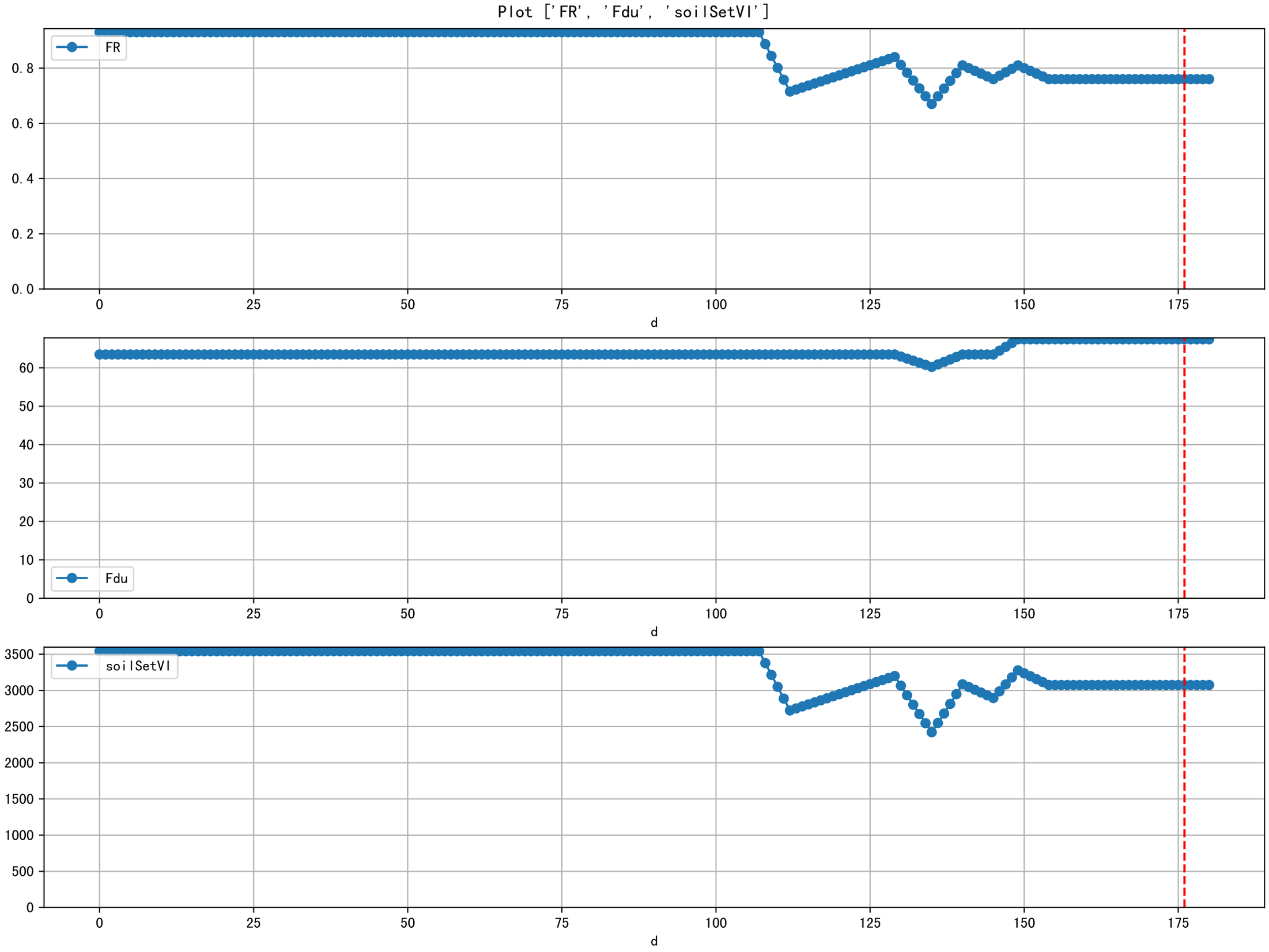

Fdu, duBegFit, and duBeg moving average
M10_E_fdu
M10_E_duBegFit
M10_E_duBeg
M20_E_fdu
M20_E_duBegFit
M20_E_duBeg
M30_E_fdu
M30_E_duBegFit
Warning: col ['M30_E_duBeg', 'M30_E_duBegma'] is missing
M_E_fdu
M_E_duBegFit
M_E_duBeg
d


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
160
170
d
M30_E_duBegFitma
M_E_duBegFitma
M20_E_duBegFitma
M10_E_duBegFitma
Warning: col ['FduBegFit'] is missing

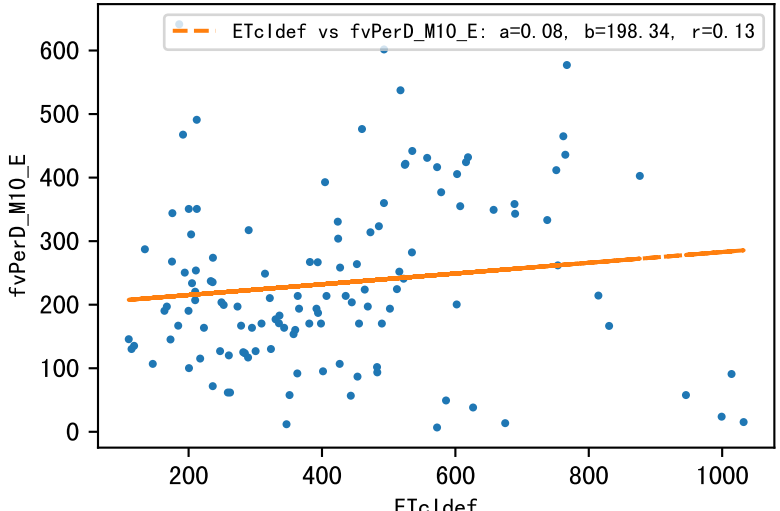

Fdu (Estimated from BetaS fit
M20_E_fduma
M_E_fduma
M30_E_fduma
M10_E_fduma
Fdu_raw
Fdu
0
20
40
60
80
100
120
110
120
130
140
150
160
170
d

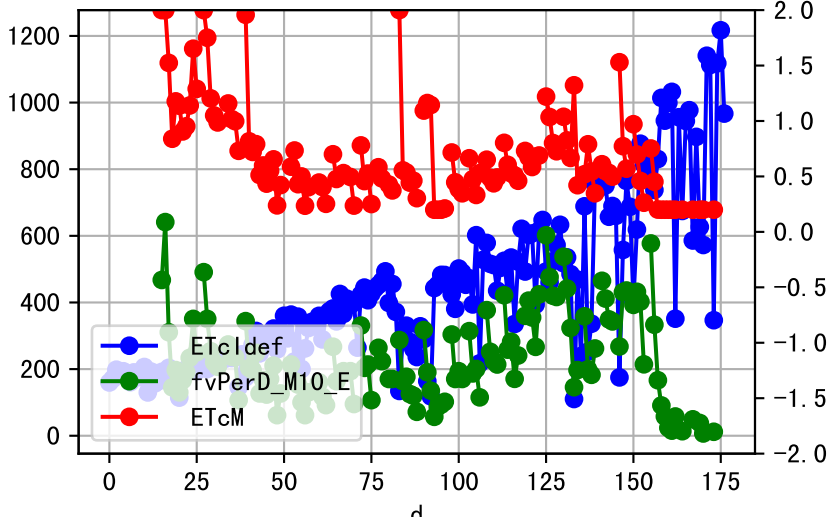

fvPerM Estimated for each M sensor by fit BetaS
2000
1500
1000
500
0
110
120
130
140
150
160
170
d
M20_E_fvPerM
M10_E_fvPerM
M30_E_fvPerM
M_E_fvPerM


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
d
d
d

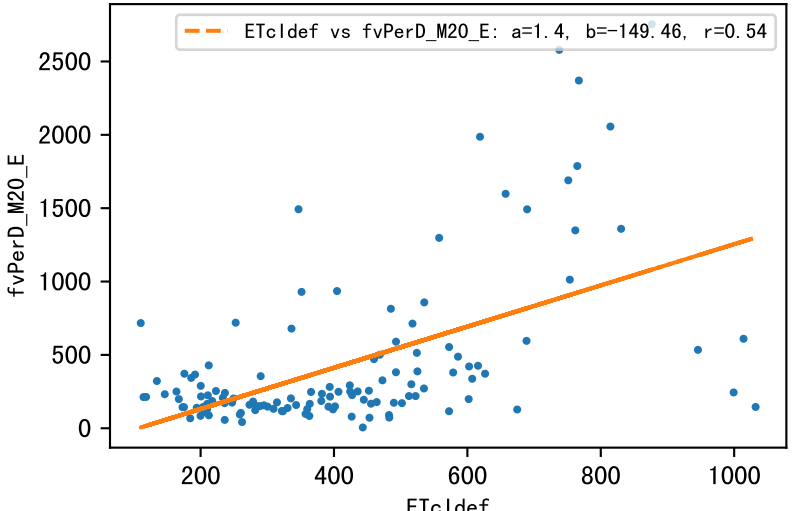

Plot ['FR', 'Fdu', 'soilSetVI']
FR
0.0
0.2
0.4
0.6
0.8
0
25
50
75
100
125
150
175
d
Fdu
0
10
20
30
40
50
60
d
soilSetVI
0
500
1000
1500
2000
2500
3000
3500
d

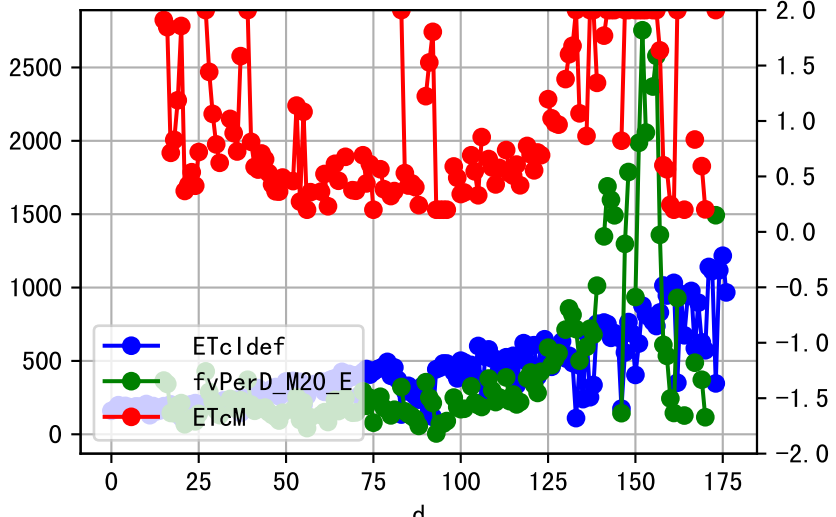
M10_E ETcldef vs estFv



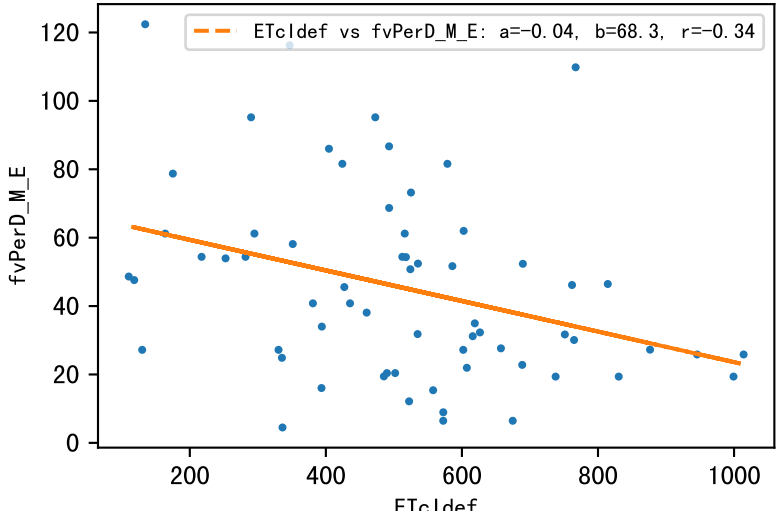


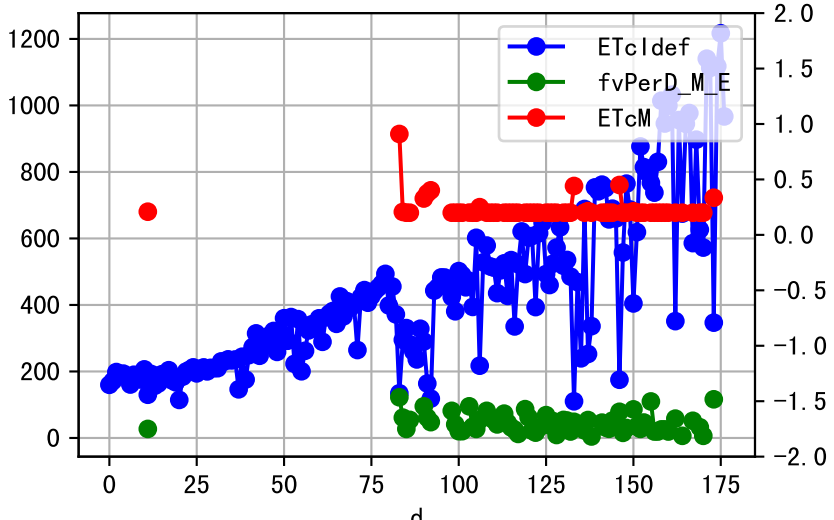
M20_E ETcIdef vs estFv

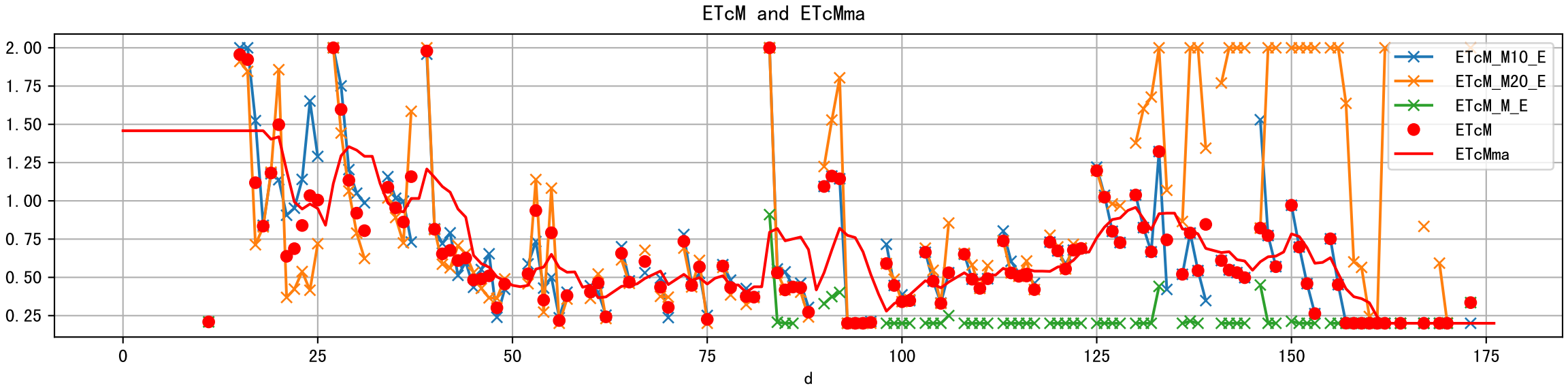




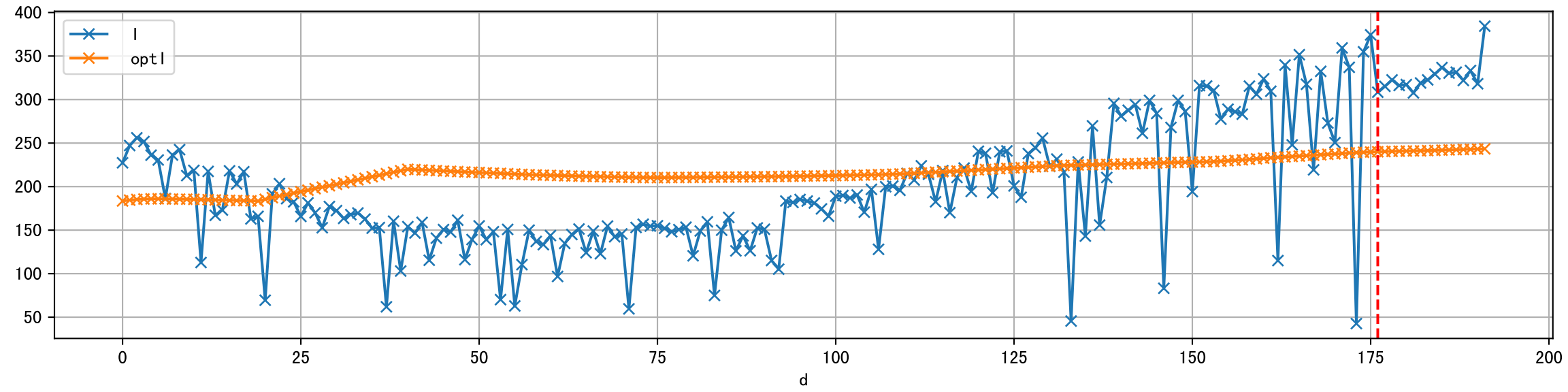
M_E ETcIdef vs estFv

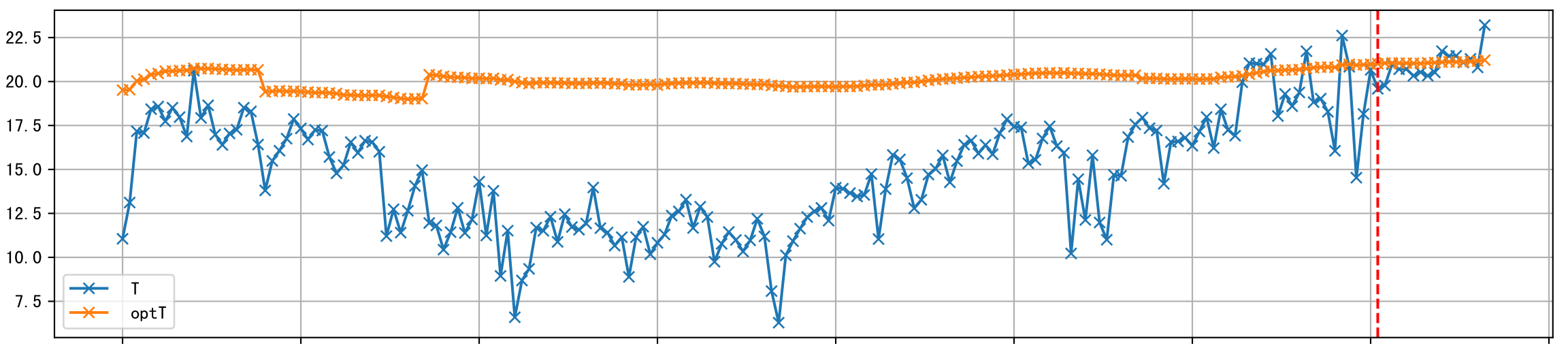


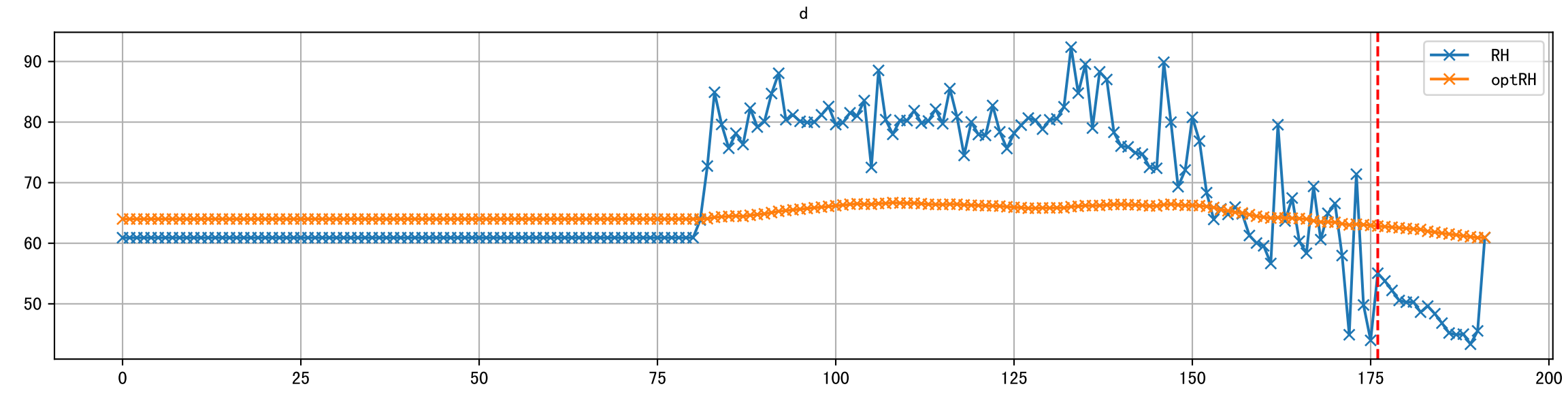


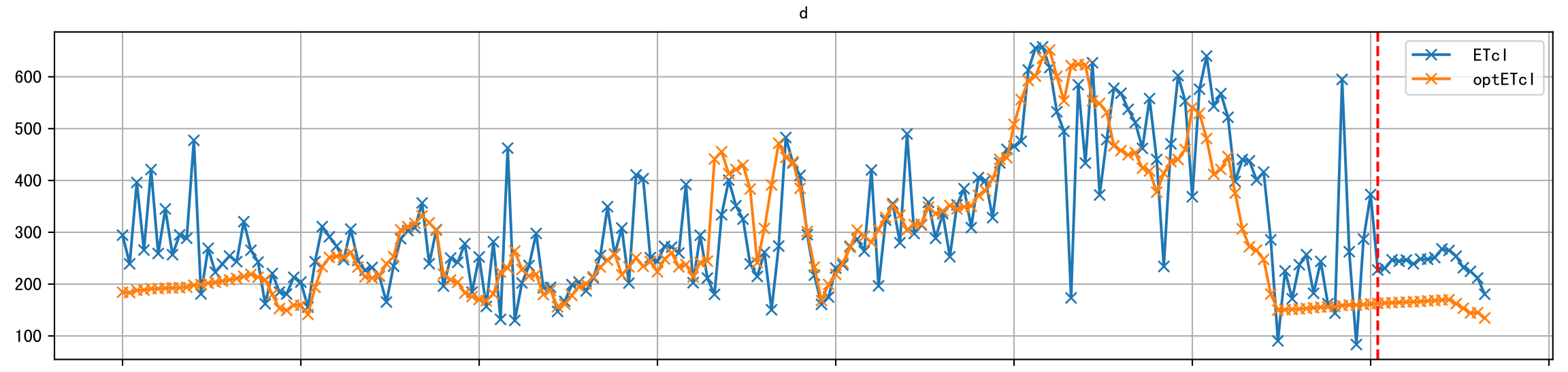

ETcM and ETcMma
2.00
1.75
1.50
1.25
1.00
0.75
0.50
0.25
0
25
50
75
100
125
150
175
d
ETcM_M10_E
ETcM_M20_E
ETcM_M_E
ETcM
ETcMma

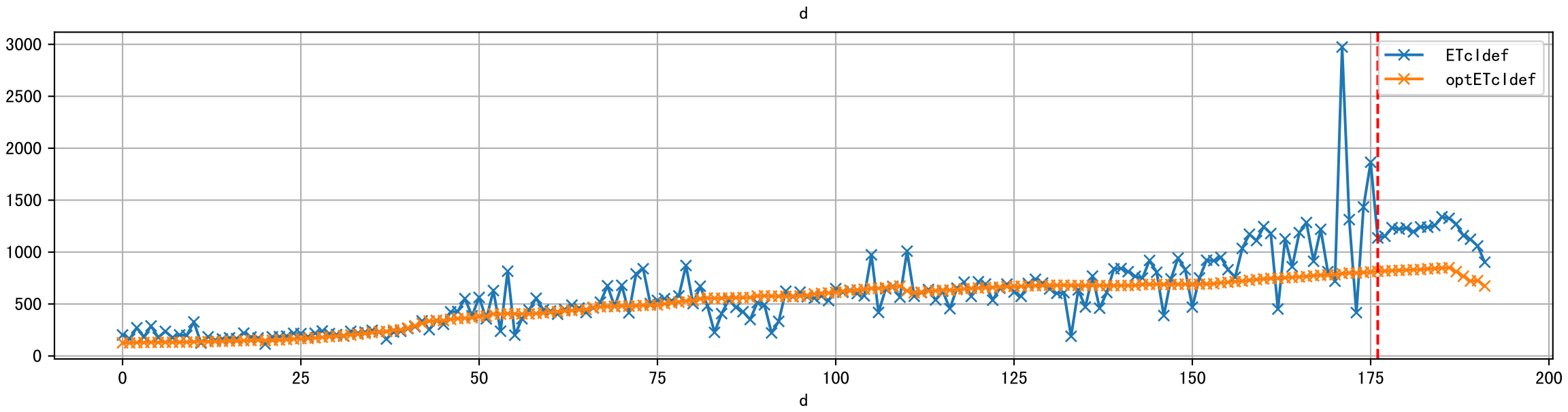
I'], ['T', 'optT'], ['RH', 'optRH'], ['ETcI', 'optETcI'], ['ETcIdef', 'optETcIdef'], ['ETol', 'optETol'], 'LAI', ['optEtRate', 'optEtRateDef', '

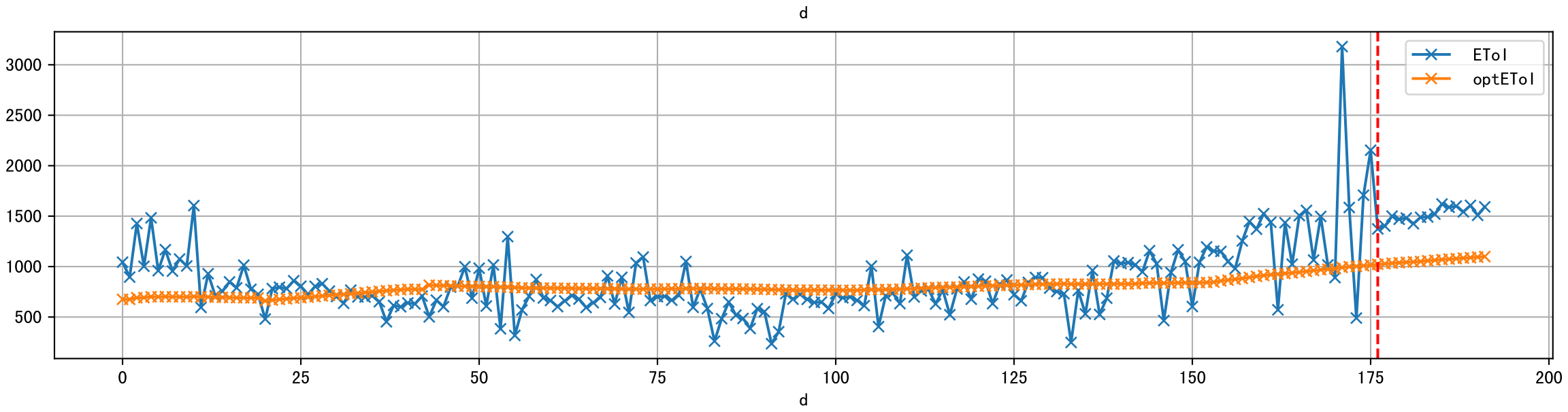


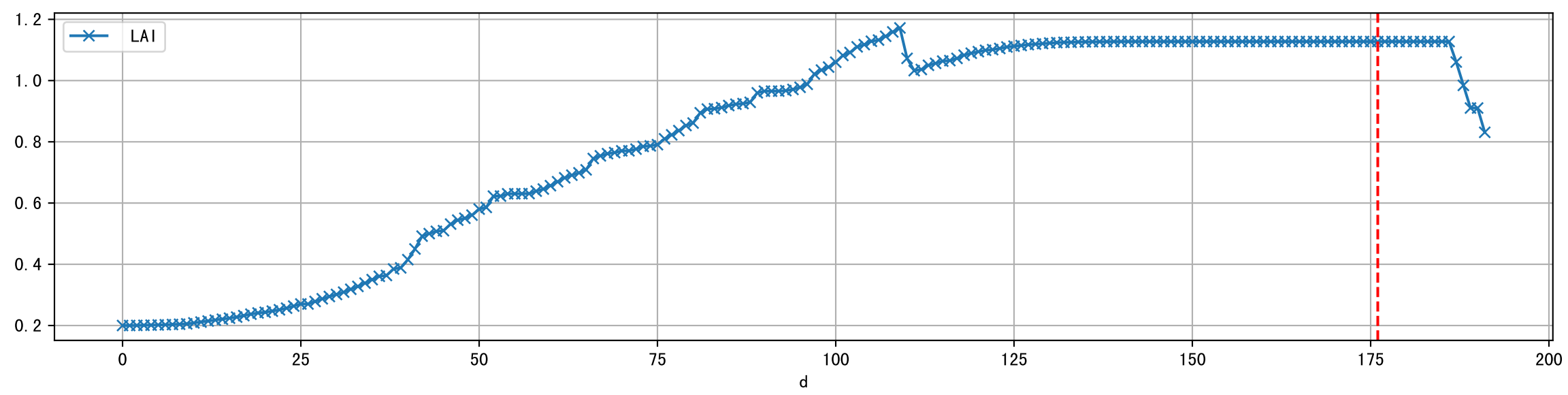


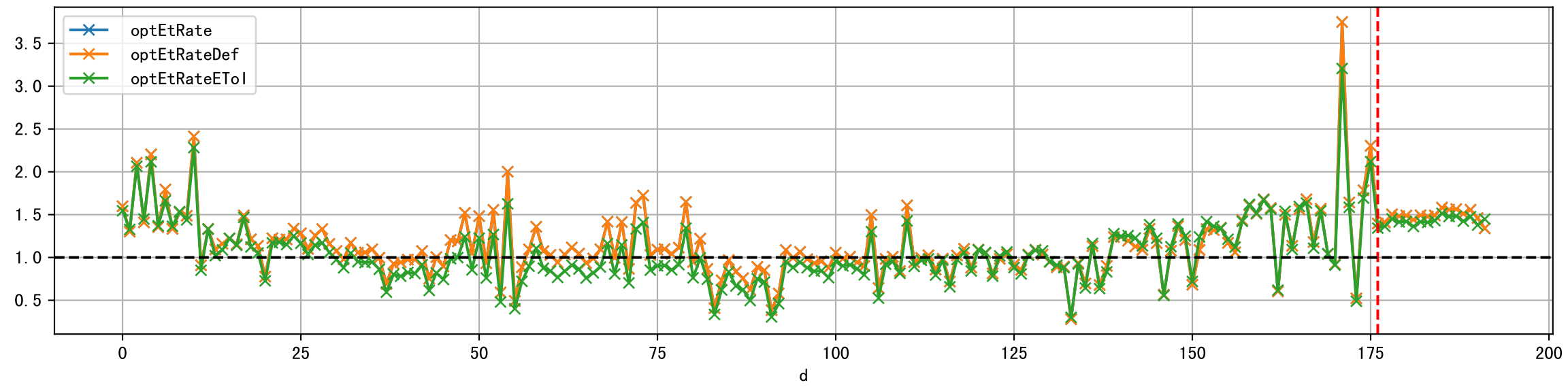


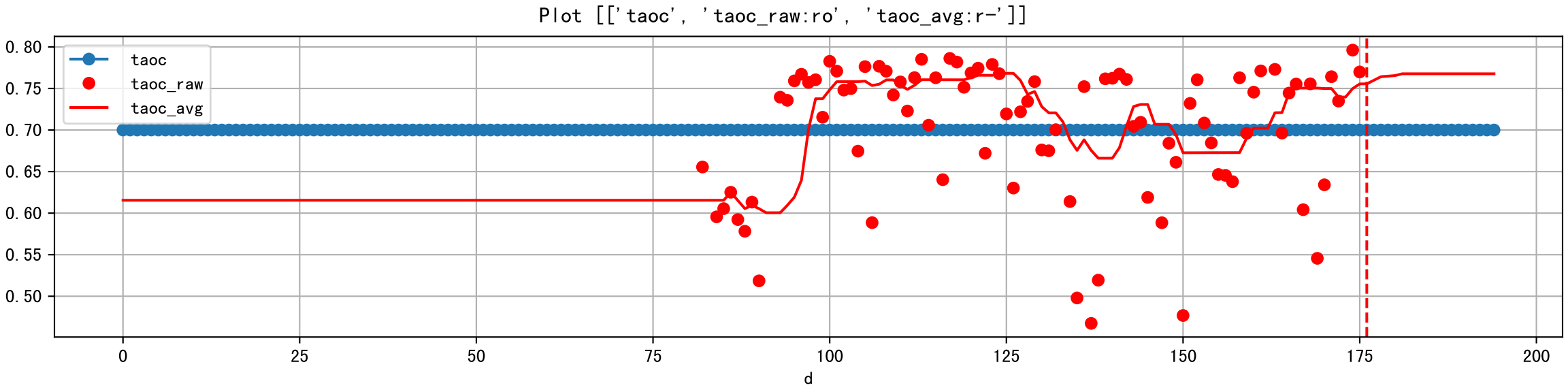




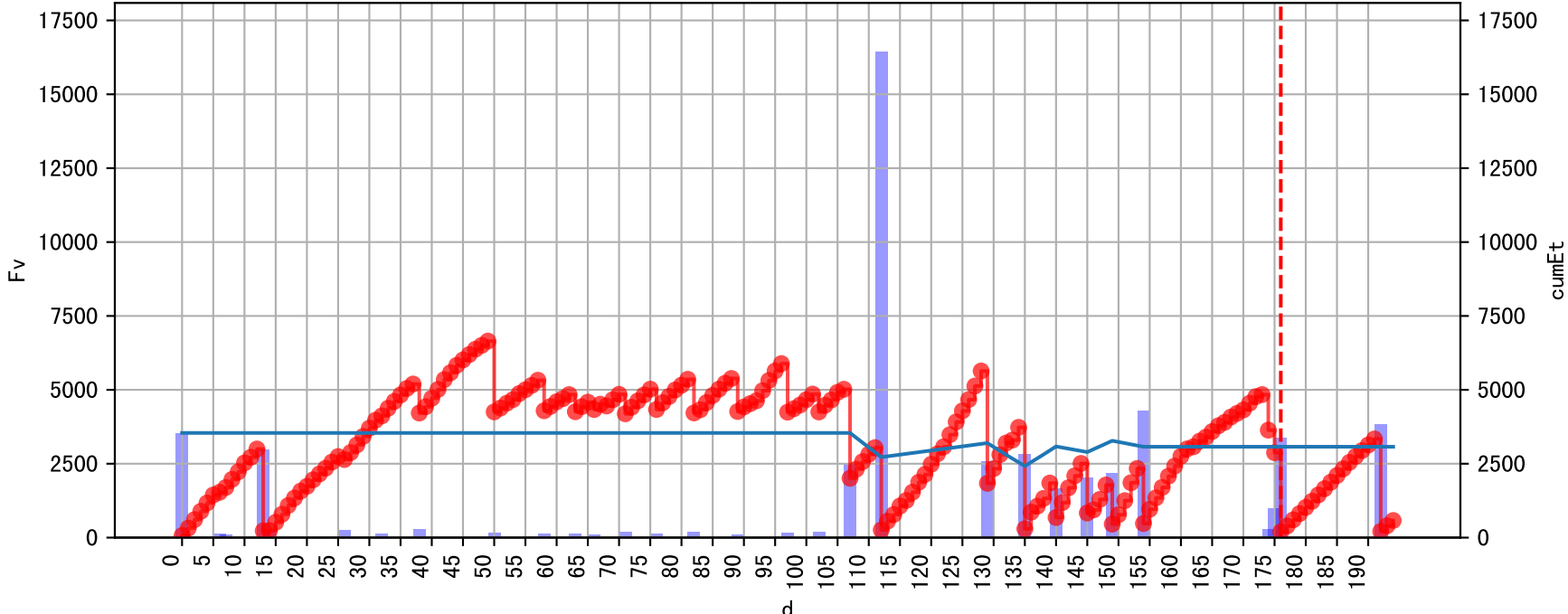


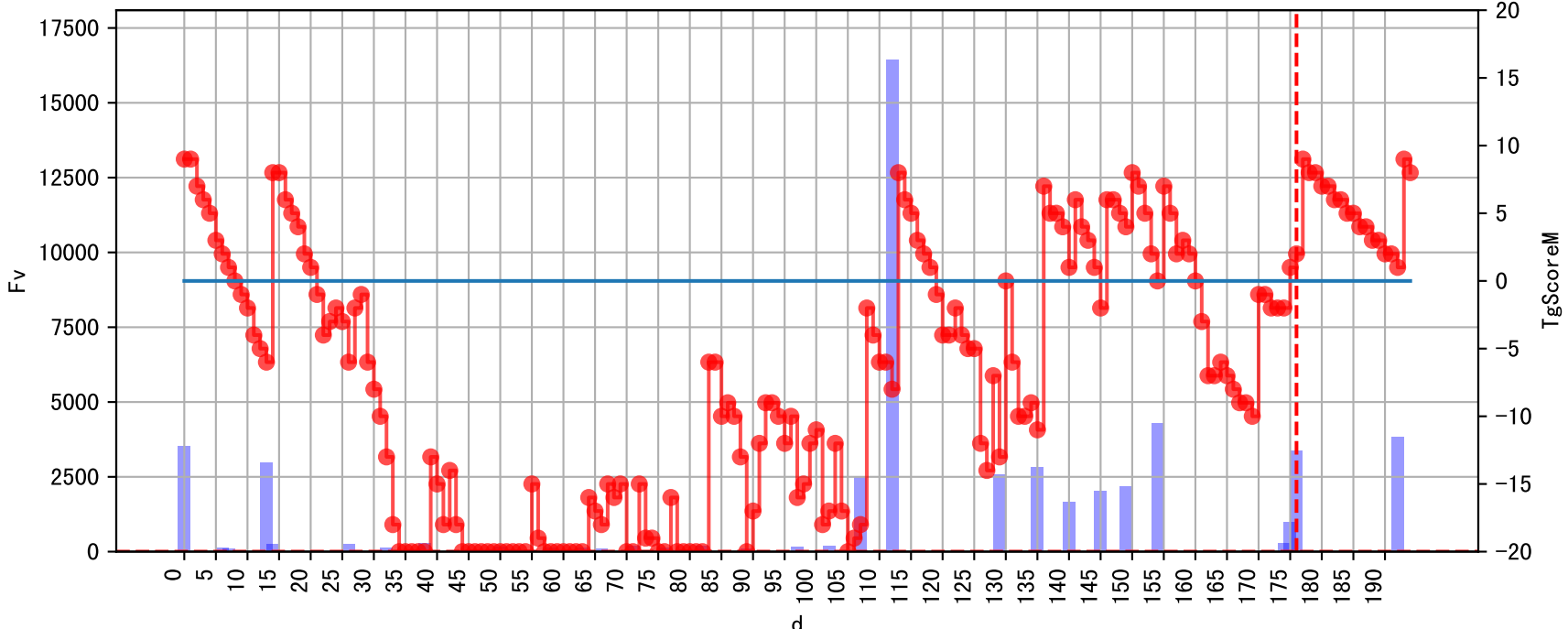




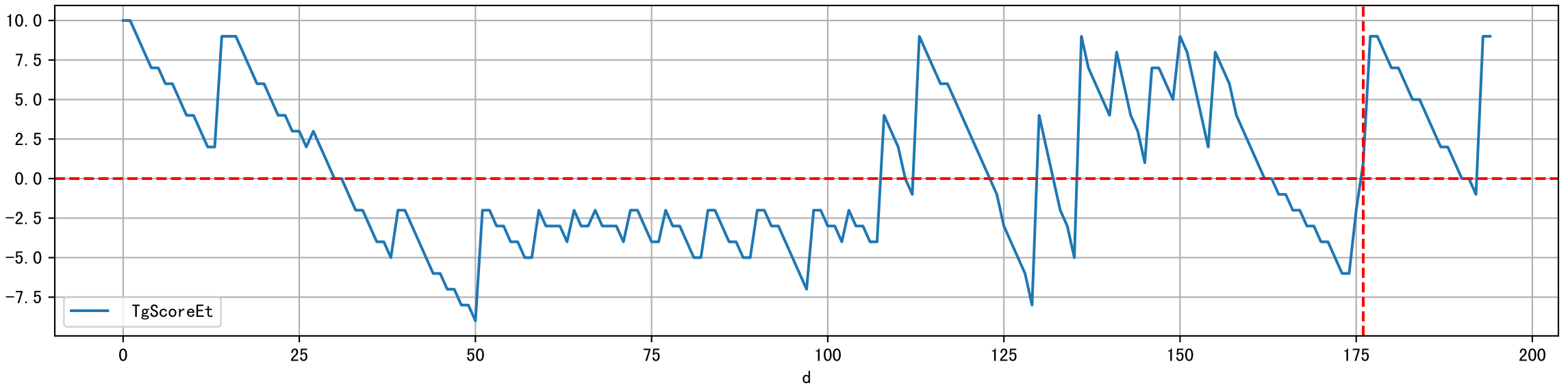

Plot [['taoc', 'taoc_raw:ro', 'taoc_avg:r-']]
taoc
taoc_raw
taoc_avg
0.80
0.75
0.70
0.65
0.60
0.55
0.50
0
25
50
75
100
125
150
175
200
d

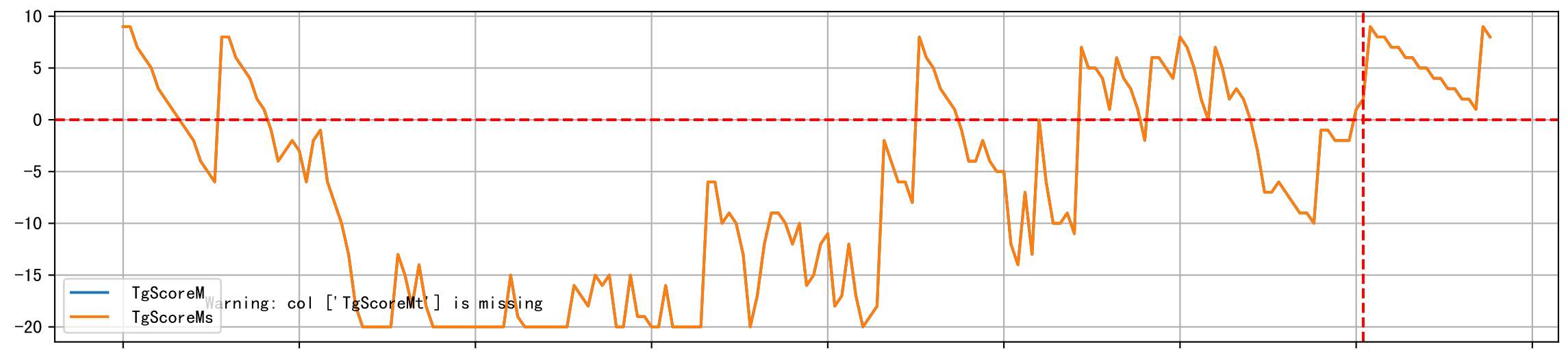
d	note	fz	fzStockID	expFDF	expEC	preDu	fzDu
6.0	假设未如期灌溉	清水		nan	nan	0.0	0.0
7.0	假设未如期灌溉	清水		nan	nan	0.0	0.0
8.0	假设未如期灌溉	清水		nan	nan	0.0	0.0
9.0	假设未如期灌溉	清水		nan	nan	0.0	0.0
0.0	假设未如期灌溉	清水		nan	nan	0.0	0.0
1.0	假设未如期灌溉	清水		nan	nan	0.0	0.0
2.0	假设未如期灌溉	清水		nan	nan	0.0	0.0
3.0	假设未如期灌溉	清水		nan	nan	0.0	0.0
4.0	如期灌溉但量少，灌溉透支3947ml/株，肥料名缺失(假设只灌清水)	清水	NA	nan	364.0	0.0	364.0
5.0	如期灌溉但量少，灌溉透支2016ml/株，肥料名缺失(假设只灌清水)	清水	NA	nan	364.0	0.0	1324.0
6.0	预期灌溉（提前以维持原计划），预期灌溉，土壤肥已过量，逐渐减肥	清水	1134	500.0	667.0	360.0	3781.0
2.0	预期灌溉	清水	TBD	500.0	364.0	360.0	4392.0


Fv
cumEt
0
2500
5000
7500
10000
12500
15000
17500
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

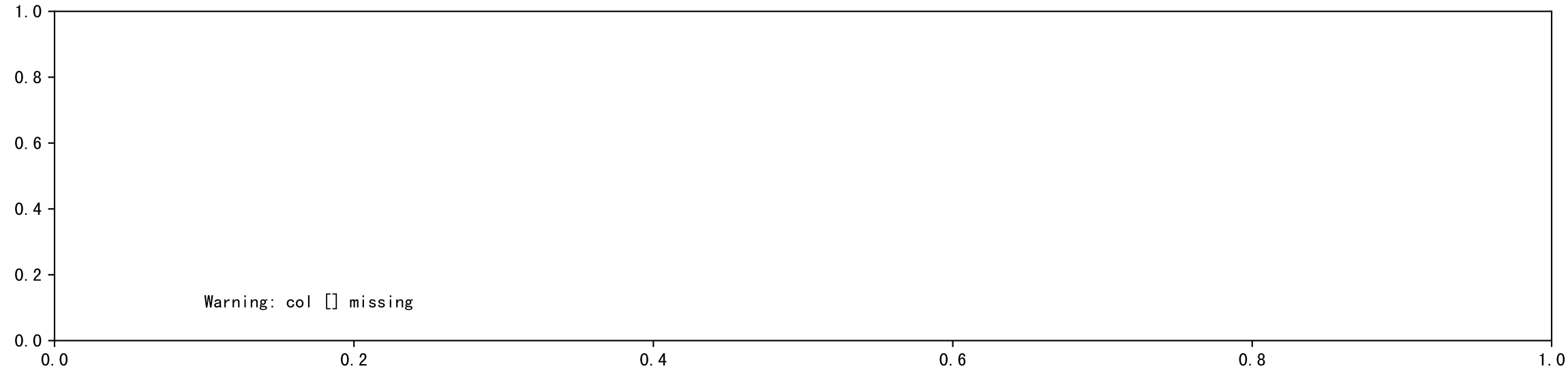

Fv
TgScoreM
17500
15000
12500
10000
7500
5000
2500
0
20
15
10
5
0
−5
−10
−15
−20
0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120 125 130 135 140 145 150 155 160 165 170 175 180 185 190

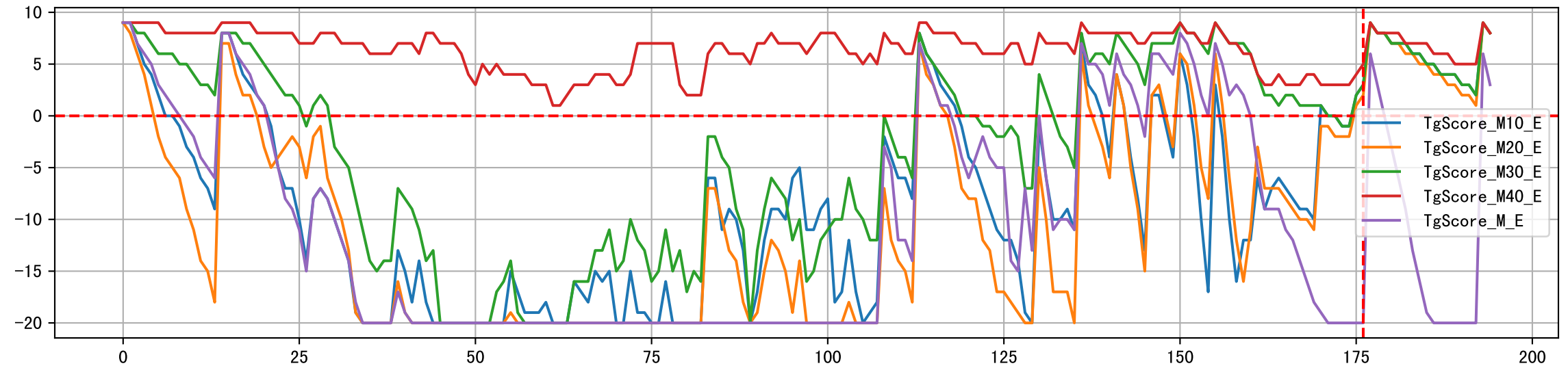
Fg Trigger Score (by Et and sensor)

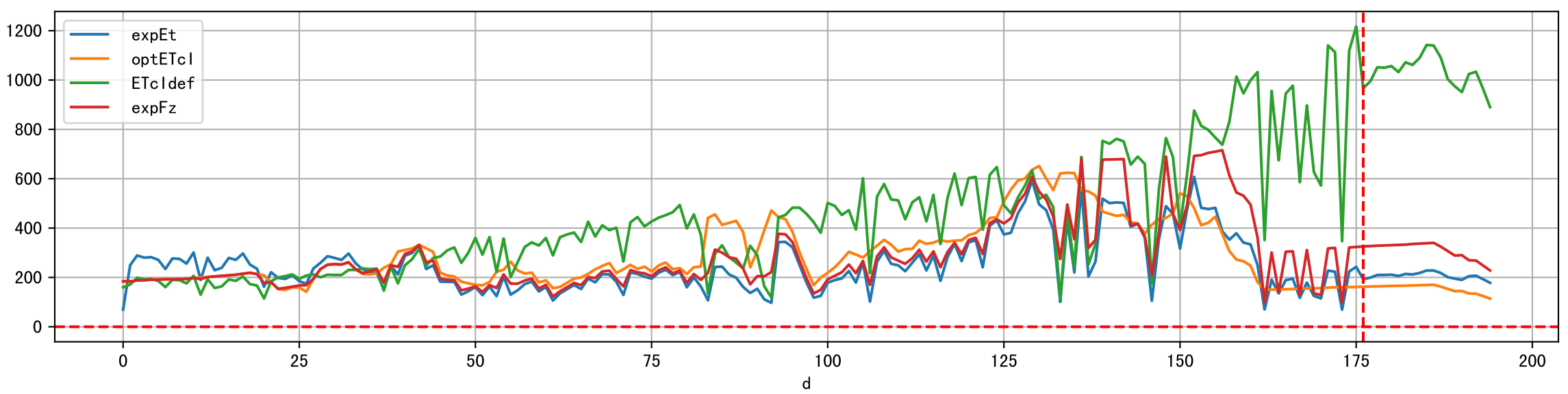


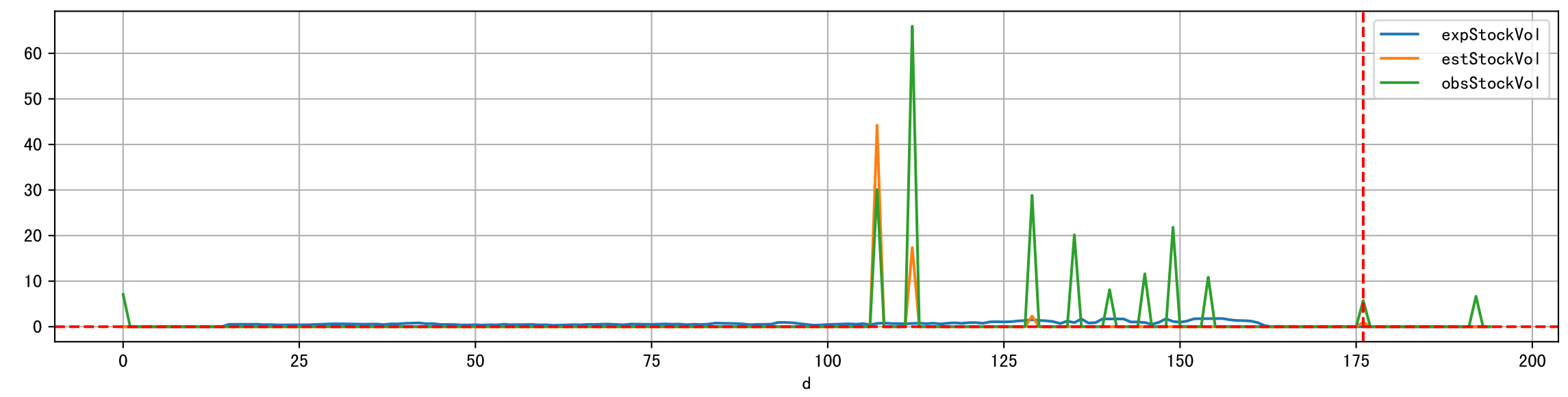


d

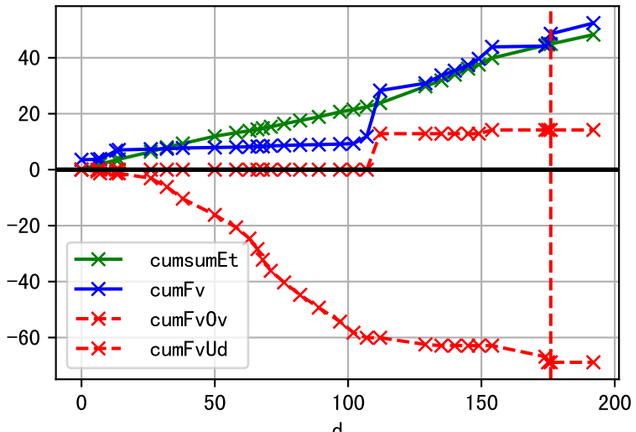


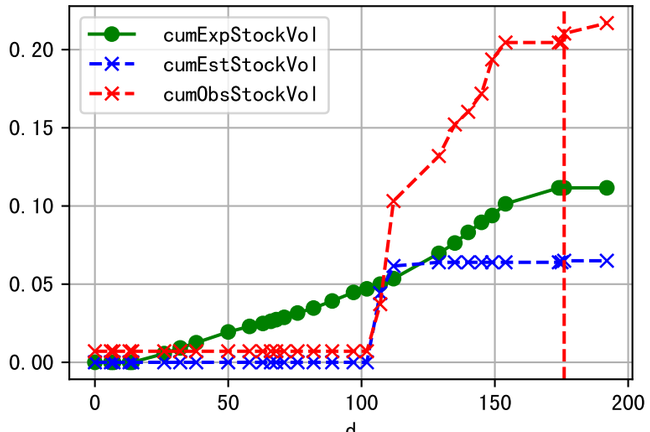


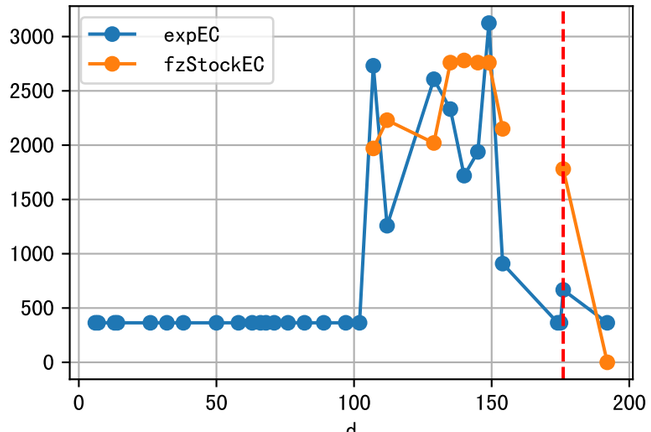


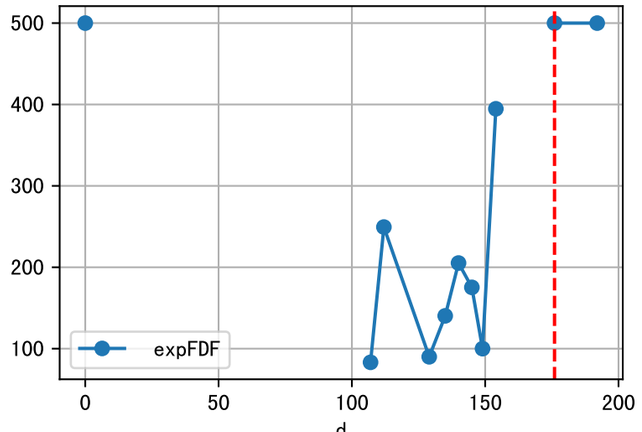


Plot liquid fertilizer usage

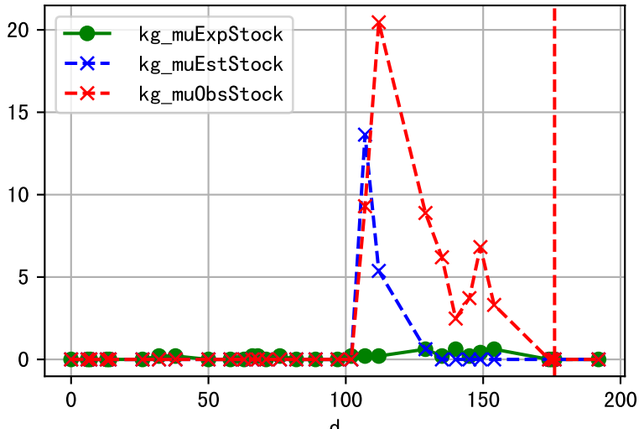


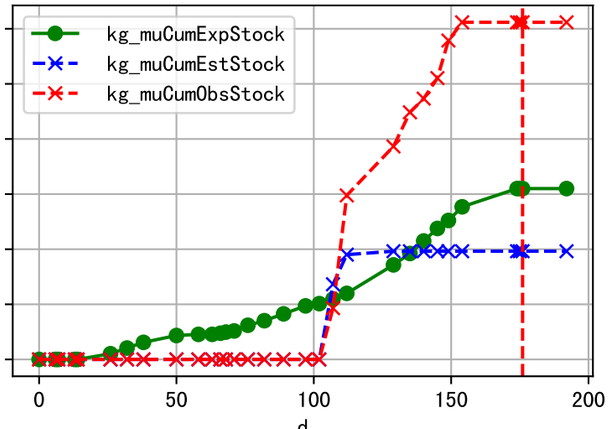


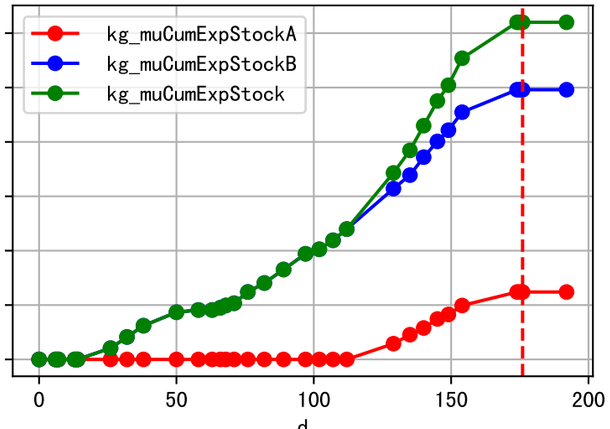


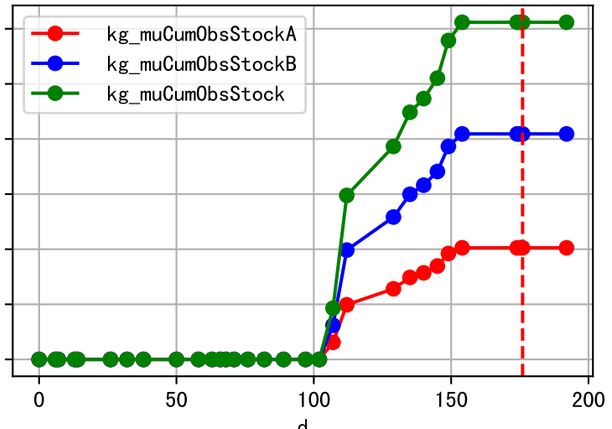


Plot solid fertilizer (kg/mu) usage









Fertilizer Range Source: kerleyL, kerleyH, UnivFL, TNAI, Haifa