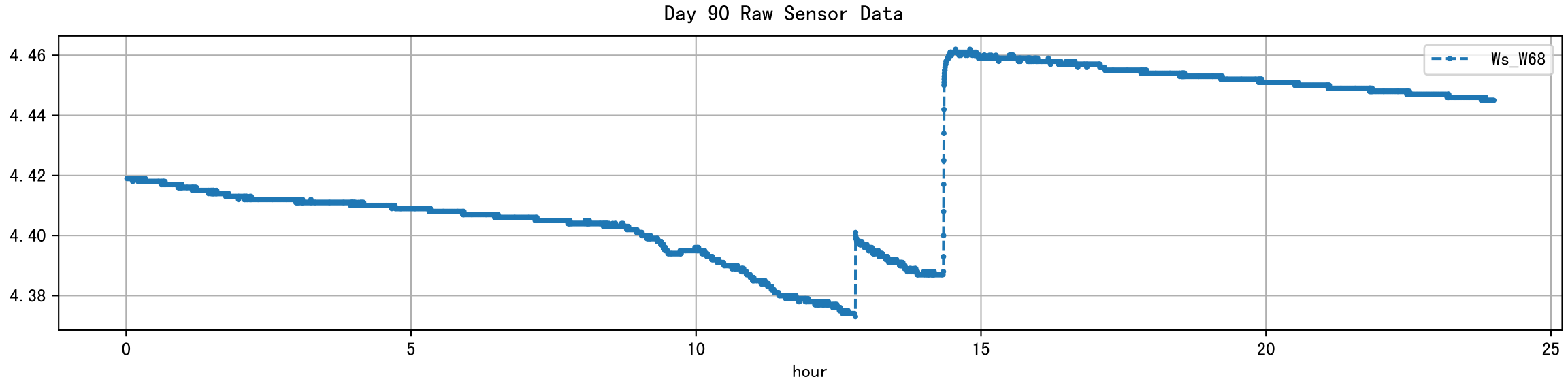
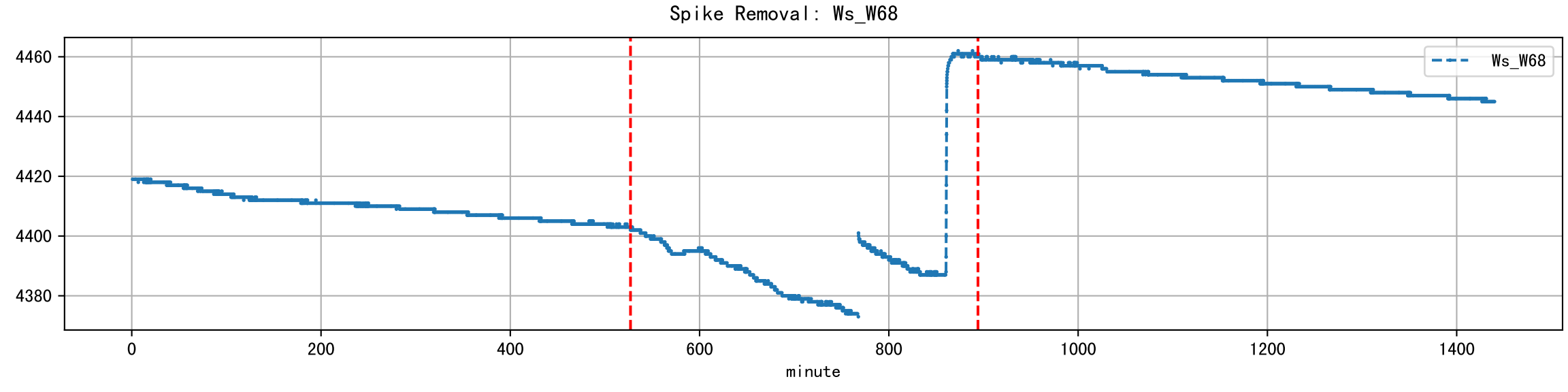
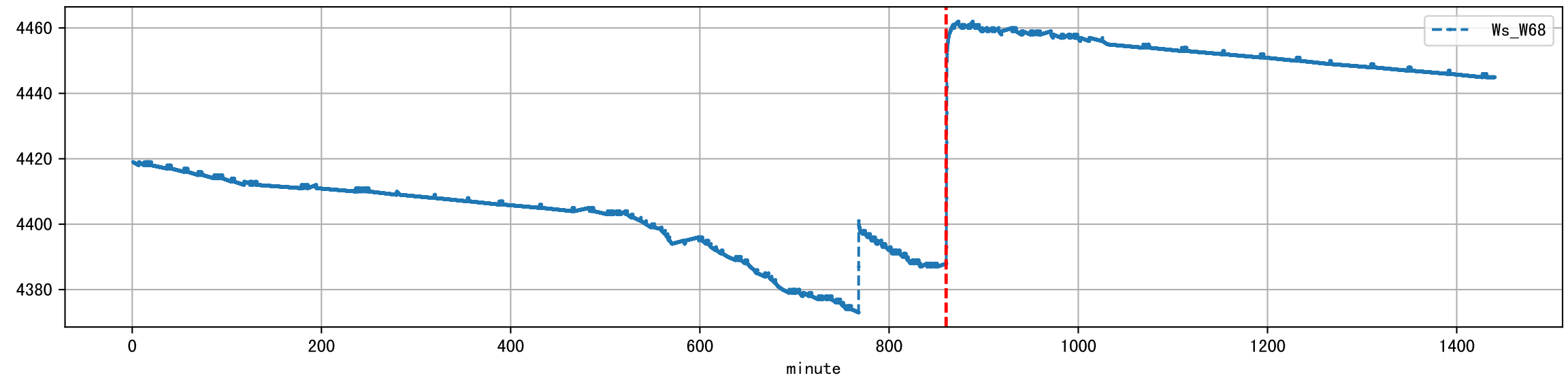
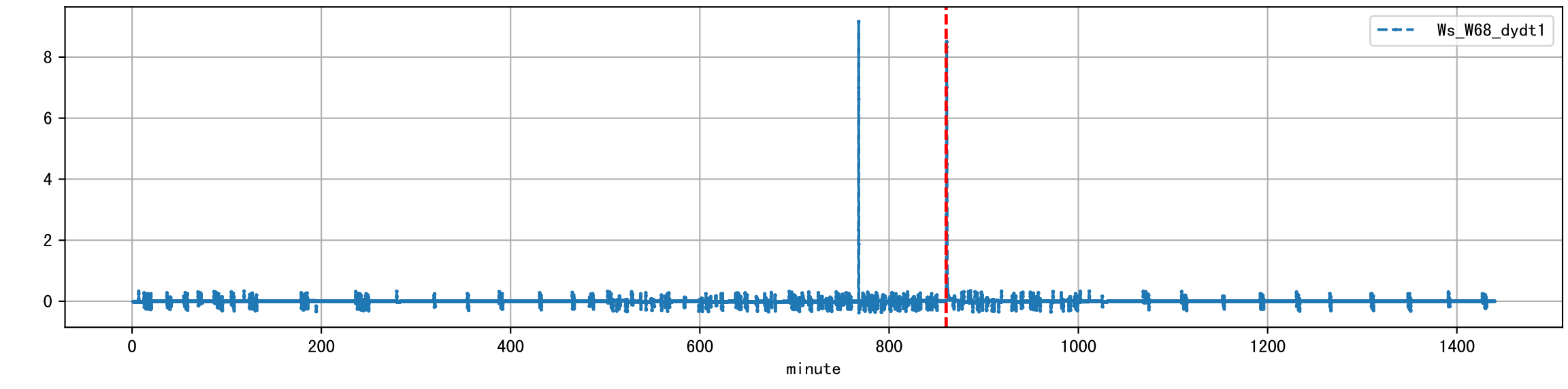
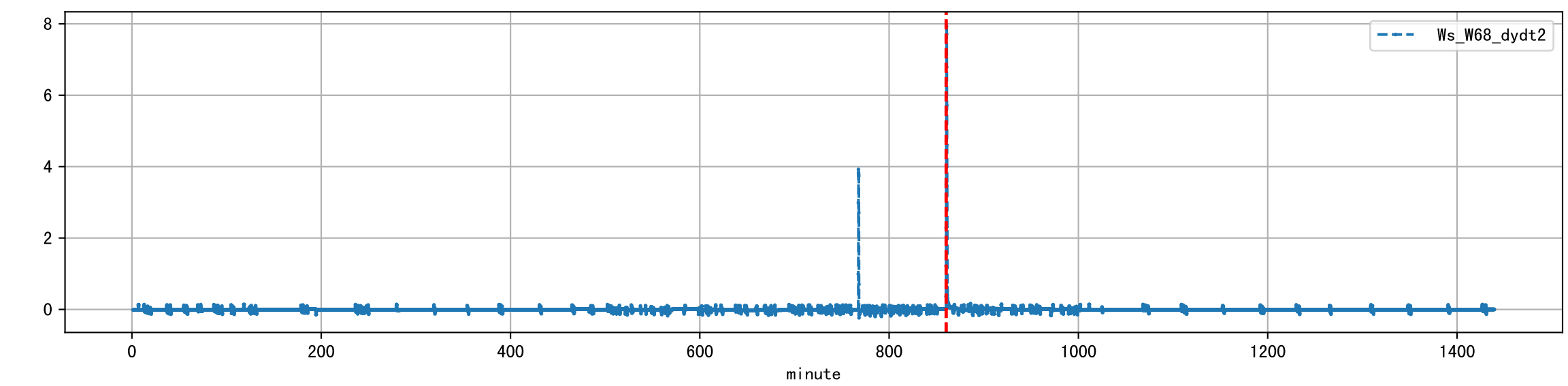

Day 90 Raw Sensor Data
Ws_W68
4.46
4.44
4.42
4.40
4.38
0
5
10
15
20
25
hour

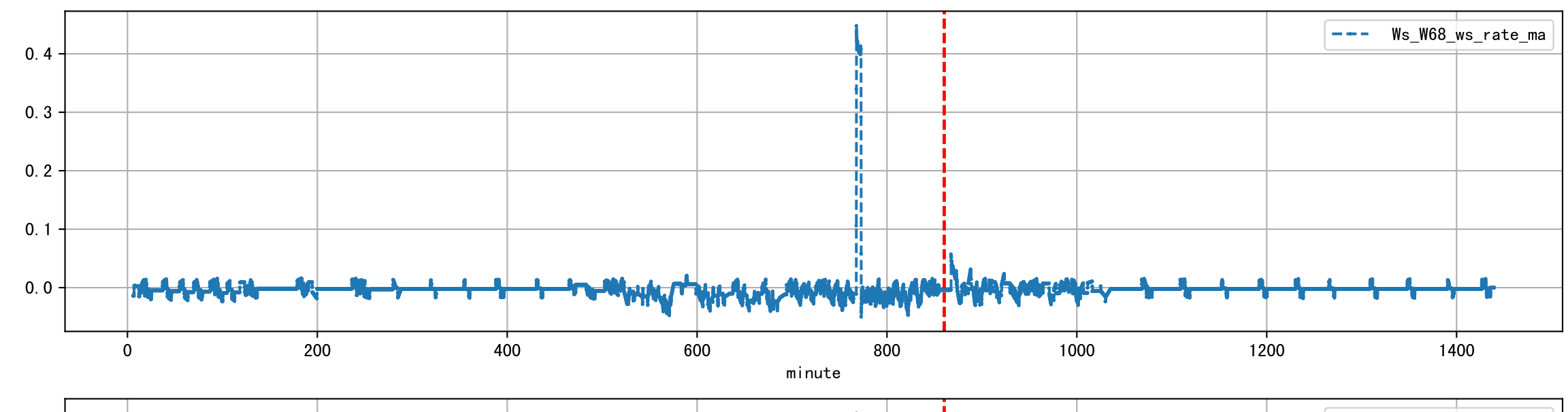

Spike Removal: Ws_W68
Ws_W68
4460
4440
4420
4400
4380
0
200
400
600
800
1000
1200
1400
minute

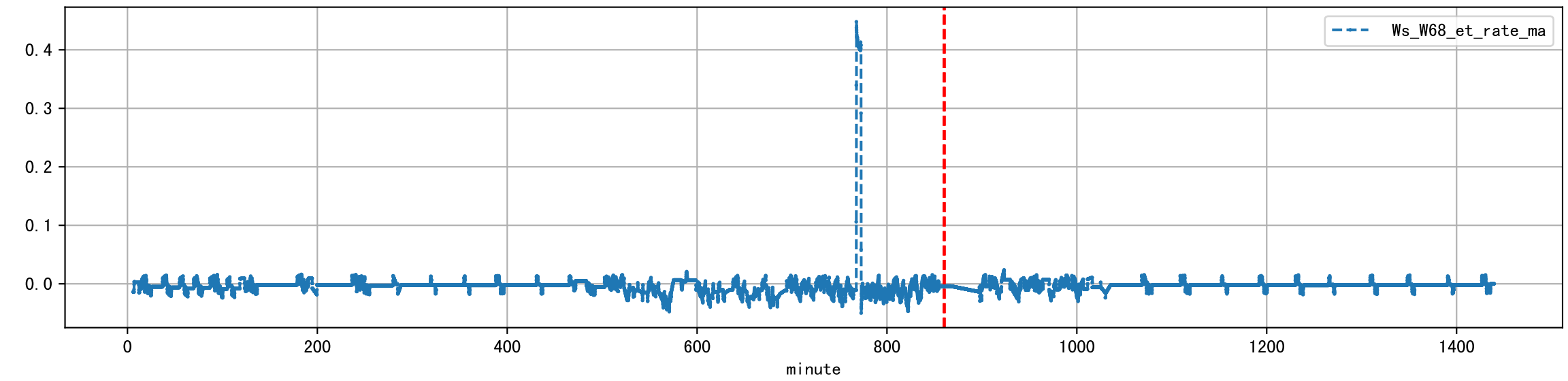
Day 90 Ws_W68 Sensor Analysis

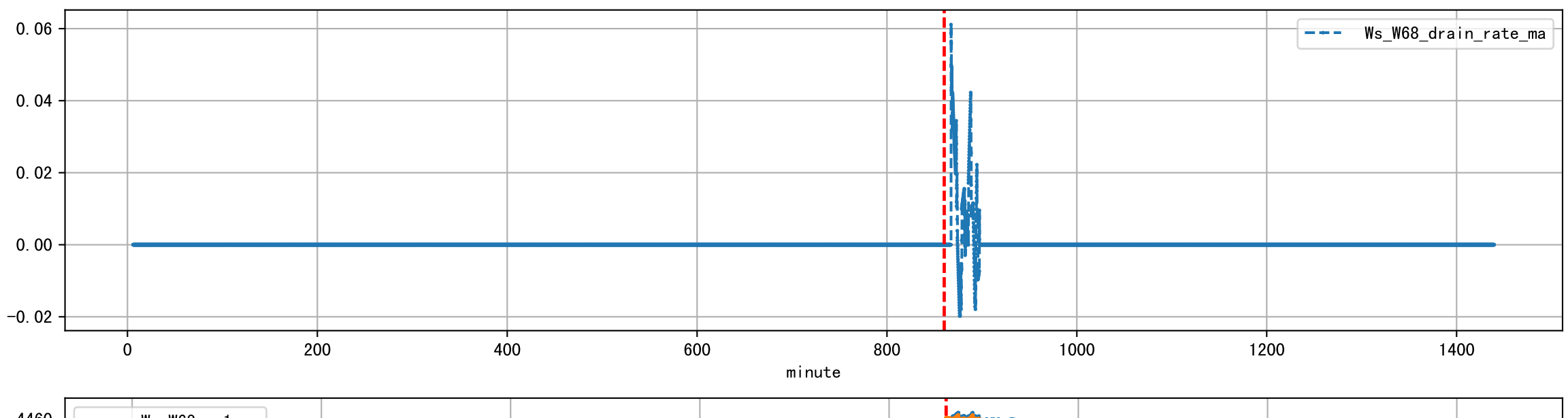


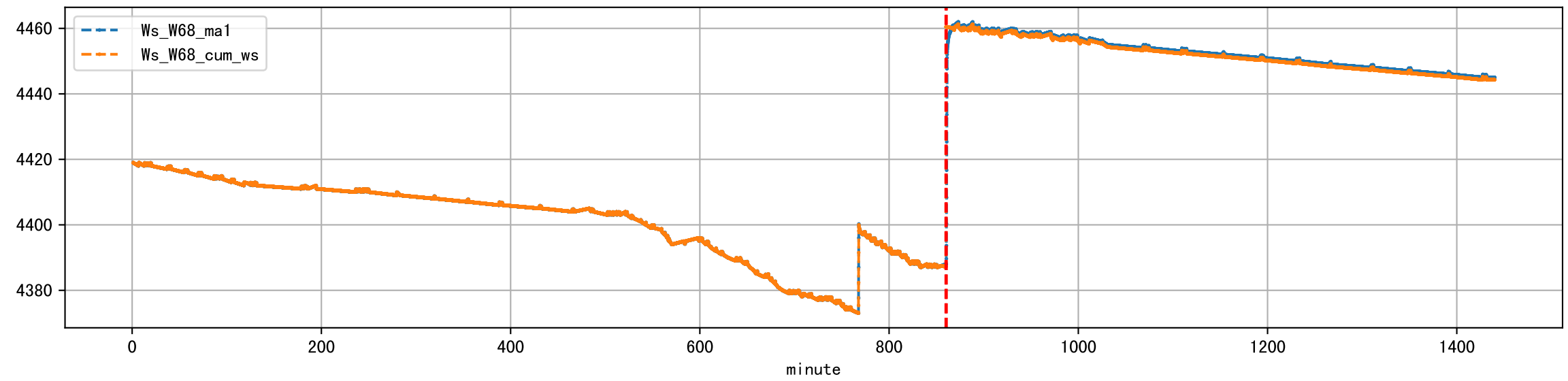


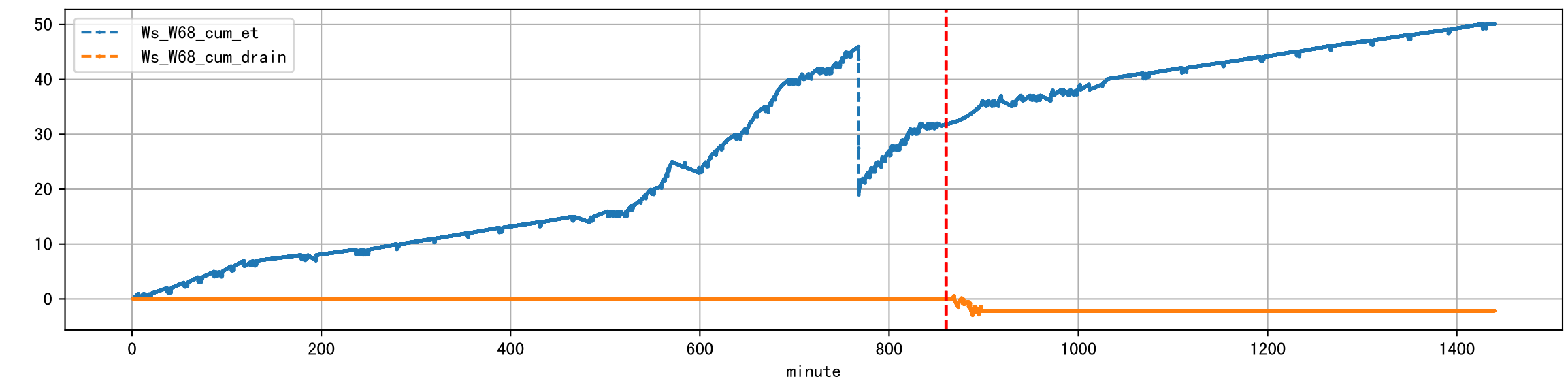


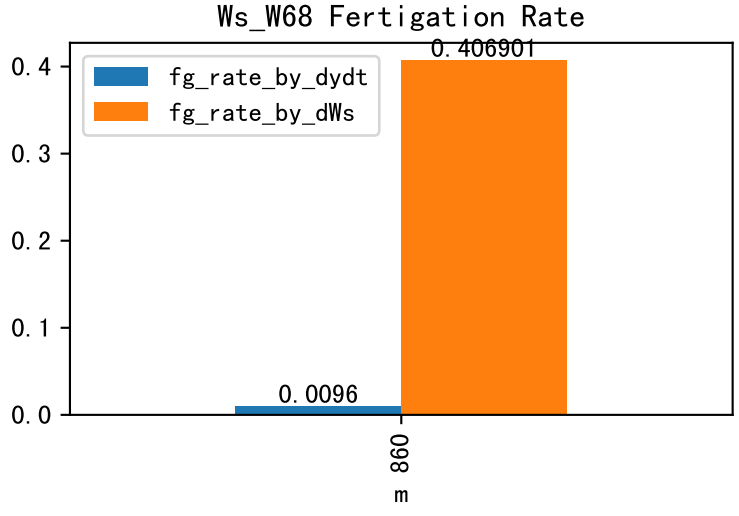


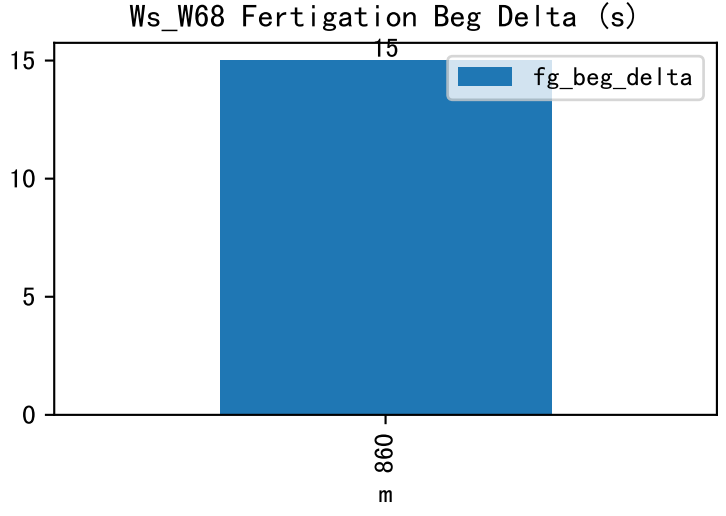


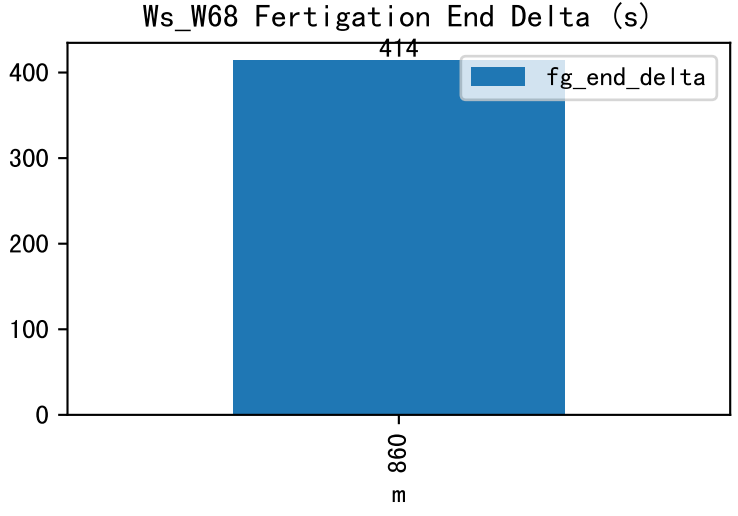


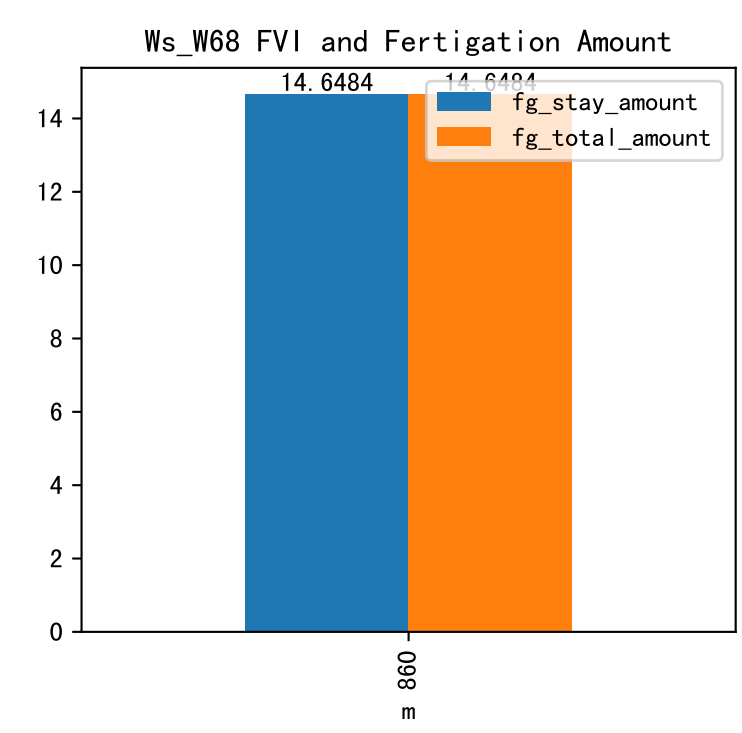


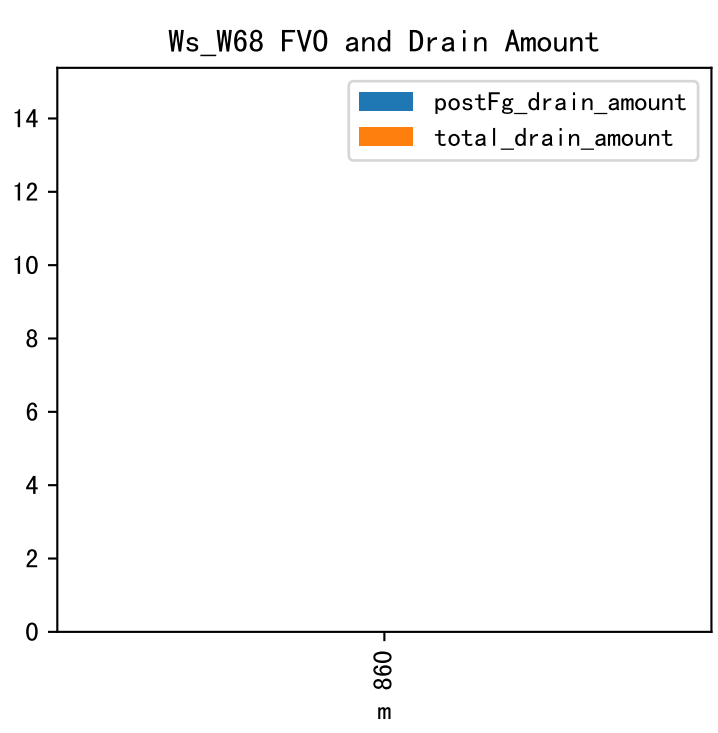


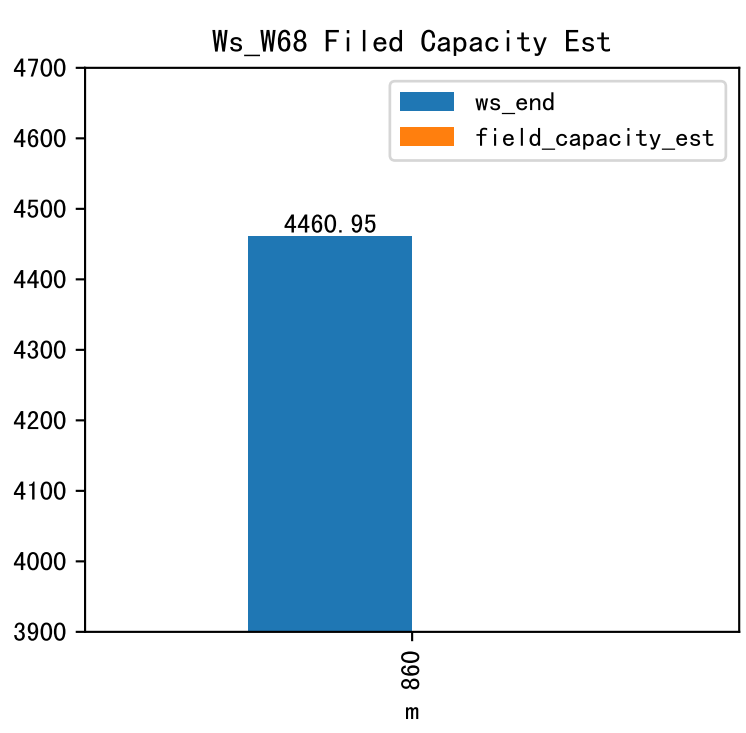

Ws_W68 Fertigation Rate
fg_rate_by_dydt
fg_rate_by_dWs
0.406901
0.0096
0.4
0.3
0.2
0.1
0.0
860
m

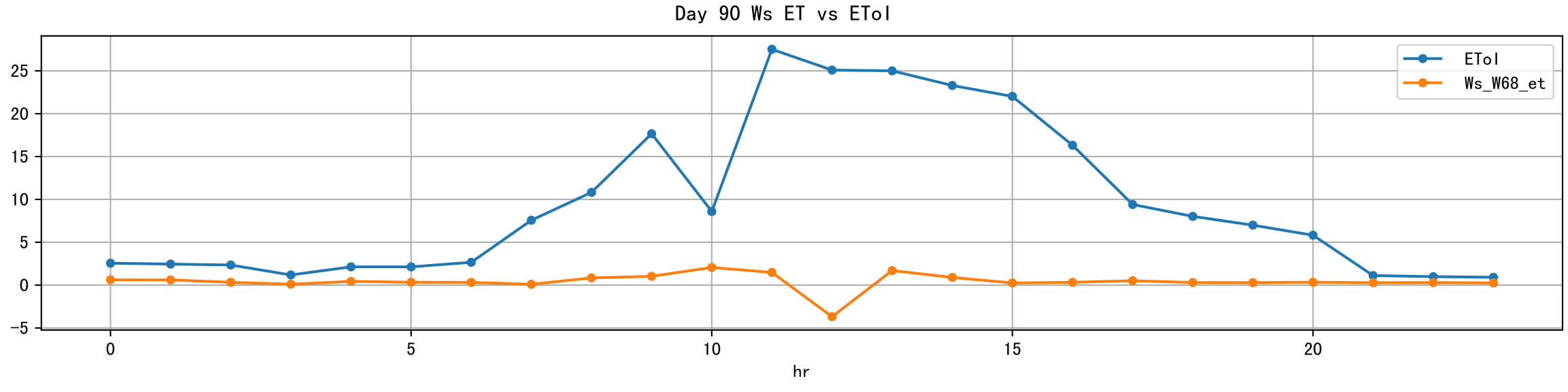

Ws_W68 Fertigation Beg Delta (s)
fg_beg_delta
15
15
10
5
0
860
m

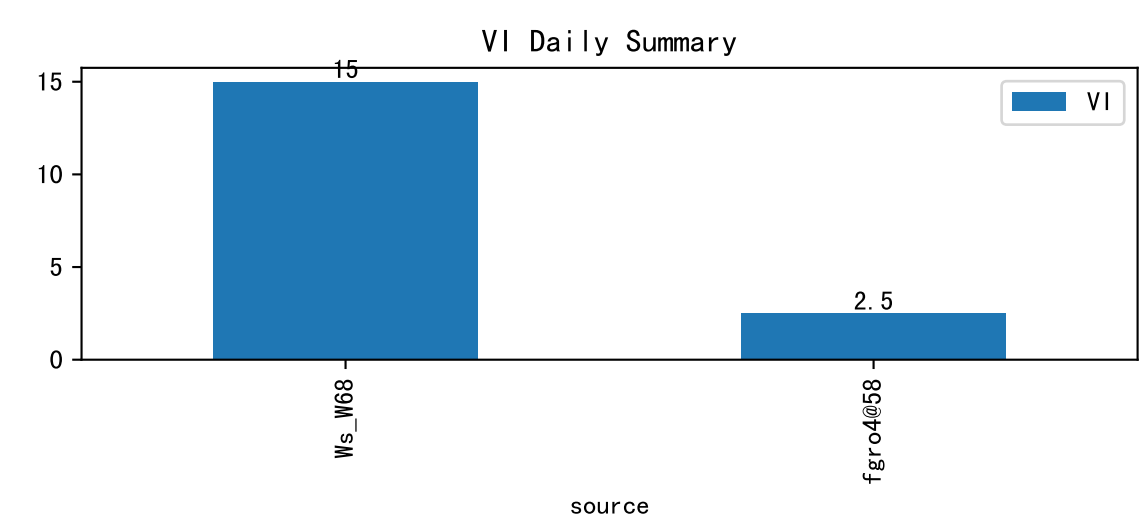

Ws_W68 Fertigation End Delta (s)
fg_end_delta
414
400
300
200
100
0
860
m

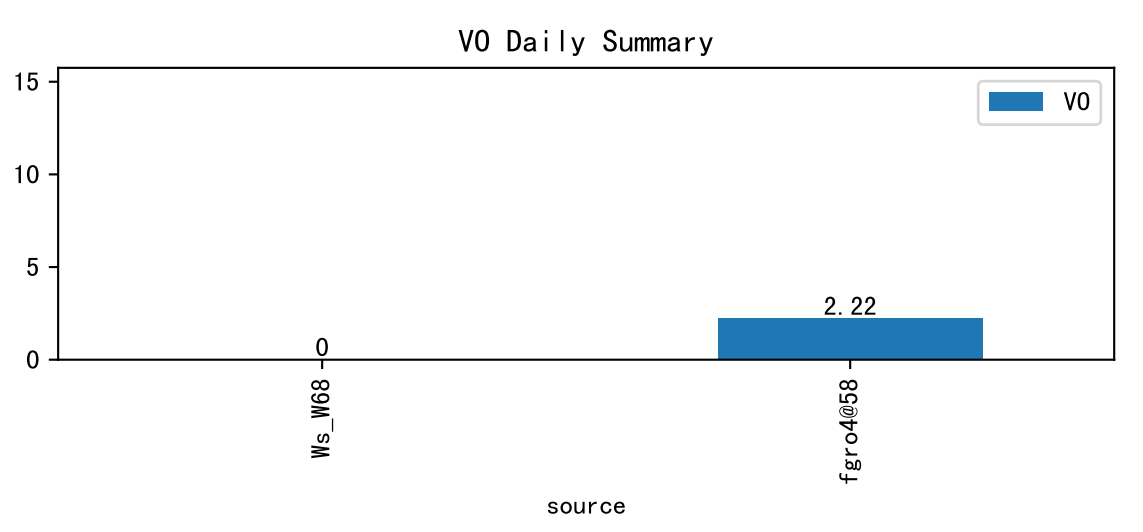

Ws_W68 FVI and Fertigation Amount
14.6484
14.6484
fg_stay_amount
fg_total_amount
0
2
4
6
8
10
12
14
860
m


Ws_W68 FVO and Drain Amount
postFg_drain_amount
total_drain_amount
0
2
4
6
8
10
12
14
860
m

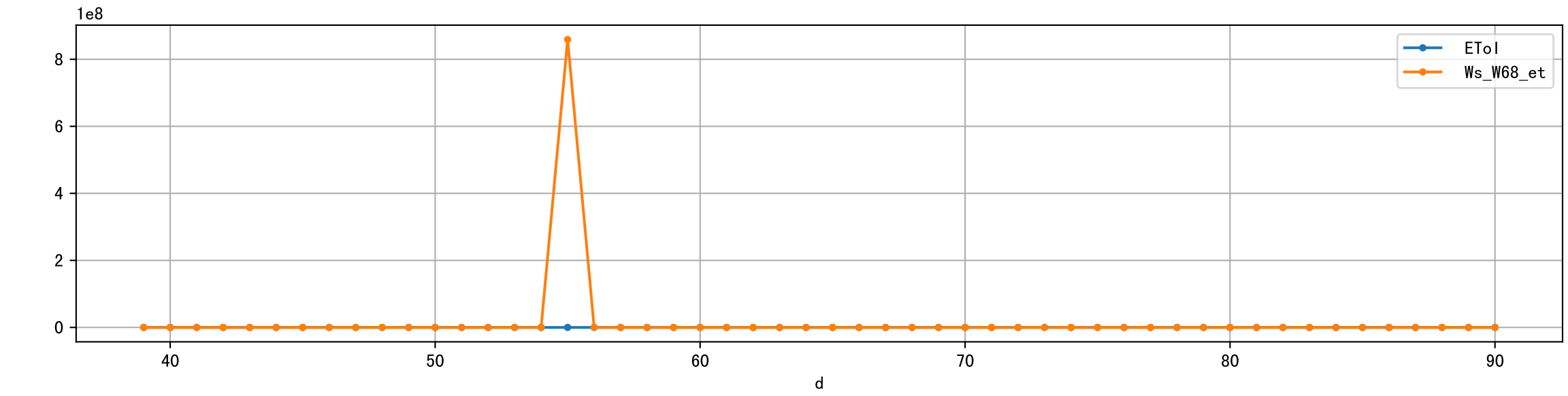

Ws_W68 Filed Capacity Est
4460.95
ws_end
field_capacity_est
3900
4000
4100
4200
4300
4400
4500
4600
4700
860
m

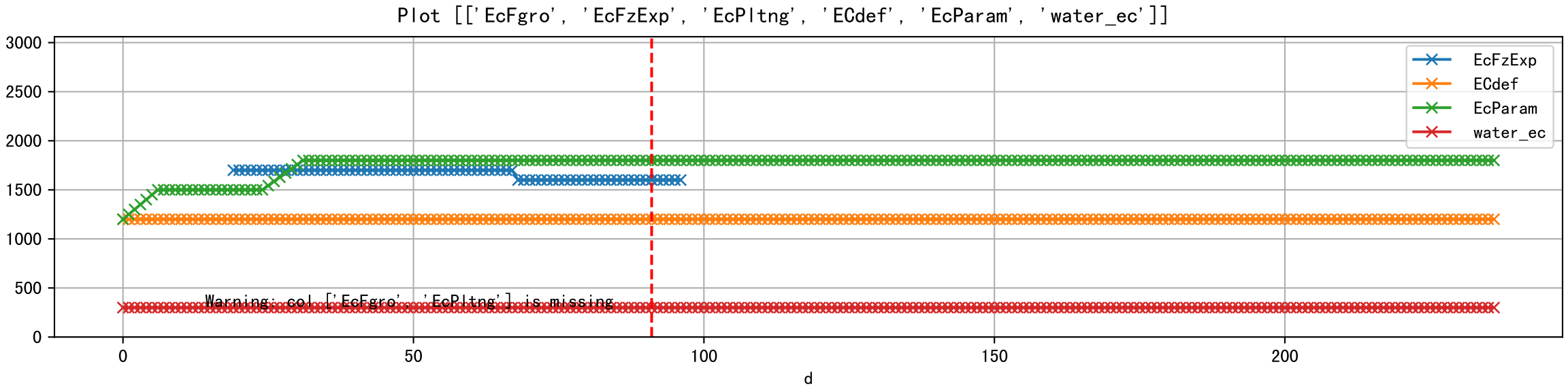

Day 90 Ws ET vs ETol
ETol
Ws_W68_et
25
20
15
10
5
0
−5
0
5
10
15
20
hr

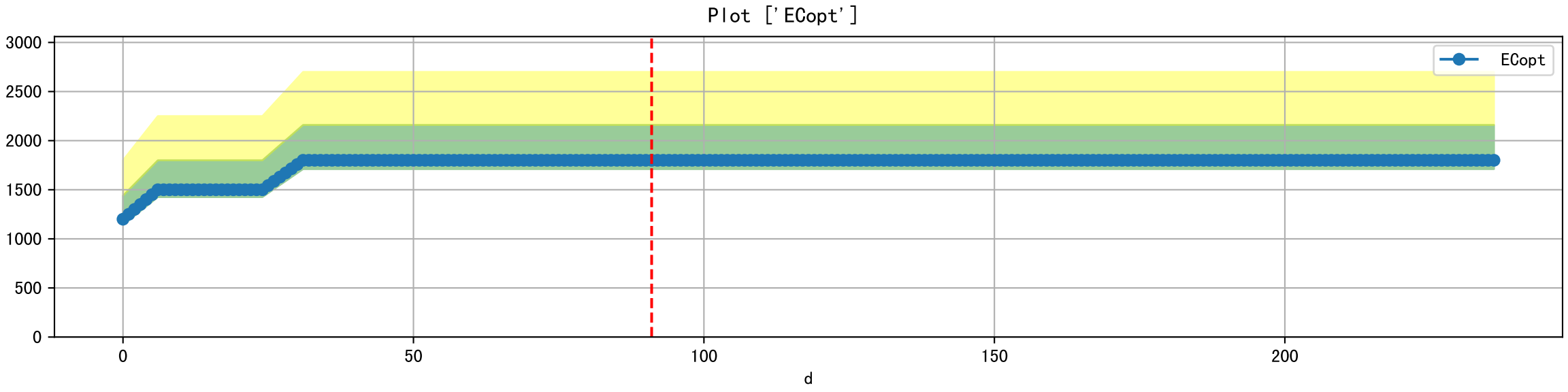

VI Daily Summary
15
2.5
VI
15
10
5
0
Ws_W68
fgro4@58
source


VO Daily Summary
0
2.22
VO
15
10
5
0
Ws_W68
fgro4@58
source

Ws Daily Summary

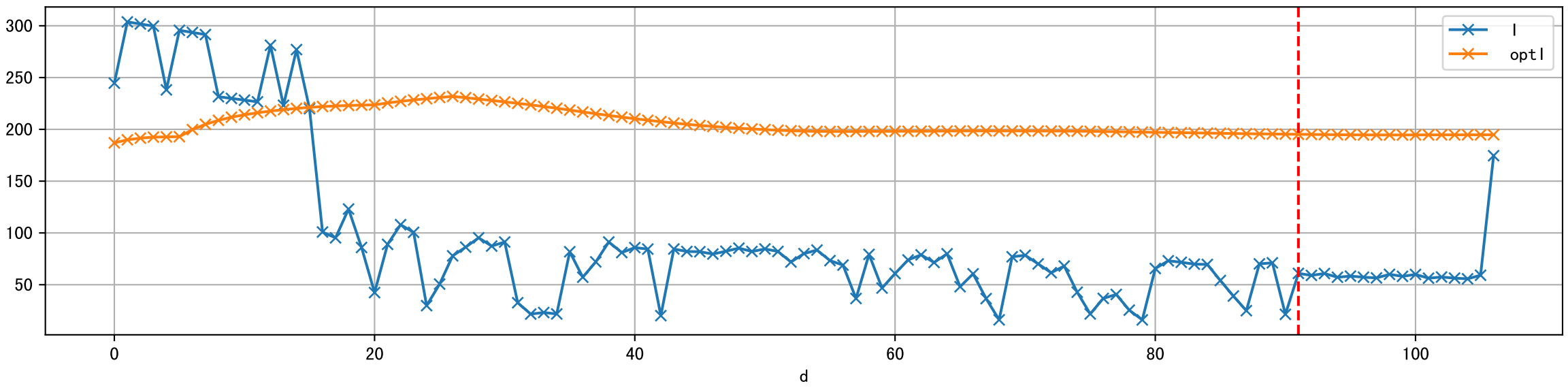


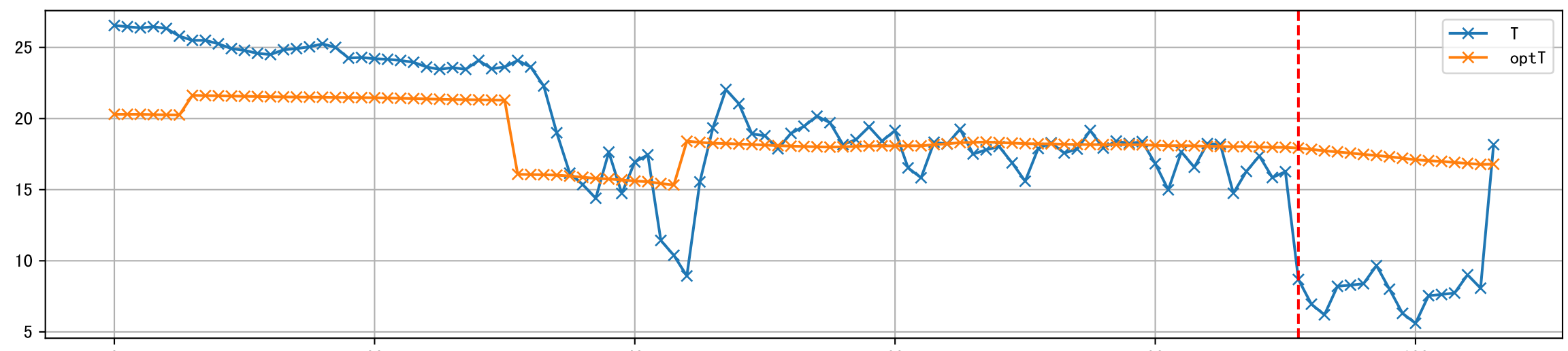

Plot [['EcFgro', 'EcFzExp', 'EcPltng', 'ECdef', 'EcParam', 'water_ec']]
EcFzExp
ECdef
EcParam
water_ec
Warning: col ['EcFgro', 'EcPltng'] is missing
3000
2500
2000
1500
1000
500
0
0
50
100
150
200
d

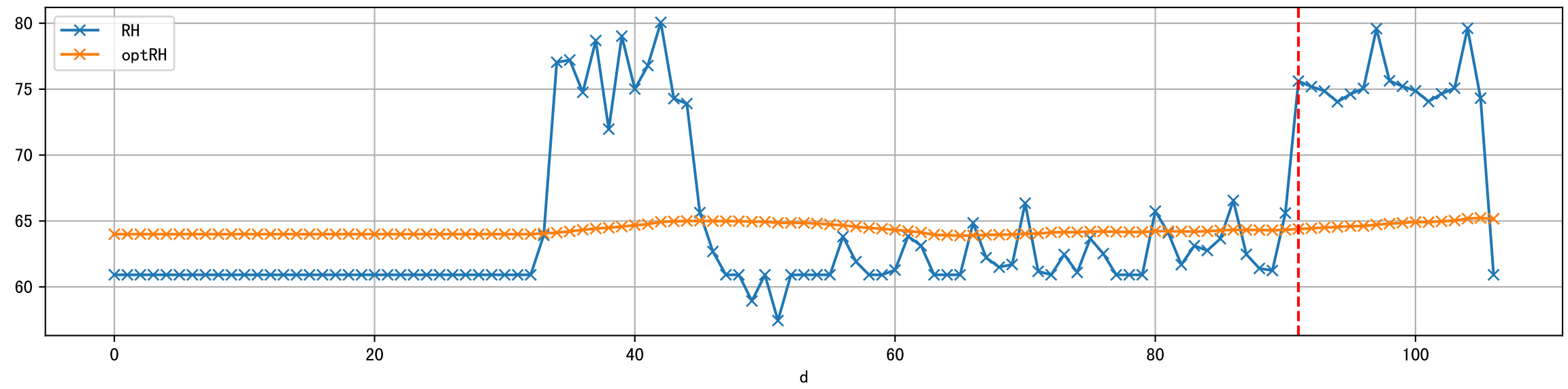

Plot ['ECopt']
ECopt
3000
2500
2000
1500
1000
500
0
0
50
100
150
200
d

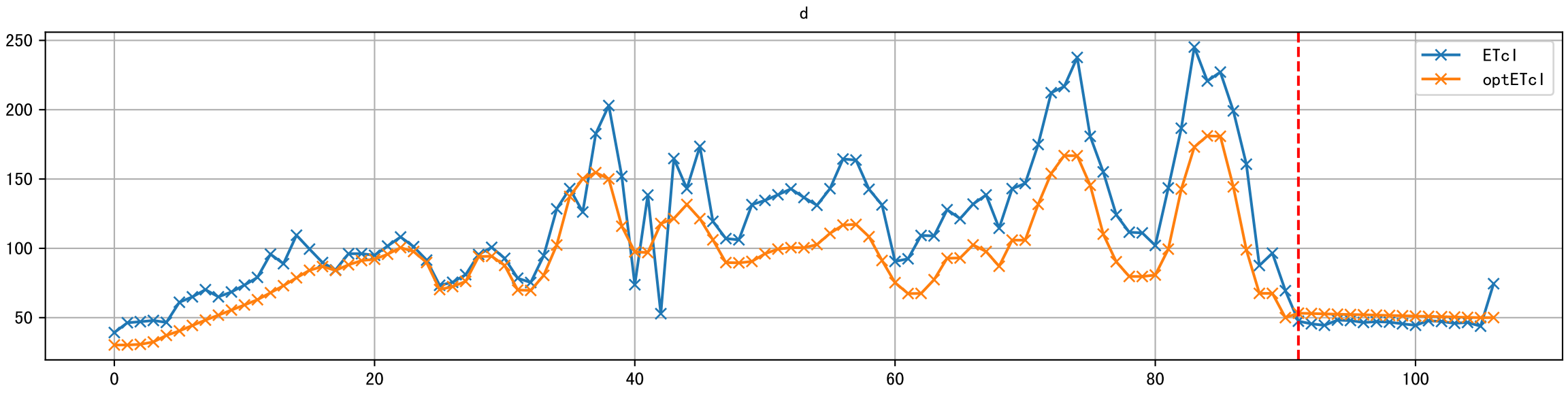
Plot Sensor and FgRec Data

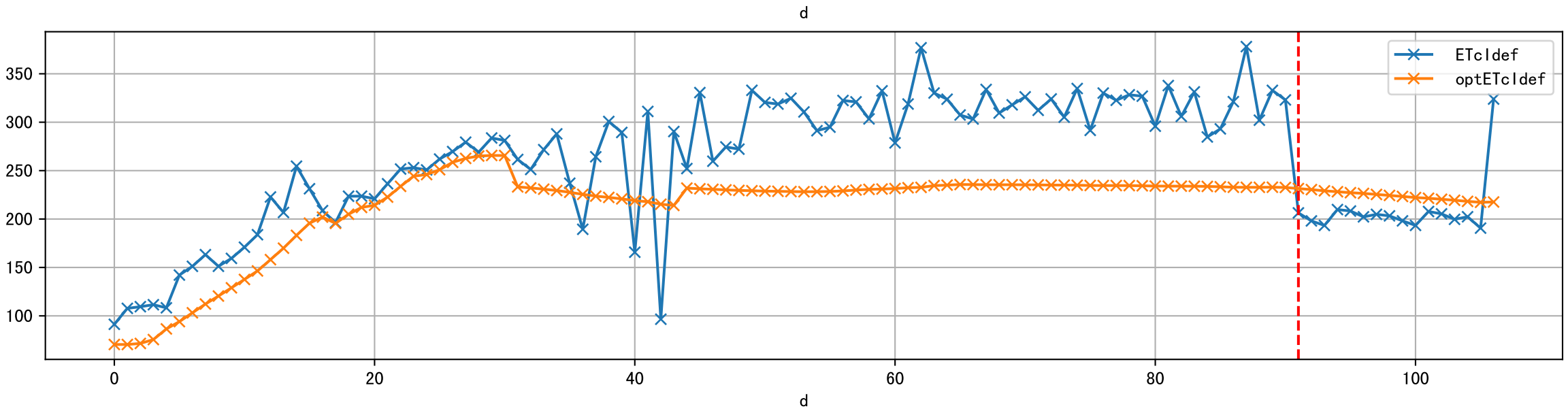
I'], ['T', 'optT'], ['RH', 'optRH'], ['ETcI', 'optETcI'], ['ETcIdef', 'optETcIdef'], ['ETo', 'optETo'], 'LAI', ['optEtRate', 'optEtRateDef', '

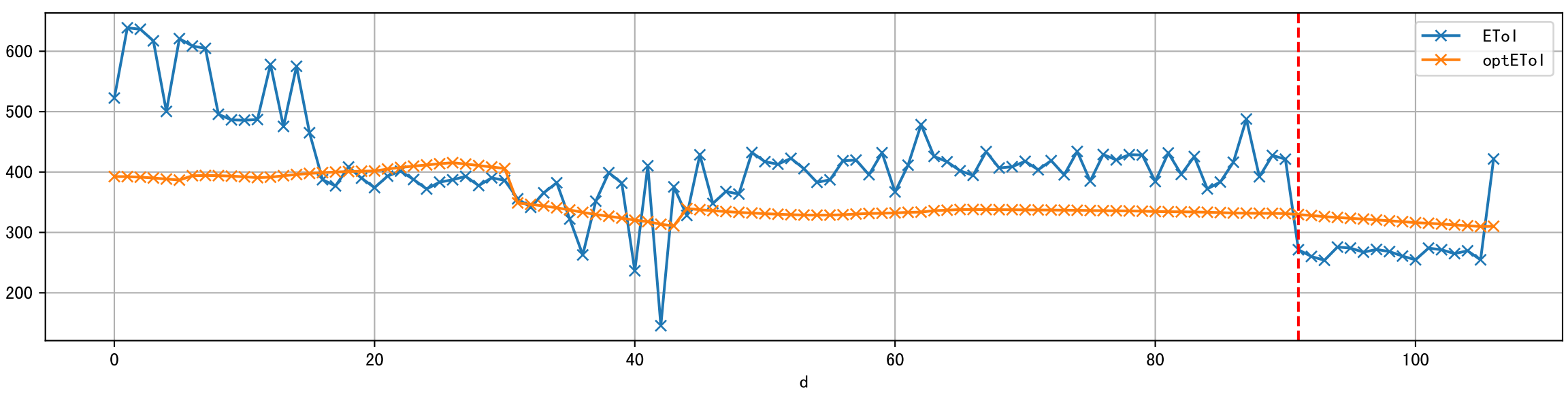


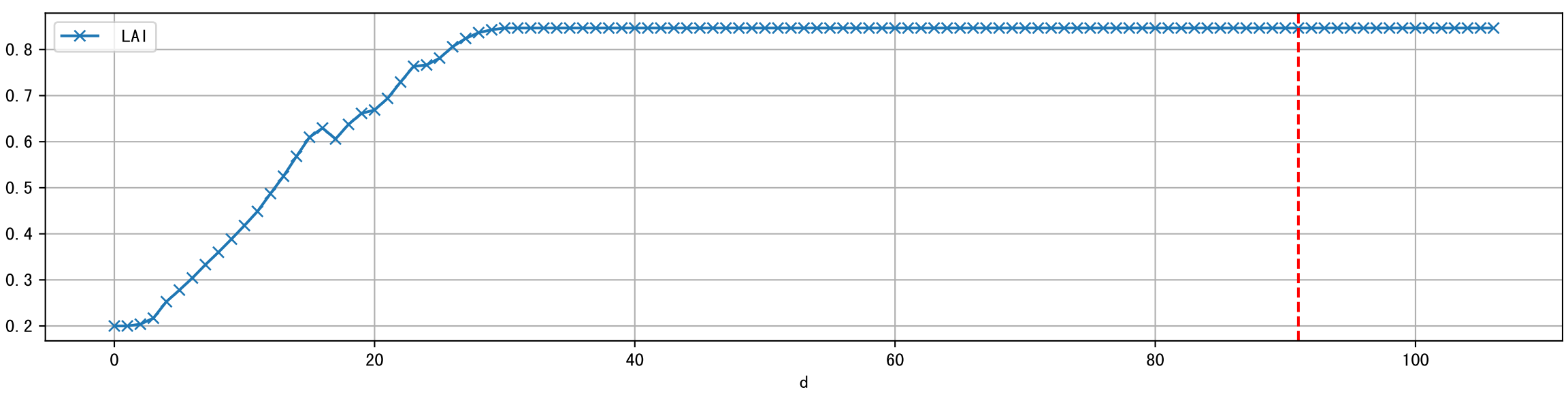


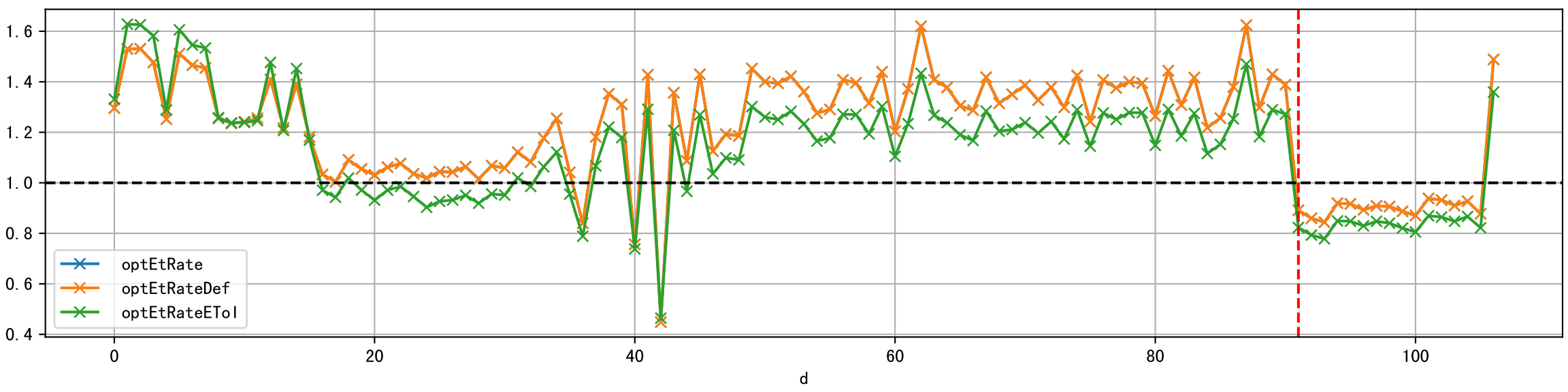


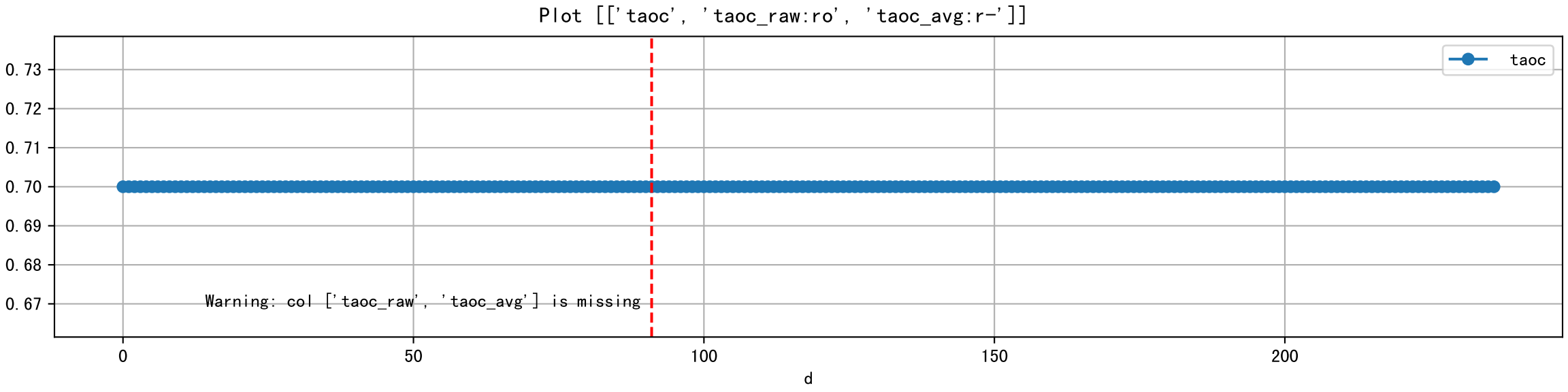


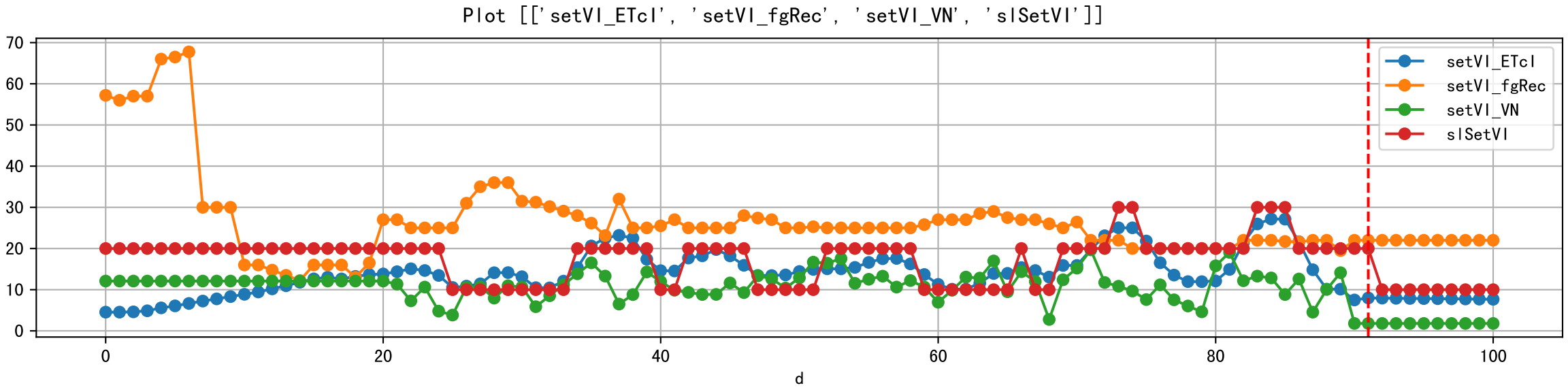


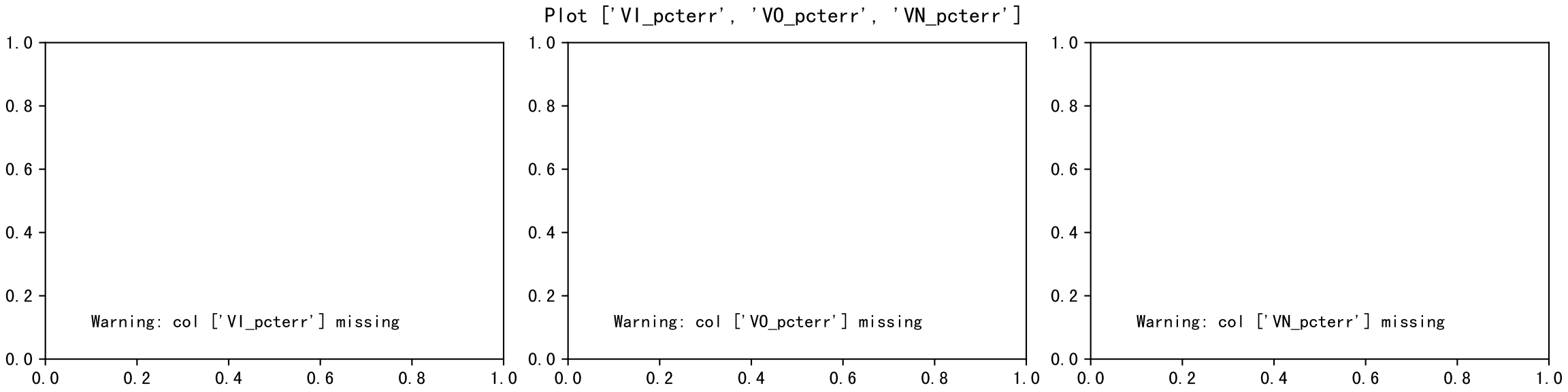


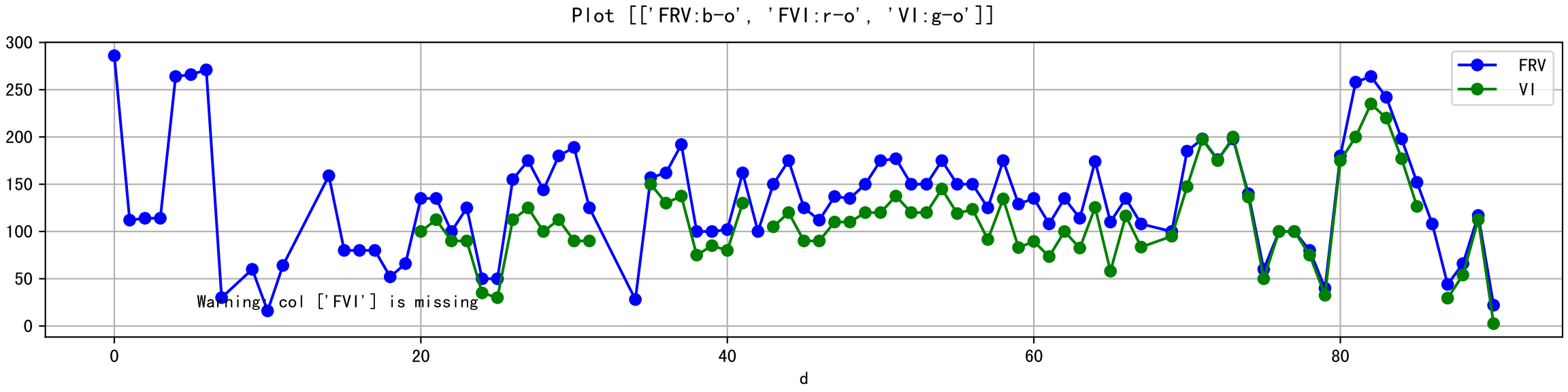


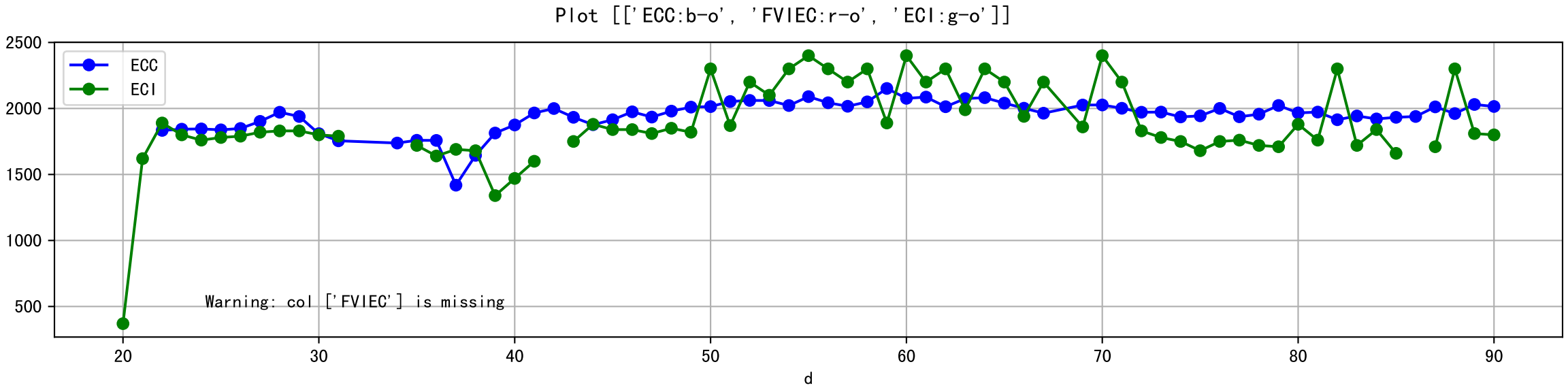


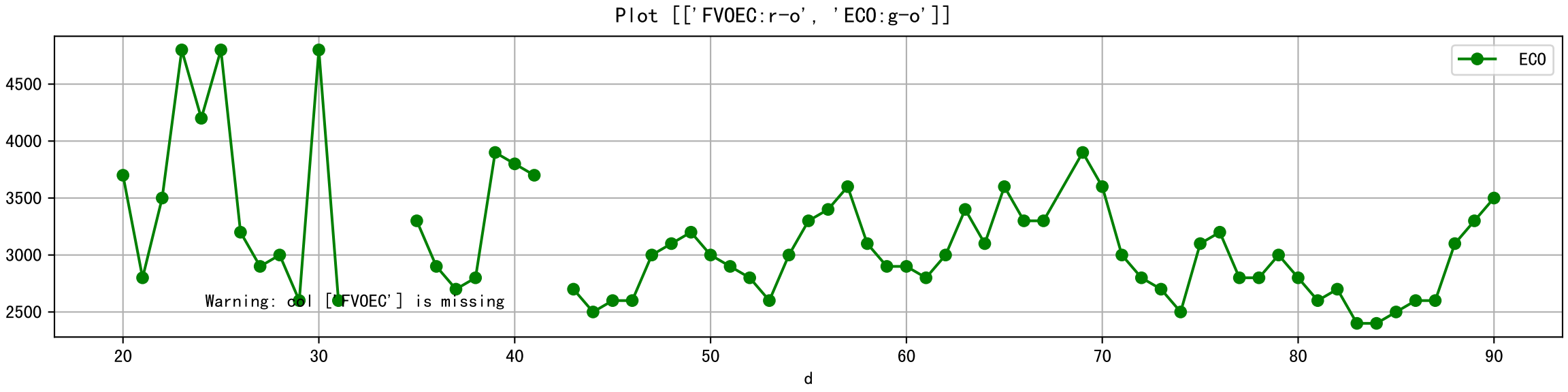

Plot [['taoc', 'taoc_raw:ro', 'taoc_avg:r-']]
taoc
0.73
0.72
0.71
0.70
0.69
0.68
0.67
Warning: col ['taoc_raw', 'taoc_avg'] is missing
0
50
100
150
200
d

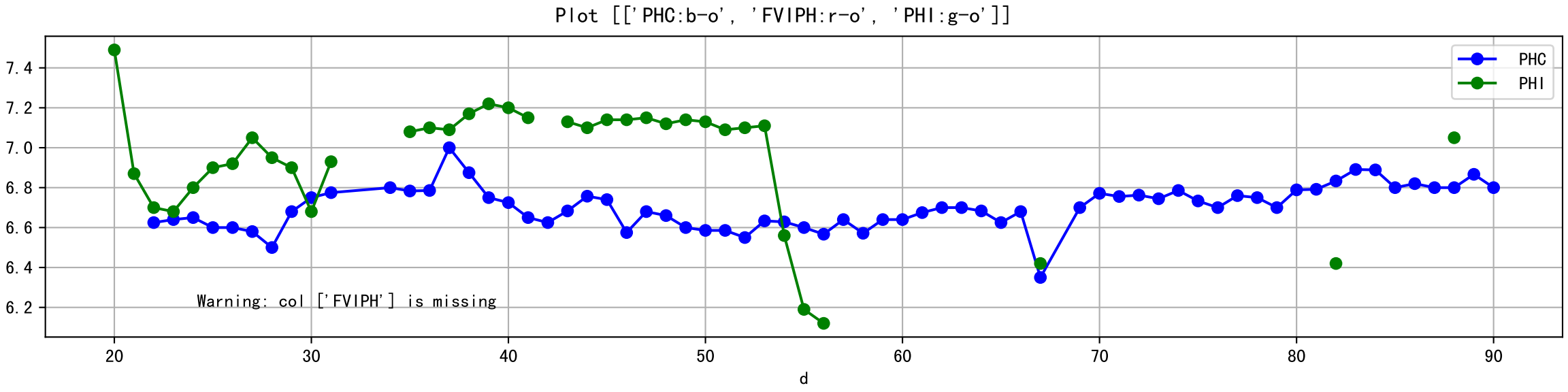

Plot [['setVI_ETcl', 'setVI_fgRec', 'setVI_VN', 'slSetVI']]
setVI_ETcl
setVI_fgRec
setVI_VN
slSetVI
d

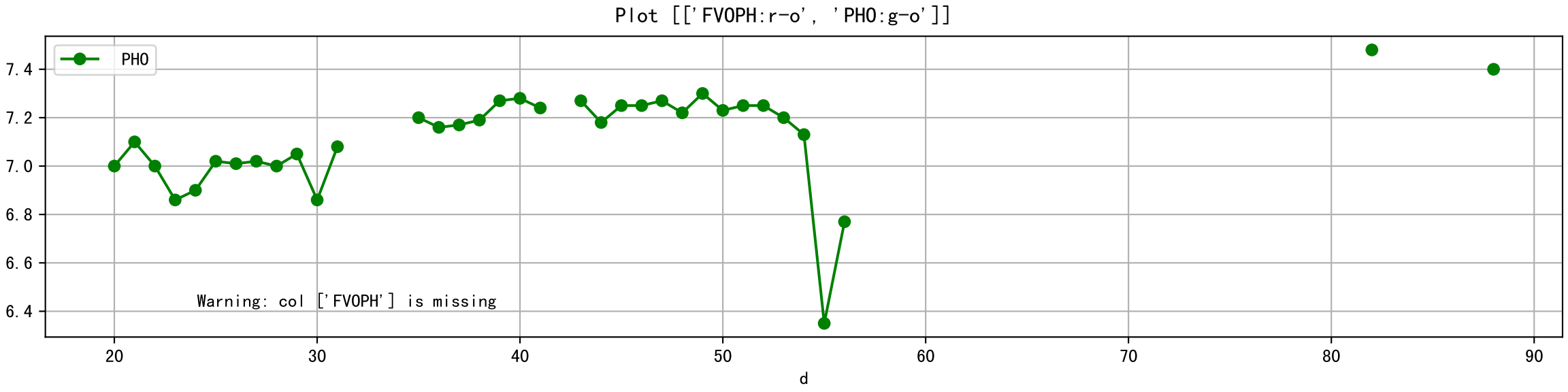

Plot ['VI_pcterr', 'VO_pcterr', 'VN_pcterr']
Warning: col ['VI_pcterr'] missing
Warning: col ['VO_pcterr'] missing
Warning: col ['VN_pcterr'] missing
0.0
0.2
0.4
0.6
0.8
1.0

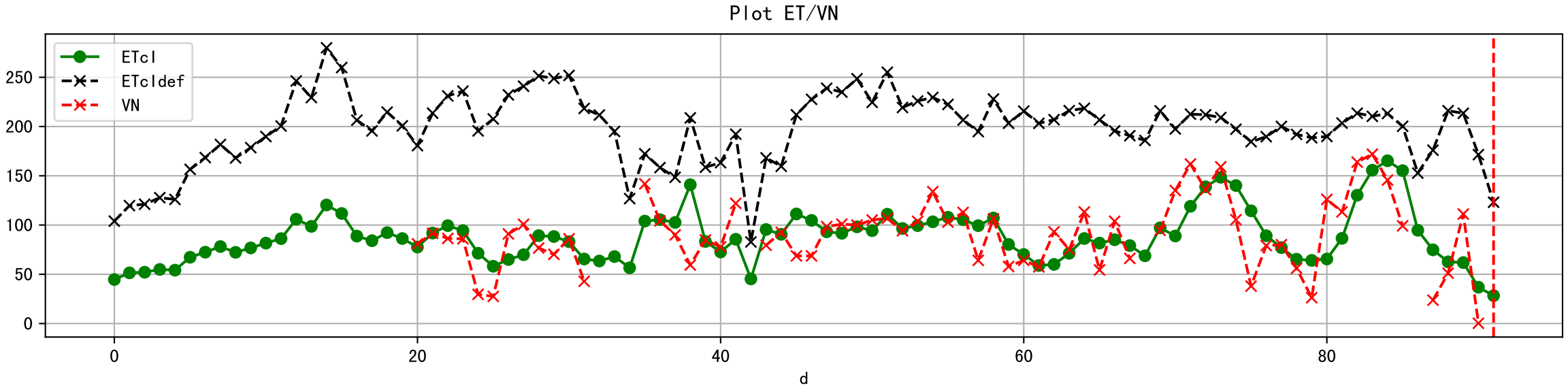

Plot [['FRV:b-o', 'FVI:r-o', 'VI:g-o']]
FRV
VI
Warning: col ['FVI'] is missing
d
0
20
40
60
80
0
50
100
150
200
250
300


Plot [['ECC:b-o', 'FVIEC:r-o', 'ECI:g-o']]
ECC
ECI
Warning: col ['FVIEC'] is missing
2500
2000
1500
1000
500
20
30
40
50
60
70
80
90
d

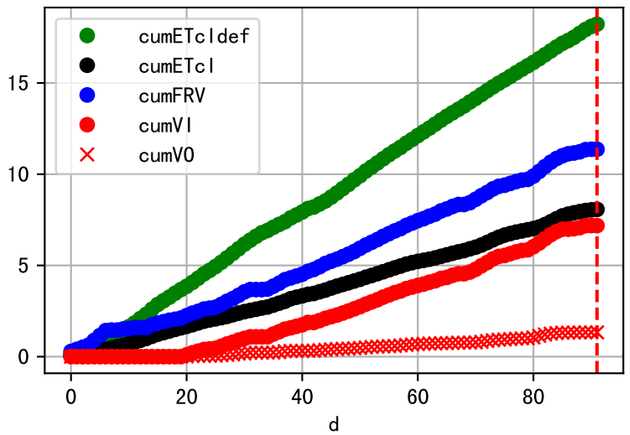

Plot [['FVOEC:r-o', 'ECO:g-o']]
ECO
Warning: col ['FVOEC'] is missing
4500
4000
3500
3000
2500
20
30
40
50
60
70
80
90
d

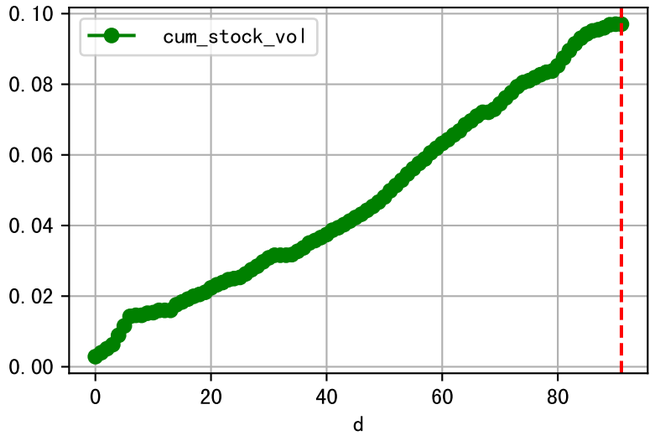

Plot [['PHC:b-o', 'FVIPH:r-o', 'PHI:g-o']]
PHC
PHI
Warning: col ['FVIPH'] is missing
7.4
7.2
7.0
6.8
6.6
6.4
6.2
20
30
40
50
60
70
80
90
d

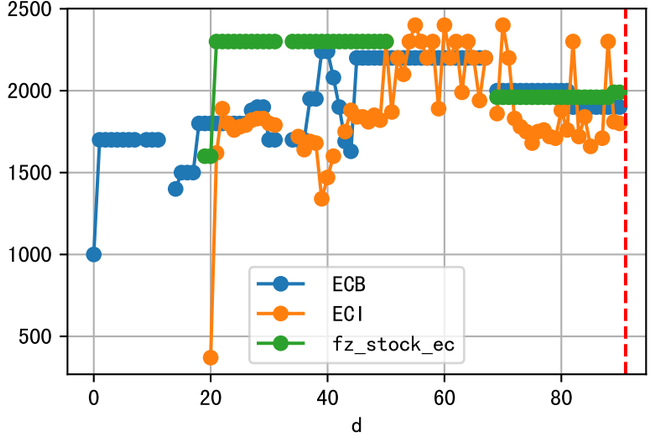

Plot [['FVOPH:r-o', 'PHO:g-o']]
PHO
7.4
7.2
7.0
6.8
6.6
6.4
Warning: col ['FVOPH'] is missing
20
30
40
50
60
70
80
90
d

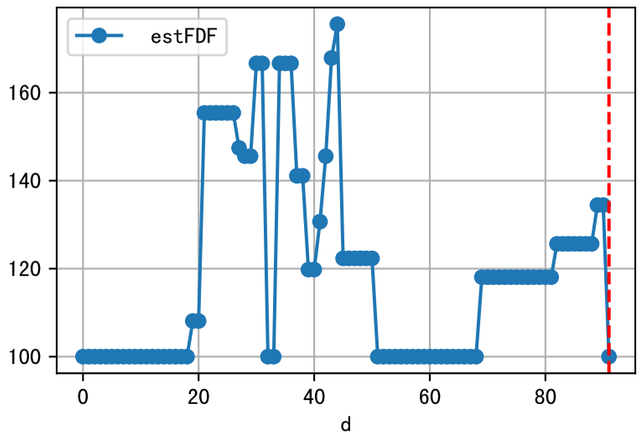

Plot ET/VN
ETcl
ETcldef
VN
250
200
150
100
50
0
0
20
40
60
80
d

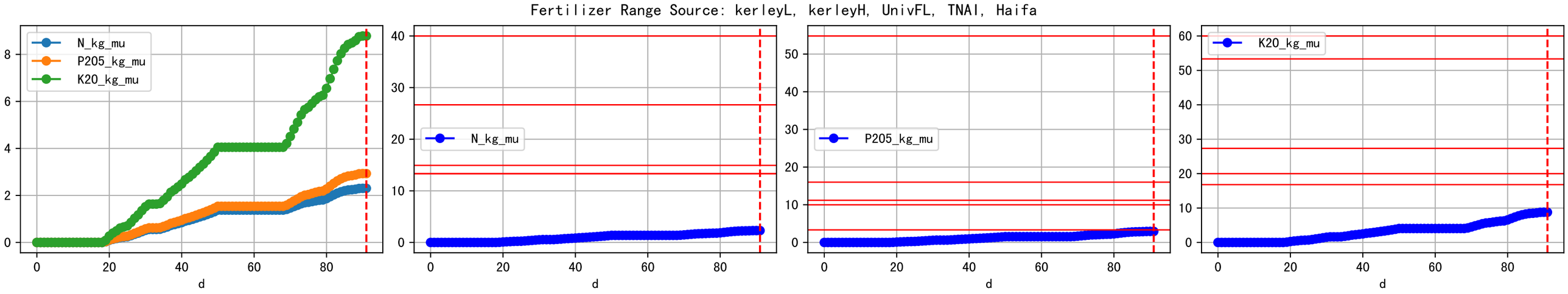
Plot Fv and fertilizer usage

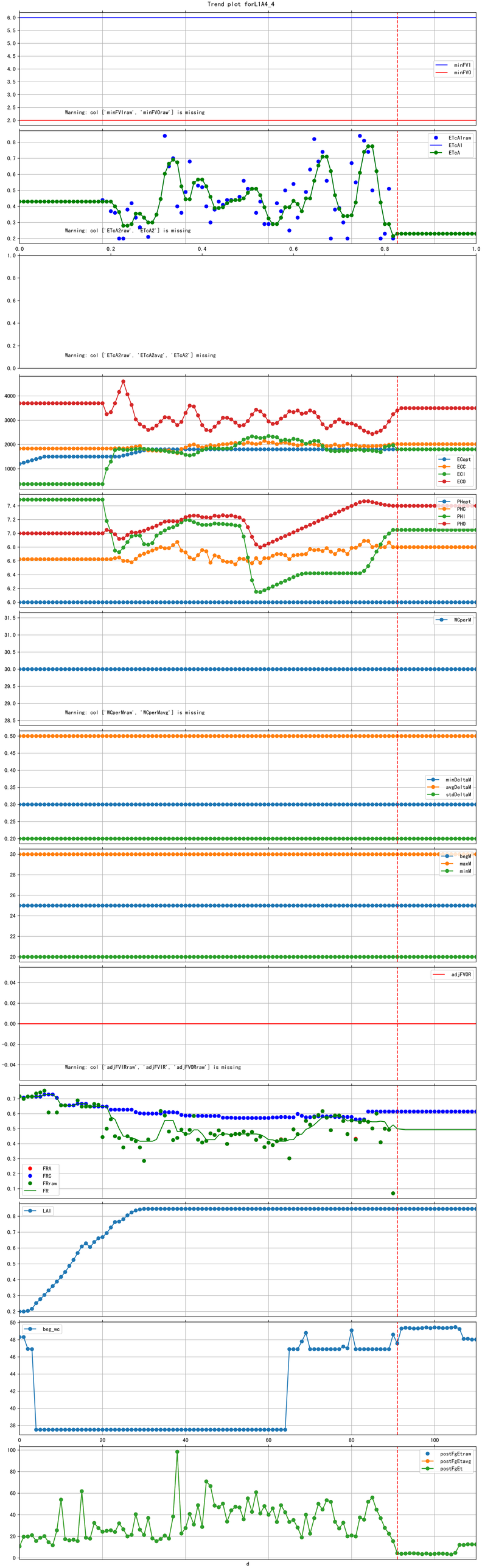


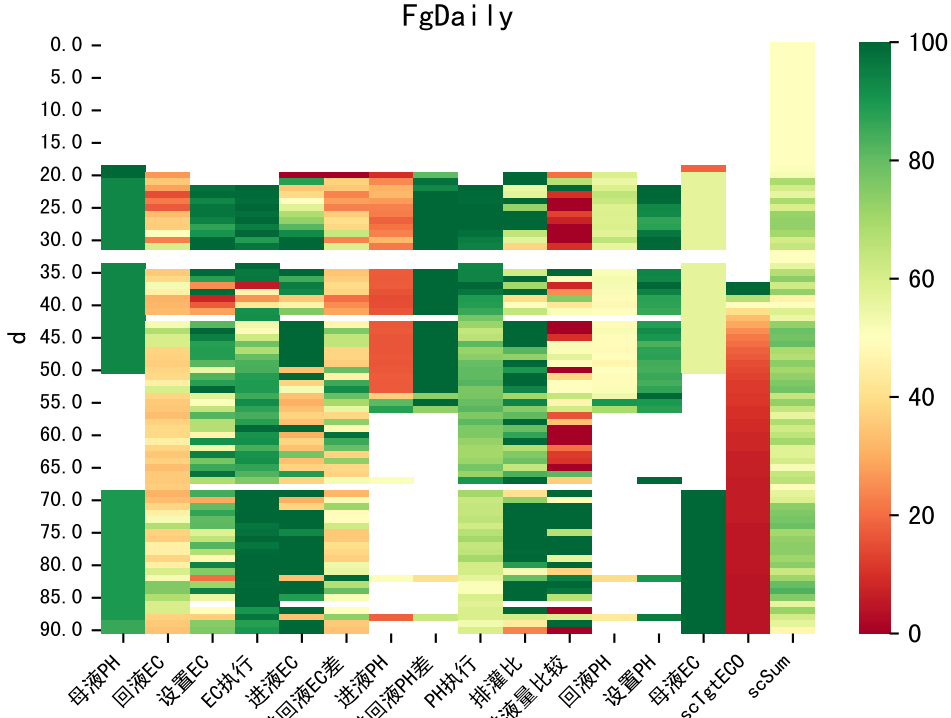




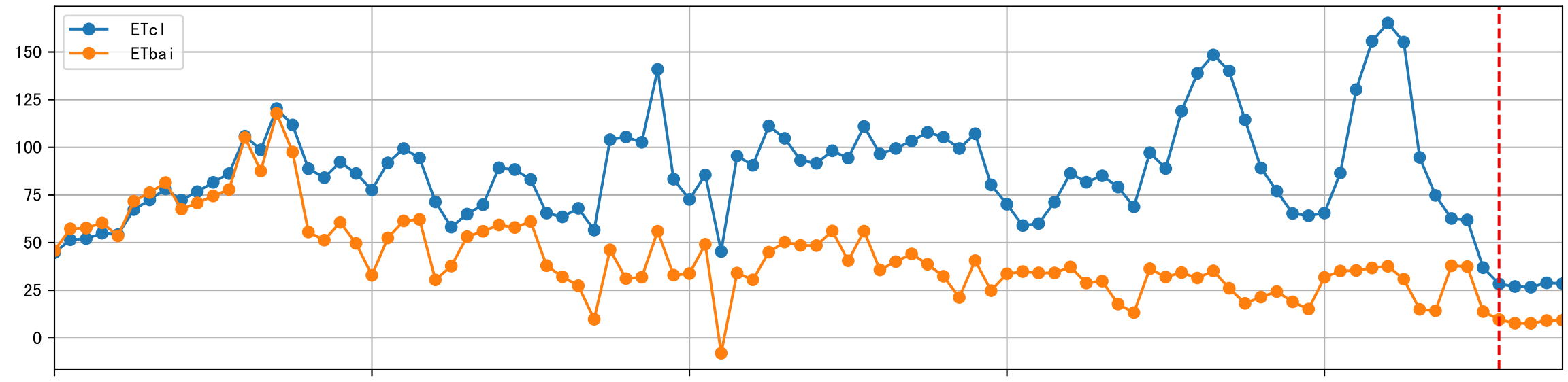


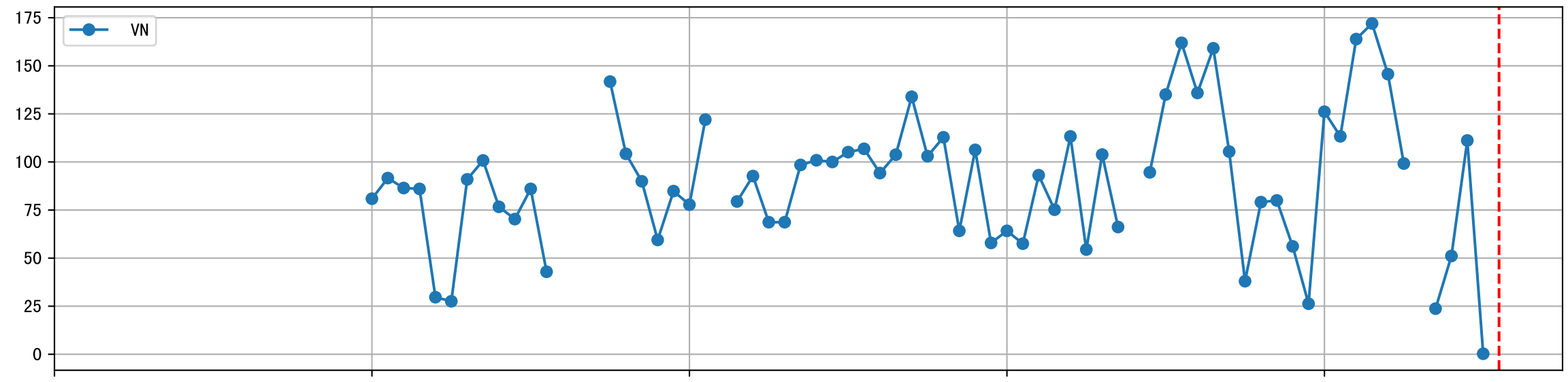

Fertilizer Range Source: kerleyL, kerleyH, UnivFL, TNAI, Haifa
N_kg_mu
P205_kg_mu
K20_kg_mu
d

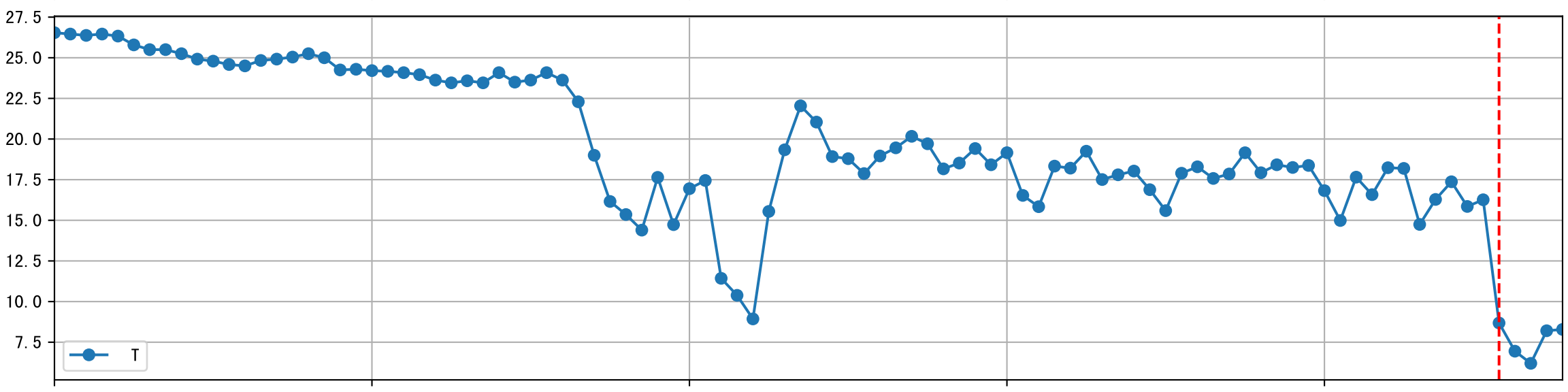

Trend plot forL1A4_4
minFVI
minFVO
Warning: col ['minFVIraw', 'minFVOraw'] is missing
ETcAIraw
ETcAI
ETcA
Warning: col ['ETcA2raw', 'ETcA2'] is missing
Warning: col ['ETcA2raw', 'ETcA2avg', 'ETcA2'] is missing
ECopt
ECC
ECI
ECO
PHopt
PHC
PHI
PHO
WCperM
Warning: col ['WCperMraw', 'WCperMavg'] is missing
minDeltaM
avgDeltaM
stdDeltaM
begM
maxM
minM
adjFVOR
Warning: col ['adjFVIRraw', 'adjFVIR', 'adjFVORraw'] is missing
FRA
FRC
FRraw
FR
LAI
beg_wc
postFgEtraw
postFgEtavg
postFgEt
d

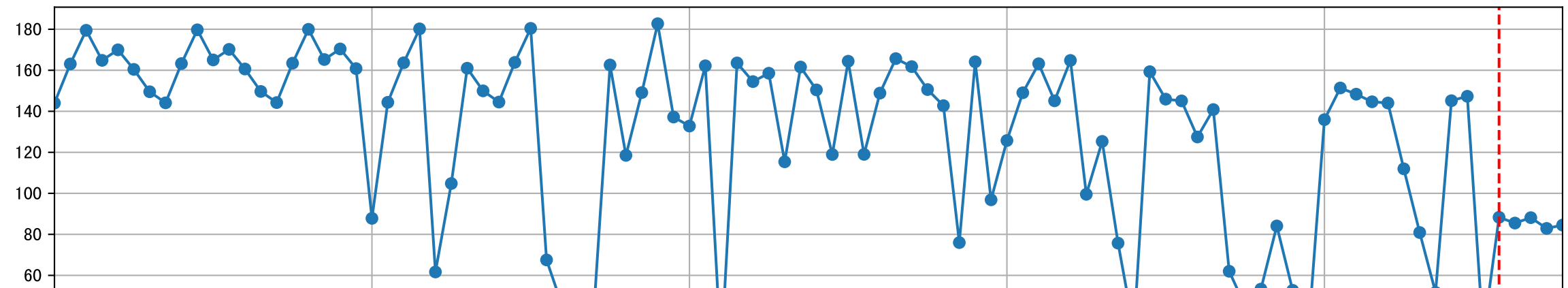

FgDaily
d
0.0
5.0
10.0
15.0
20.0
25.0
30.0
35.0
40.0
45.0
50.0
55.0
60.0
65.0
70.0
75.0
80.0
85.0
90.0
母液PH
回液EC
设置EC
EC执行
进液EC
回液EC差
进液PH
回液PH差
PH执行
排灌比
液量比较
回液PH
设置PH
母液EC
scTgtEC0
scSum
100
80
60
40
20
0

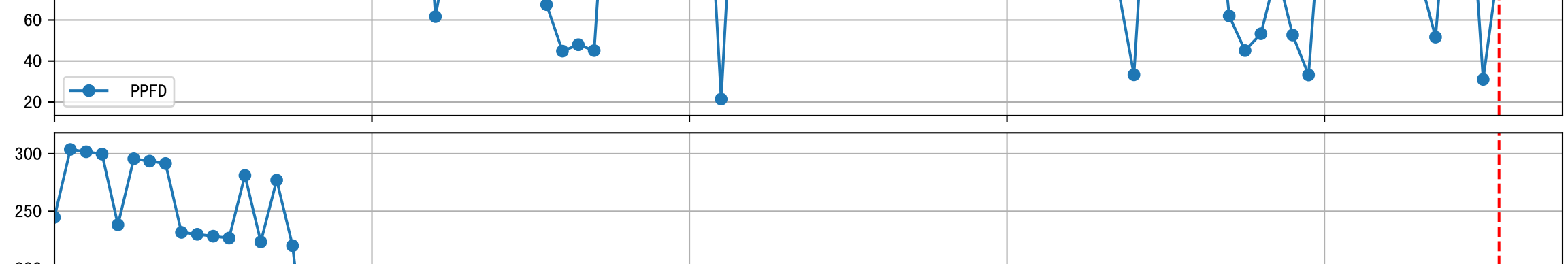
L1A4_4

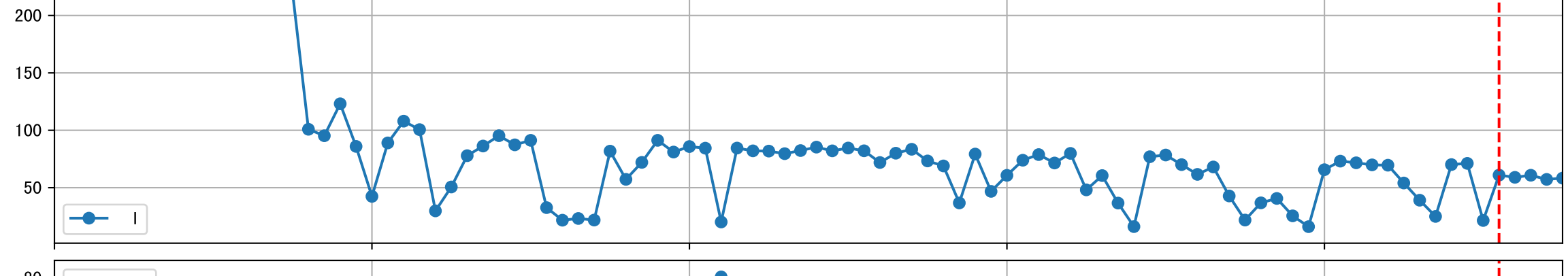

ETcl
ETbai
150
125
100
75
50
25
0

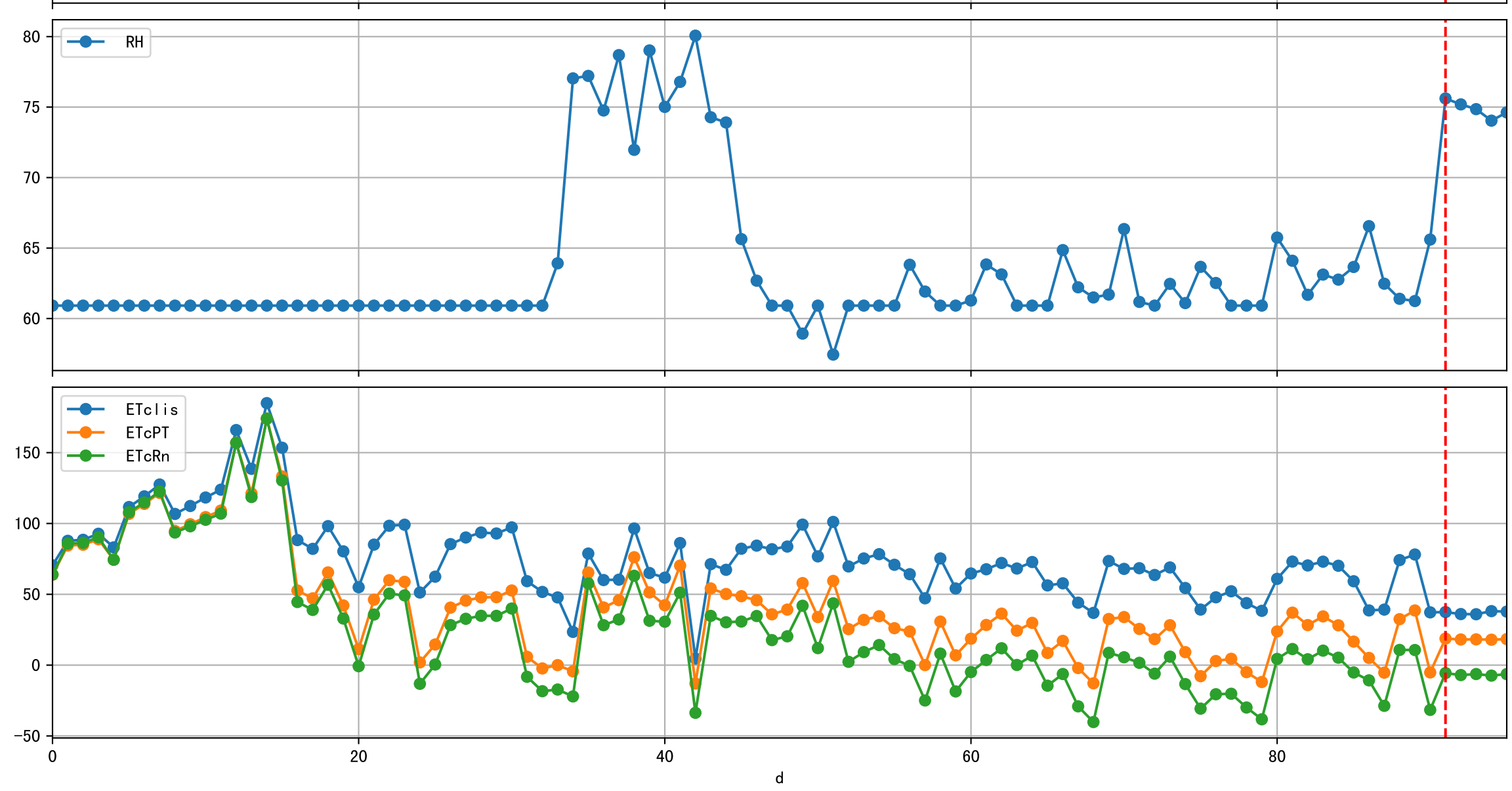

VN
175
150
125
100
75
50
25
0

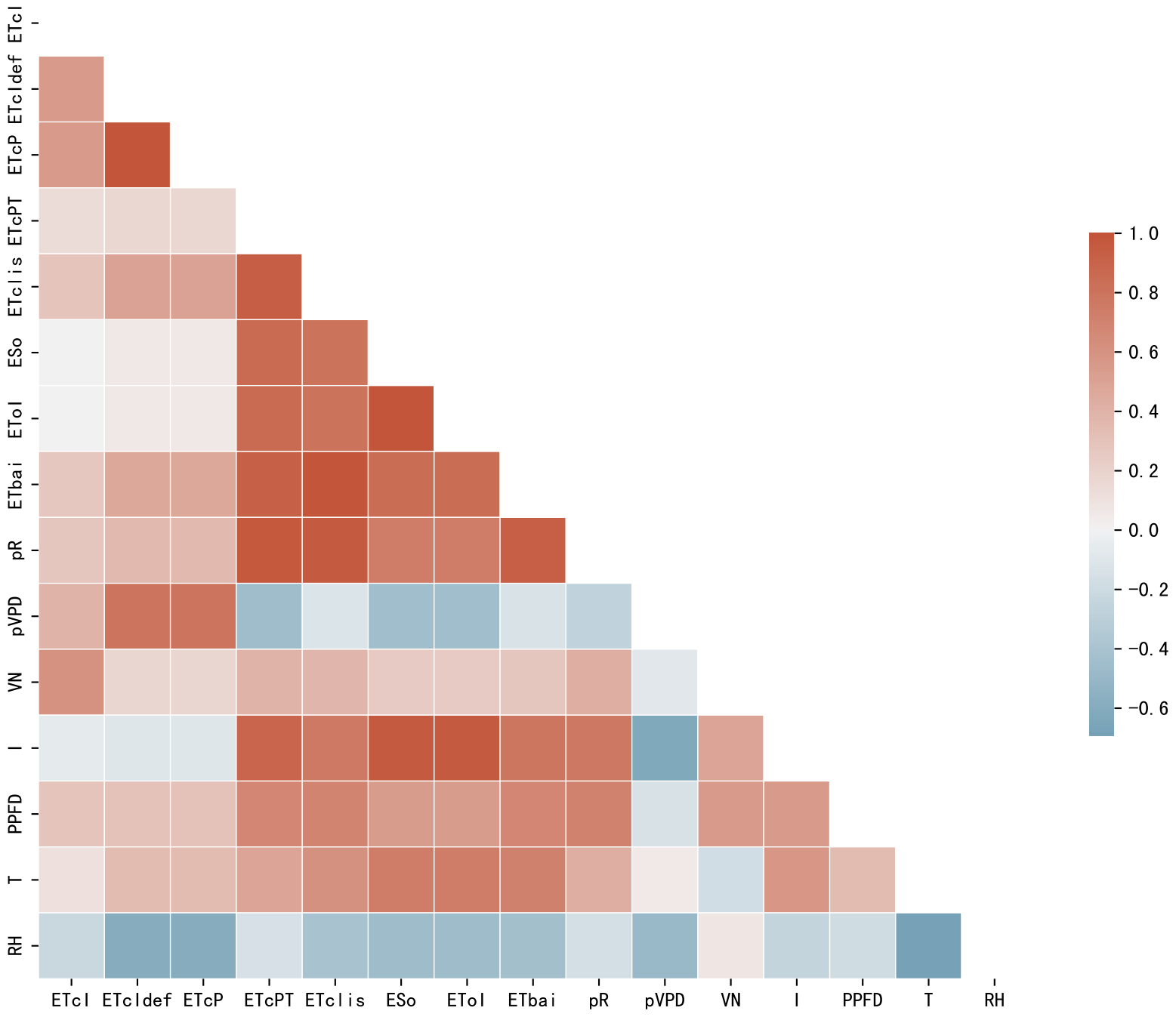

27.5
25.0
22.5
20.0
17.5
15.0
12.5
10.0
7.5
T

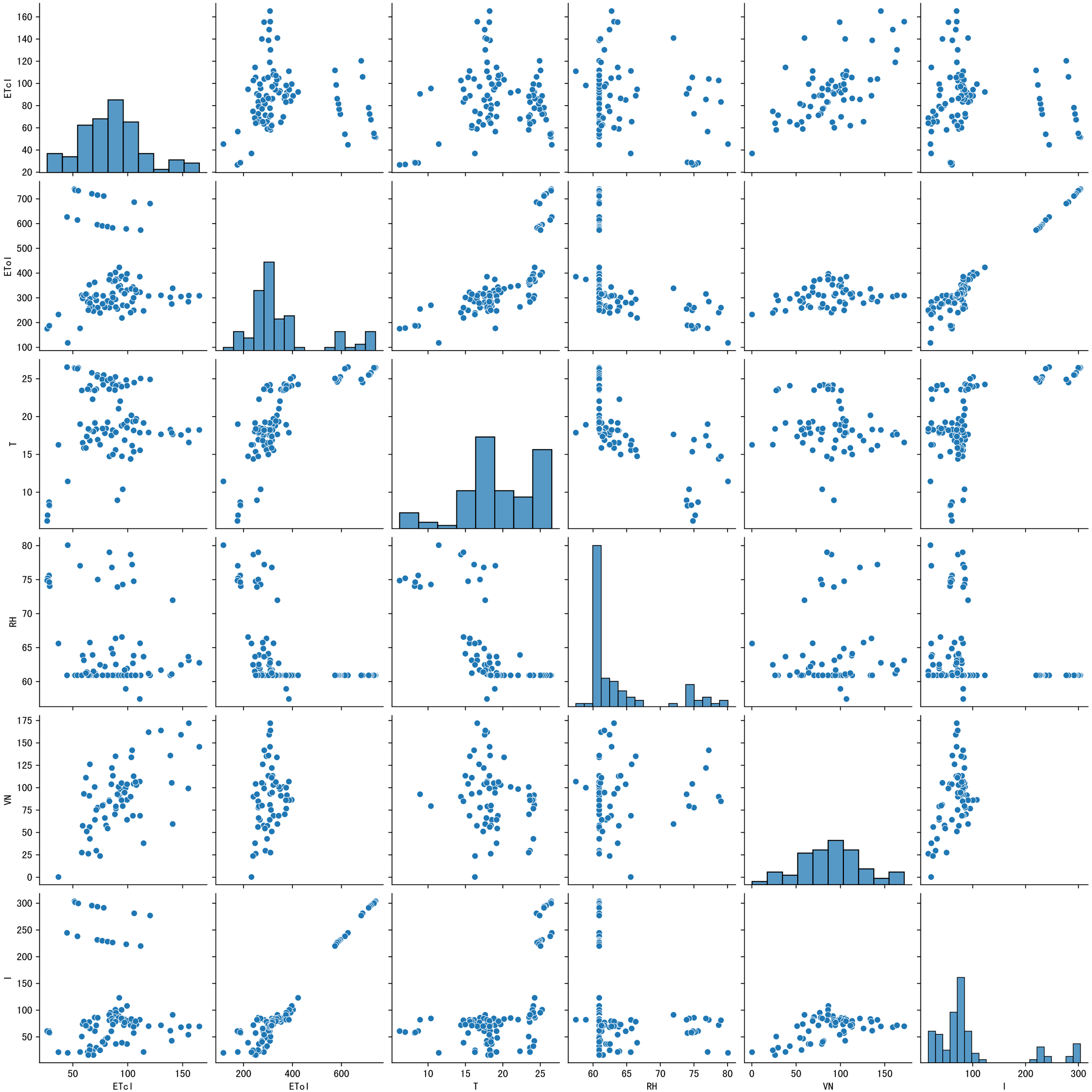

180
160
140
120
100
80
60
40
20
PPFD

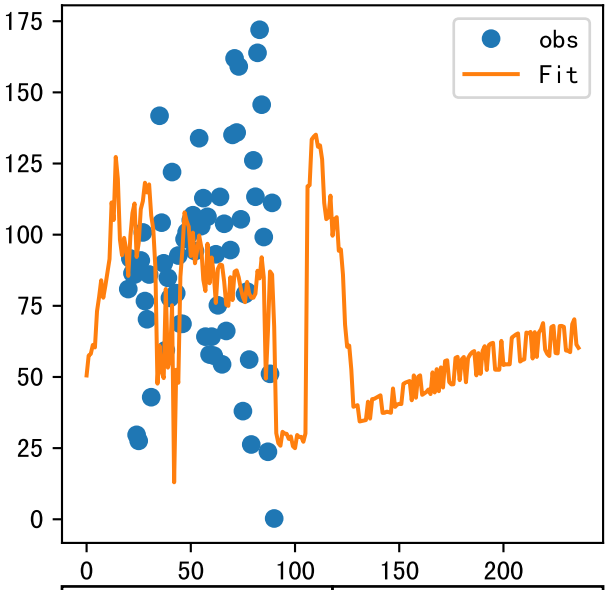

300
250
200
150
100
50
I

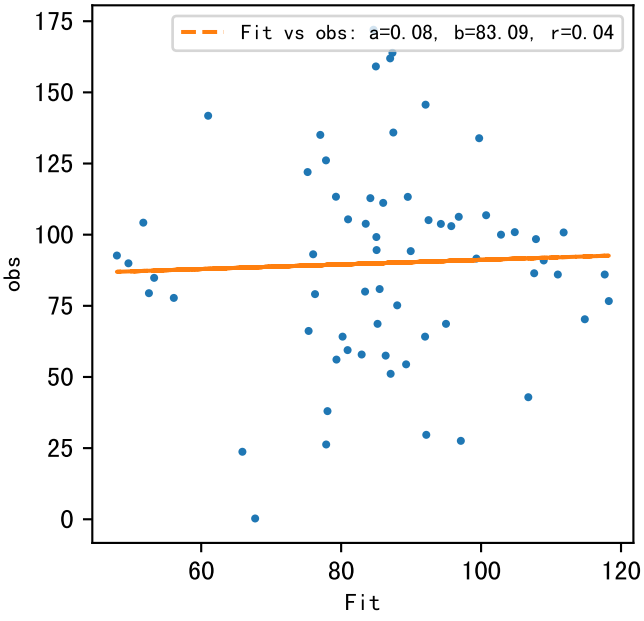

80
75
70
65
60
RH


ETclis
ETcPT
ETcRn
150
100
50
0
−50
0
20
40
60
80
d

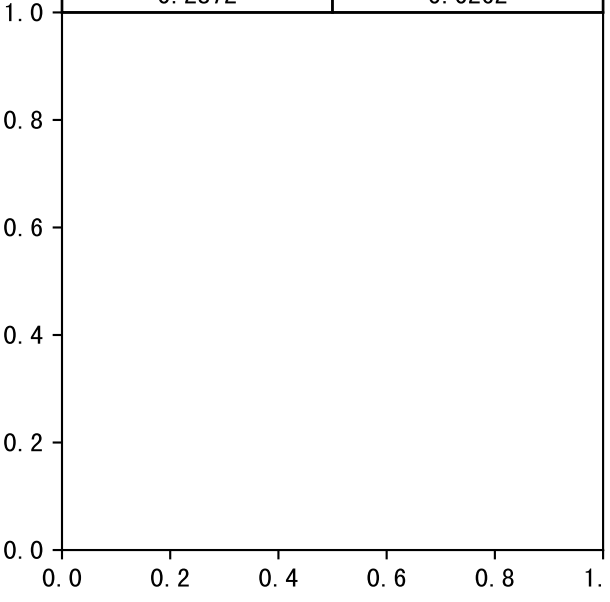

ETcl
ETcldef
ETcP
ETcPT
ETclis
ESo
ETol
ETbai
pR
pVPD
VN
I
PPFD
T
RH
1.0
0.8
0.6
0.4
0.2
0.0
−0.2
−0.4
−0.6

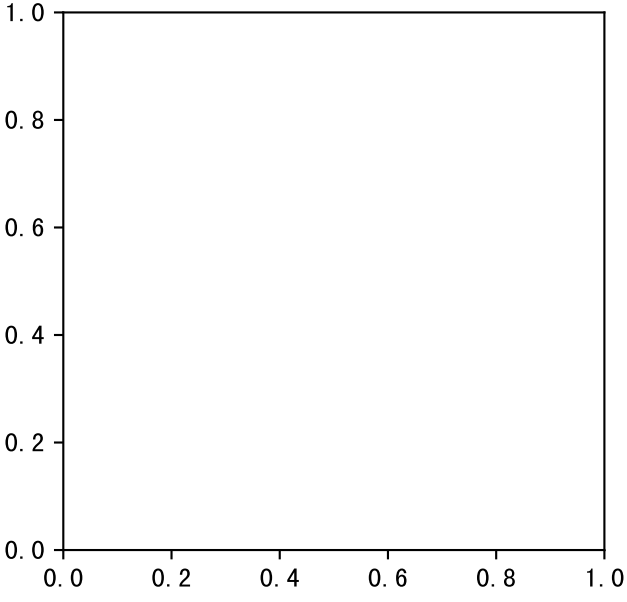

ETcl
ETol
T
RH
VN
I
ETcl
ETol
T
RH
VN
I

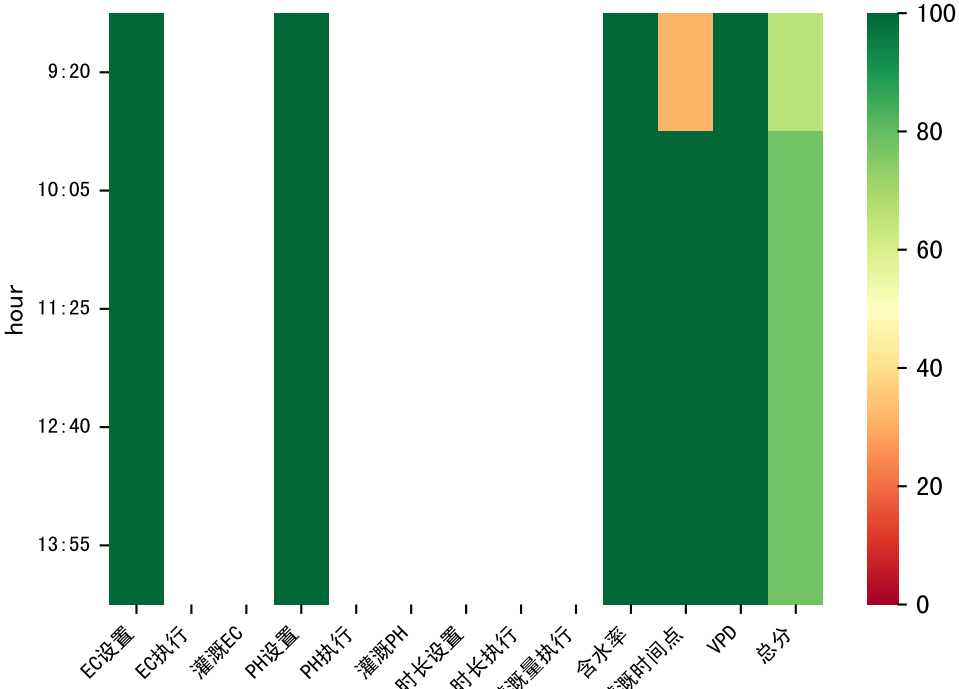




baiA	baiB
0.2872	0.0262

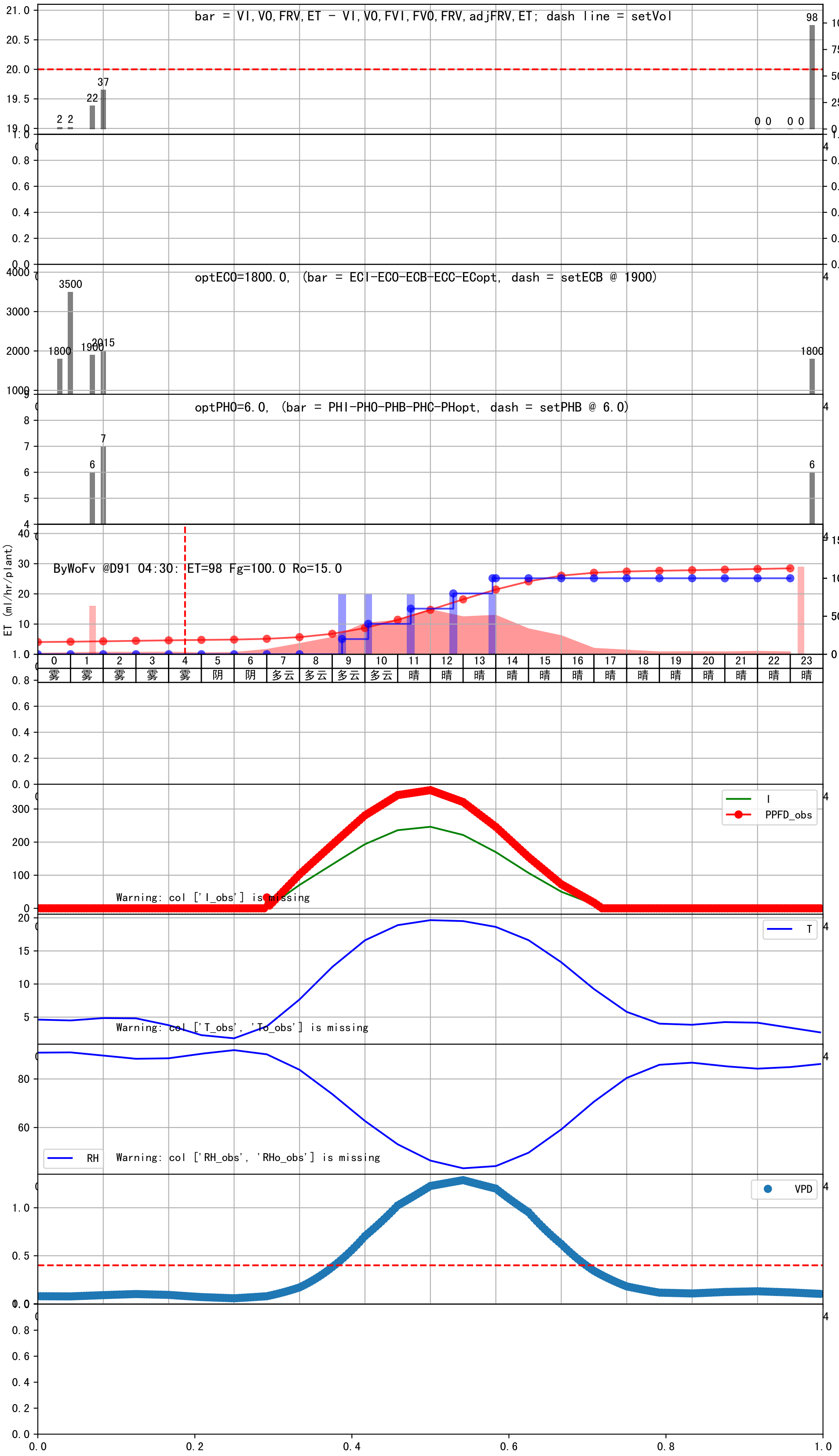


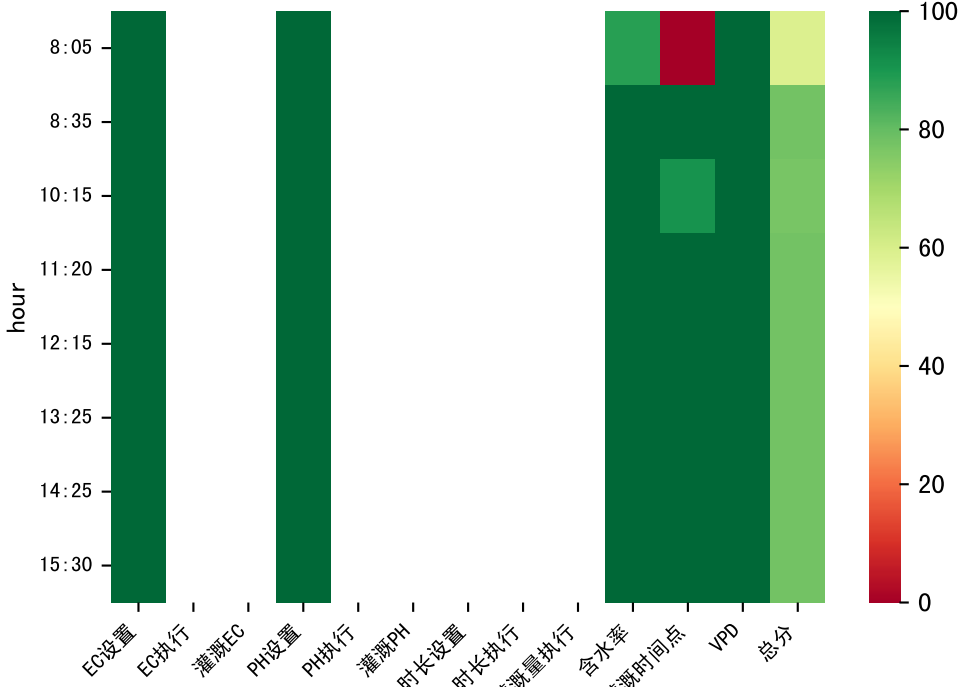



hour
9:20
10:05
11:25
12:40
13:55
EC设置
EC执行
灌溉EC
PH设置
PH执行
灌溉PH
时长设置
时长执行
灌溉量执行
含水率
灌溉时间点
VPD
总分
100
80
60
40
20
0

时间	灌溉时长(秒)	灌溉量(毫升/株)	灌溉总量(方/次)	天气	注释
09:20	40	20.0	0.081	多云	预期@09:20 自主（未用传感器）
10:05	40	20.0	0.081	多云	预期@10:05 自主（未用传感器）
11:25	40	20.0	0.081	晴	预期@11:25 自主（未用传感器）
12:40	40	20.0	0.081	晴	预期@12:40 自主（未用传感器）
13:55	40	20.0	0.081	晴	预期@13:55 自主（未用传感器）
总计	200.0 (5次)	100.0			建议进液EC：1900， PH：6.0

L1A4_4, Day=91 (2026-01-05)

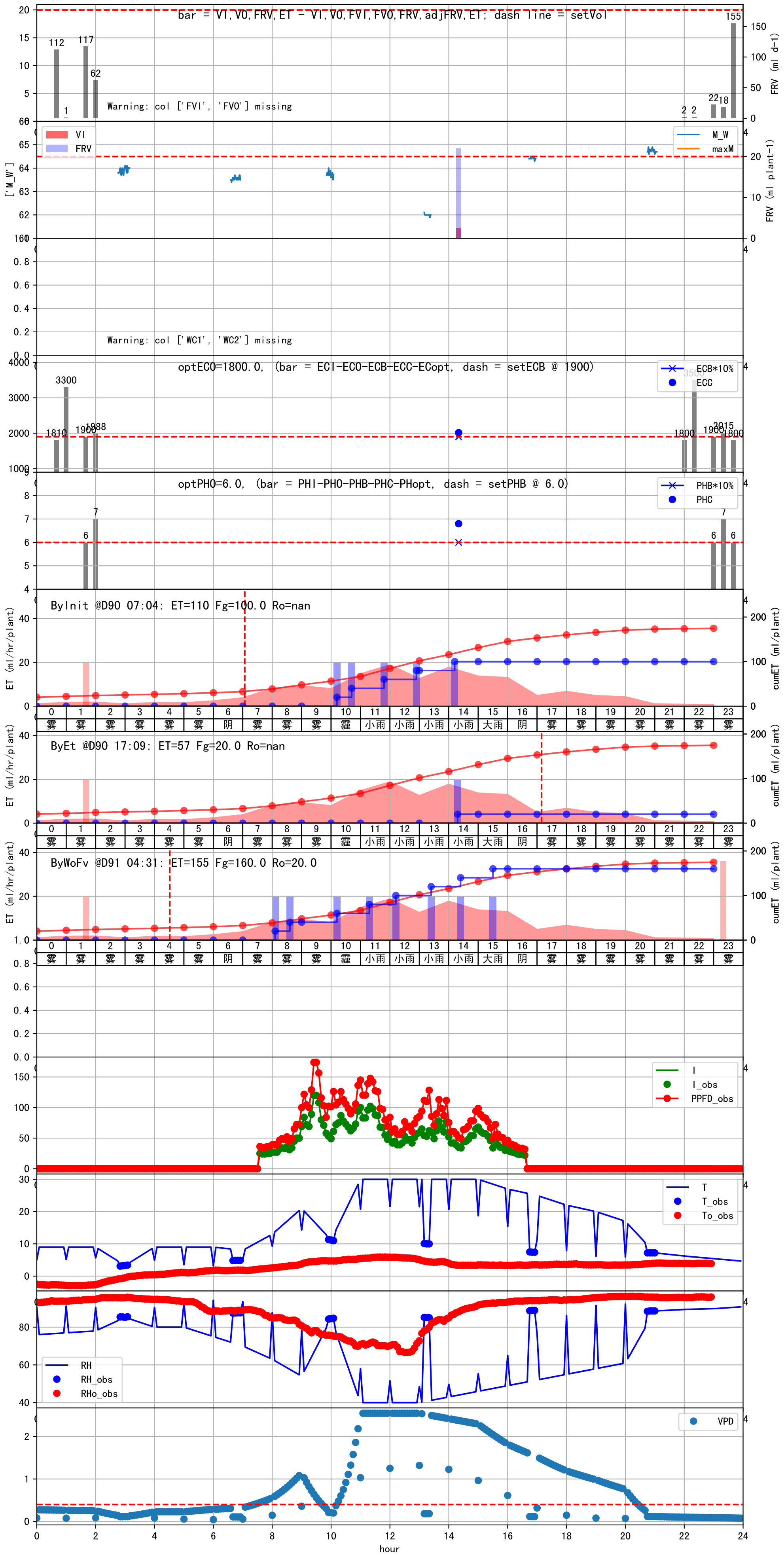


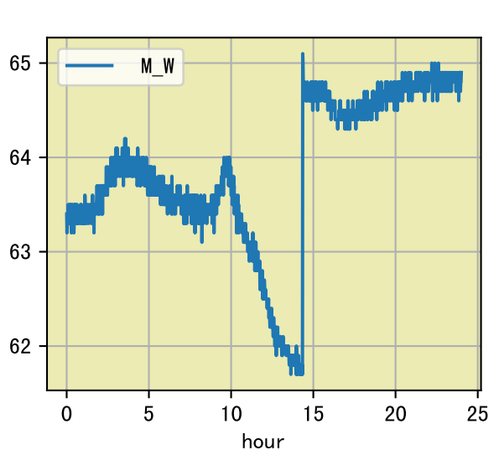

hour
8:05
8:35
10:15
11:20
12:15
13:25
14:25
15:30
EC设置
EC执行
灌溉EC
PH设置
PH执行
灌溉PH
时长设置
时长执行
含水率
VPD
总分
100
80
60
40
20
0

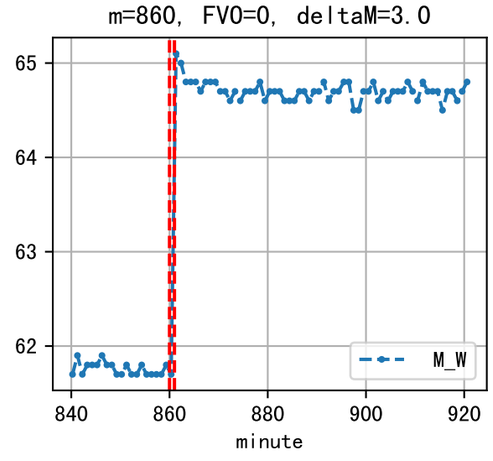
时间	灌溉时长(秒)	灌溉量(毫升/株)	灌溉总量(方/次)	天气	注释
08:05	36	20.0	0.081	雾	假设@08:05 自动（未用传感器）
08:35	36	20.0	0.081	雾	假设@08:35 自动（未用传感器）
10:15	36	20.0	0.081	霾	假设@10:15 自动（未用传感器）
11:20	36	20.0	0.081	小雨	假设@11:20 自动（未用传感器）
12:15	36	20.0	0.081	小雨	假设@12:15 自动（未用传感器）
13:25	36	20.0	0.081	小雨	假设@13:25 自动（未用传感器）
14:25	36	20.0	0.081	小雨	假设@14:25 自动（未用传感器）
15:30	36	20.0	0.081	大雨	假设@15:30 自动（未用传感器）
总计	288.0 (8次)	160.0			建议进液EC：1900， PH：6.0

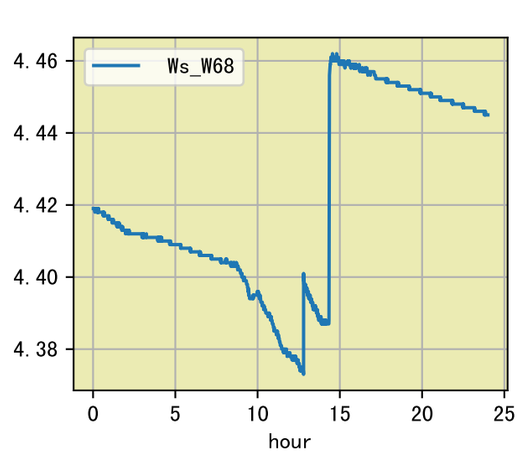
施肥机灌溉量与预期值不符 (22.0 : 18.0)，可能水表需要校准
上次灌溉时长未按模型建议(36 vs 40.0))
默认实际灌溉18.0 ml.

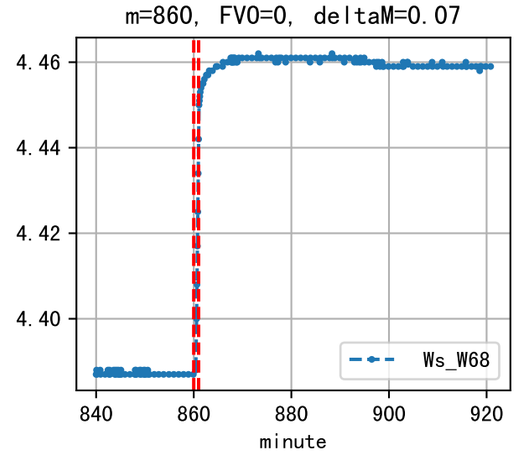
L1A4_4, Day=90 (2026-01-04)

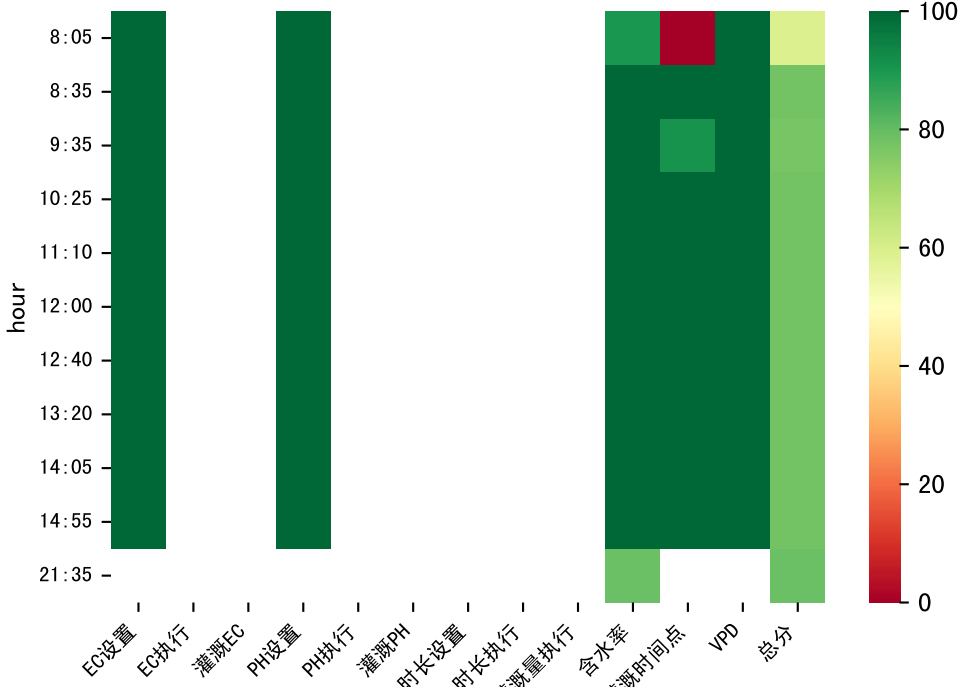



M_W
65
64
63
62
0
5
10
15
20
25
hour


m=860, FVO=0, deltaM=3.0
M_W
65
64
63
62
840
860
880
900
920
minute

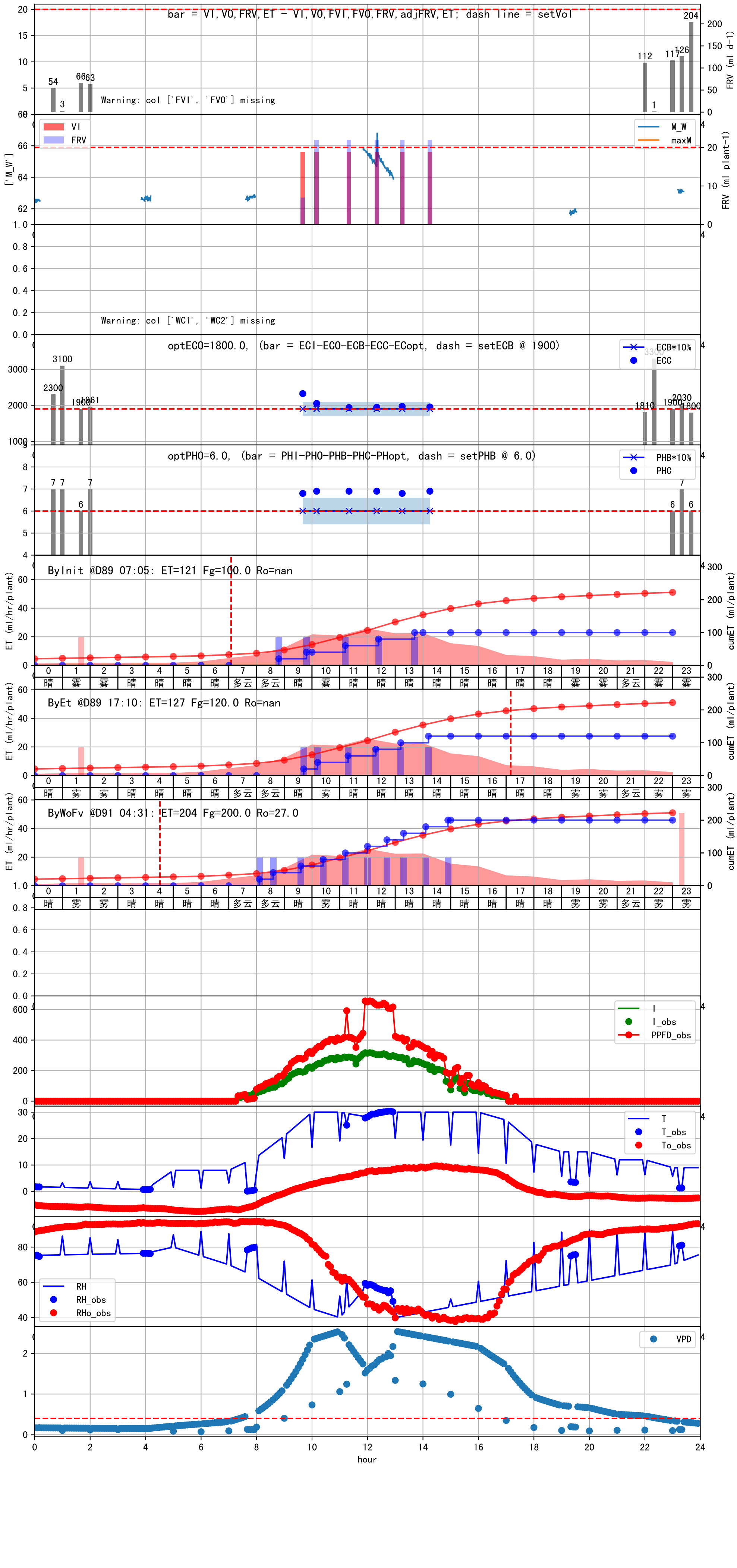

Ws_W68
4.46
4.44
4.42
4.40
4.38
0
5
10
15
20
25
hour

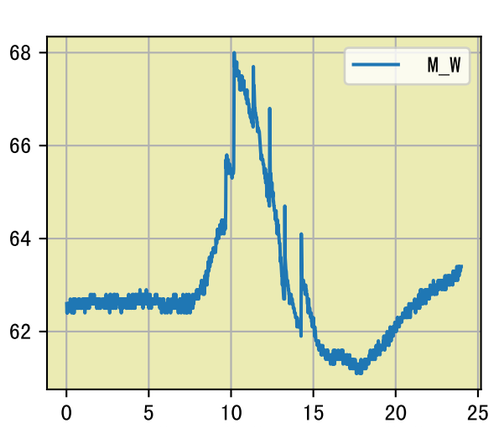

m=860, FVO=0, deltaM=0.07
Ws_W68
4.46
4.44
4.42
4.40
840
860
880
900
920
minute

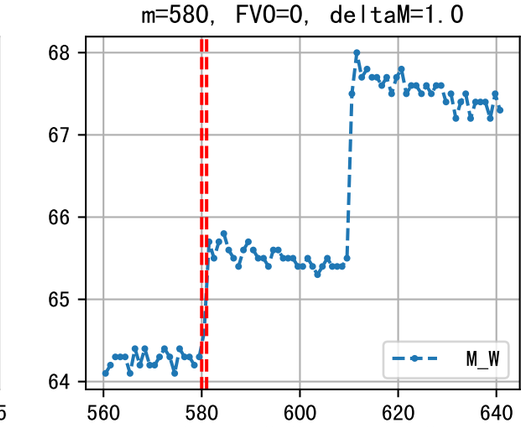

hour
8:05
8:35
9:35
10:25
11:10
12:00
12:40
13:20
14:05
14:55
21:35
EC设置
EC执行
灌溉EC
PH设置
PH执行
灌溉PH
时长设置
时长执行
灌溉量执行
含水率
灌溉时间点
VPD
总分
100
80
60
40
20
0

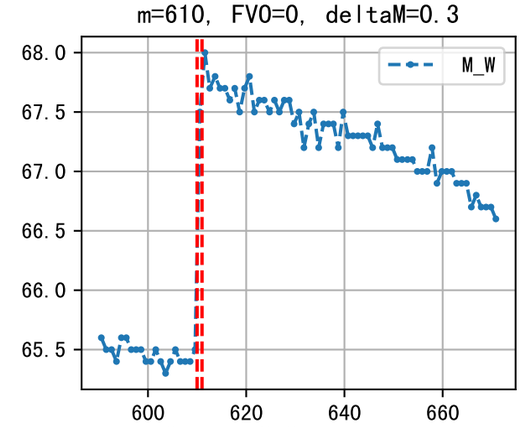
时间	灌溉时长(秒)	灌溉量(毫升/株)	灌溉总量(方/次)	天气	注释
08:05	38	20.0	0.081	多云	假设@08:05 自动（未用传感器）
08:35	38	20.0	0.081	多云	假设@08:35 自动（未用传感器）
09:35	38	20.0	0.081	晴	假设@09:35 自动（未用传感器）
10:25	38	20.0	0.081	雾	假设@10:25 自动（未用传感器）
11:10	38	20.0	0.081	晴	假设@11:10 自动（未用传感器）
12:00	38	20.0	0.081	晴	假设@12:00 自动（未用传感器）
12:40	38	20.0	0.081	晴	假设@12:40 自动（未用传感器）
13:20	38	20.0	0.081	晴	假设@13:20 自动（未用传感器）
14:05	38	20.0	0.081	晴	假设@14:05 自动（未用传感器）
14:55	38	20.0	0.081	晴	假设@14:55 自动（未用传感器）
总计	380.0 (10次)	200.0			建议进液EC：1900， PH：6.0

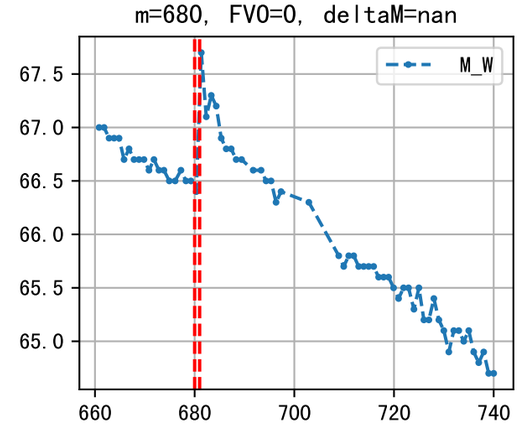
L1A4_4, Day=89 (2026-01-03)

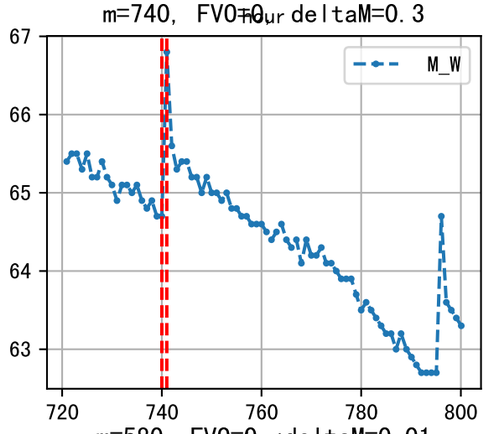


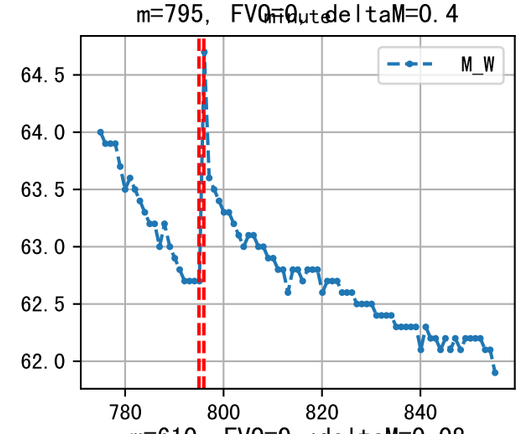

M_W

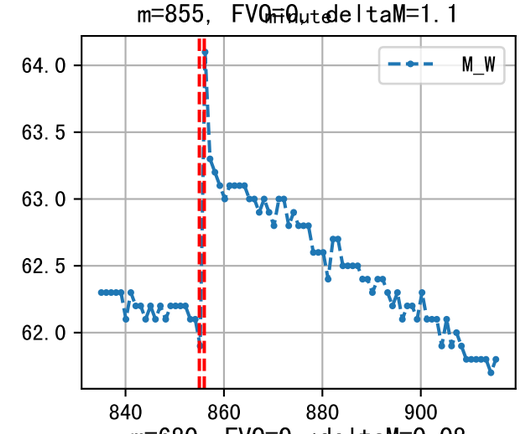

m=580, FV0=0, deltaM=1.0
M_W

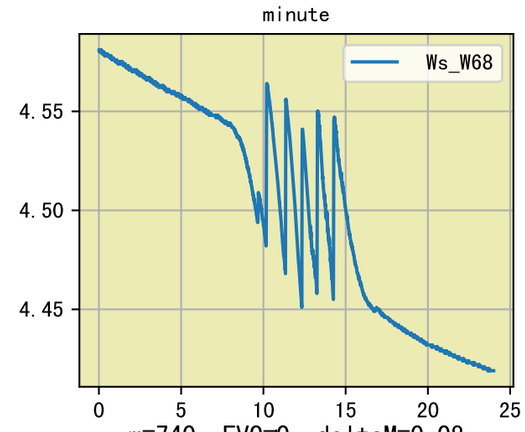

m=610, FV0=0, deltaM=0.3
M_W

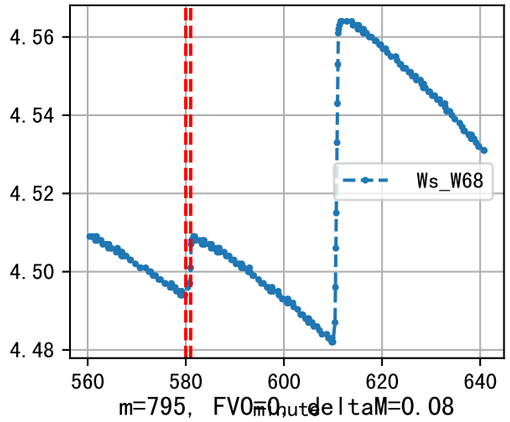

m=680, FV0=0, deltaM=nan
M_W
minute

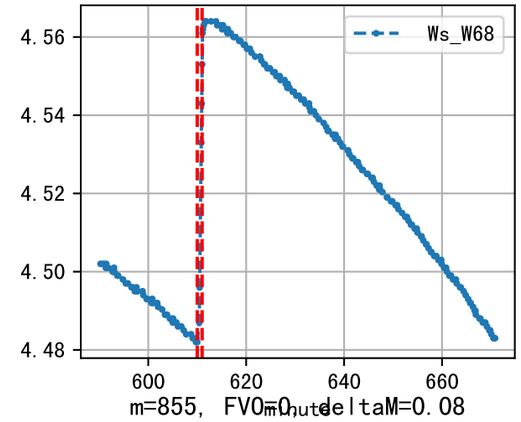

m=740, FV0=0, deltaM=0.3
M_W
hour

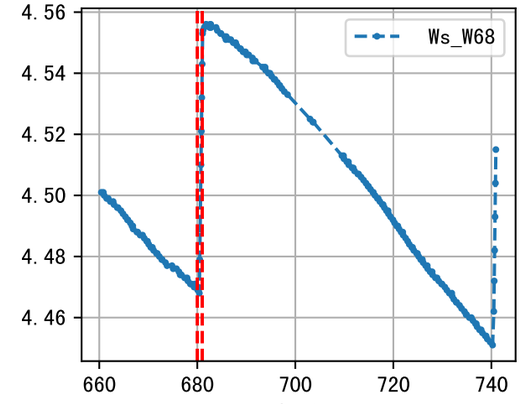

m=795, FV0=0, deltaM=0.4
M_W
minute

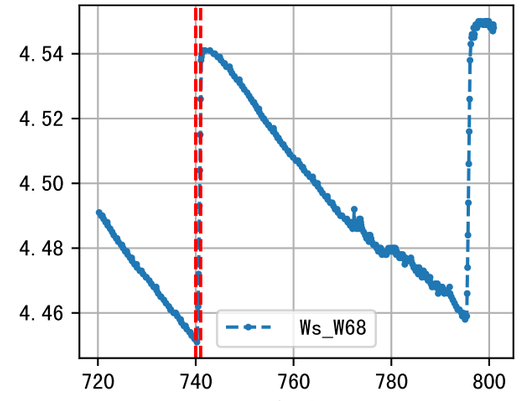

m=855, FV0=0, deltaM=1.1
M_W
minute

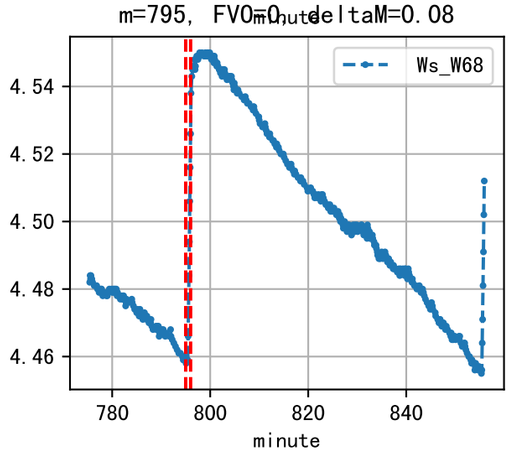

Ws_W68

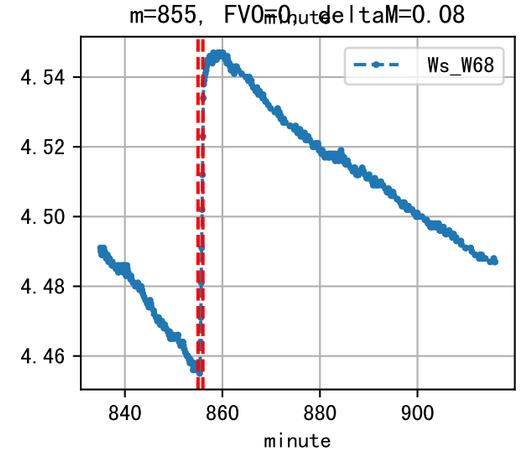

m=580, FV0=0, deltaM=0.01
Ws_W68
minute

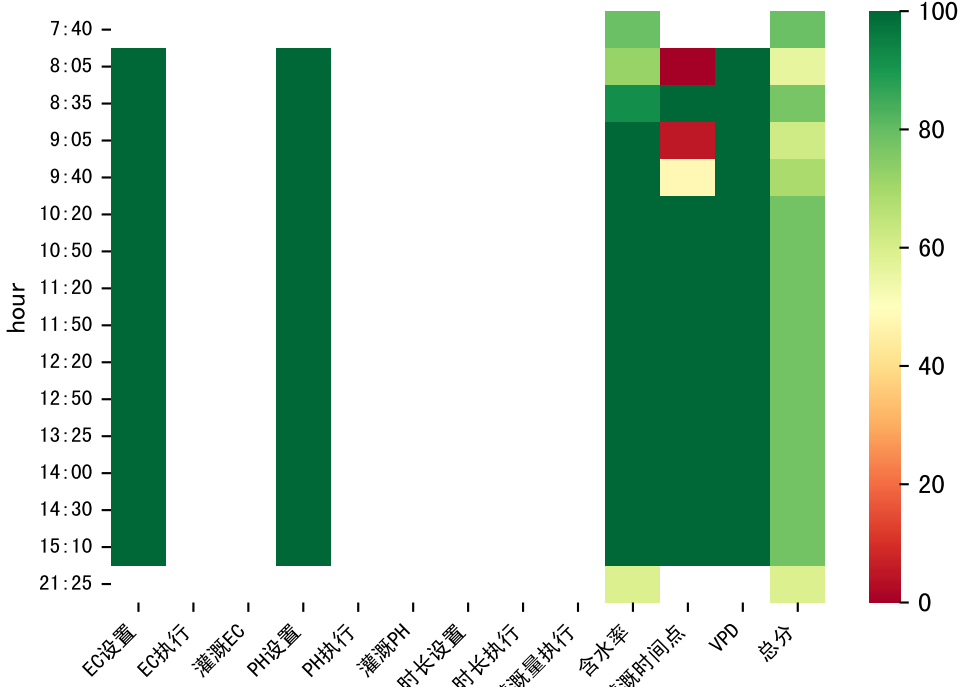

m=610, FV0=0, deltaM=0.08
Ws_W68
minute


m=680, FV0=0, deltaM=0.08
Ws_W68
minute


m=740, FV0=0, deltaM=0.08
Ws_W68
hour

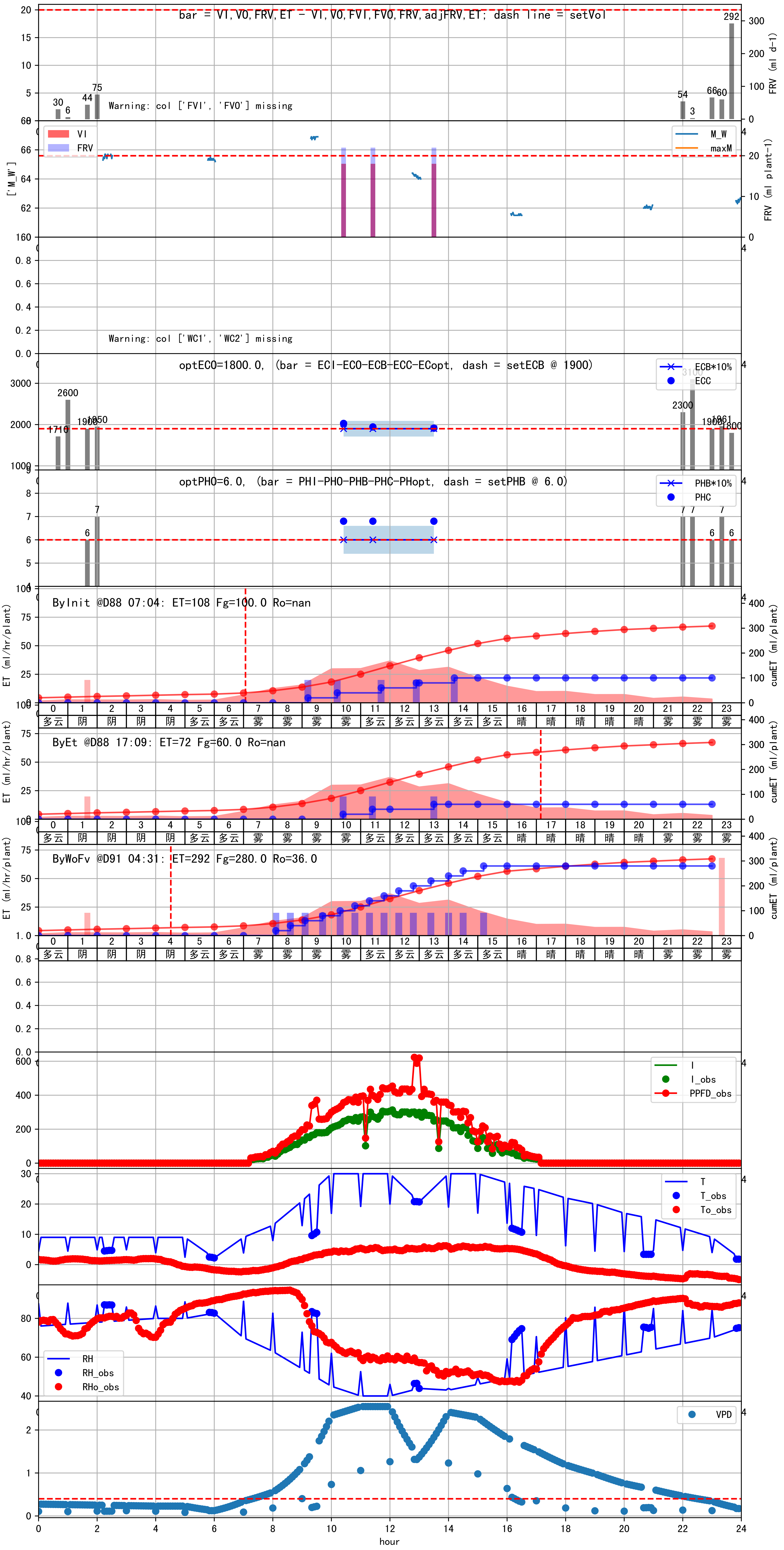

m=795, FV0=0, deltaM=0.08
Ws_W68
minute

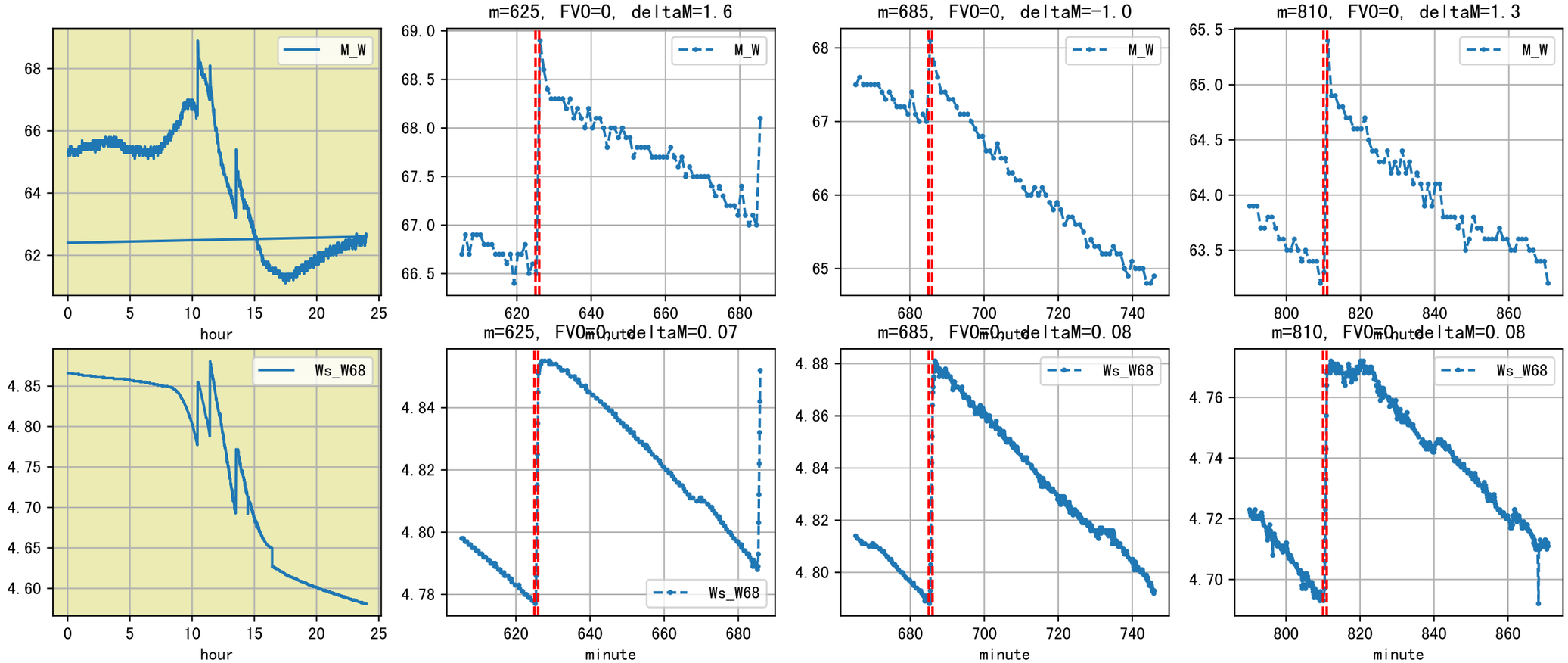

m=855, FV0=0, deltaM=0.08
Ws_W68
minute

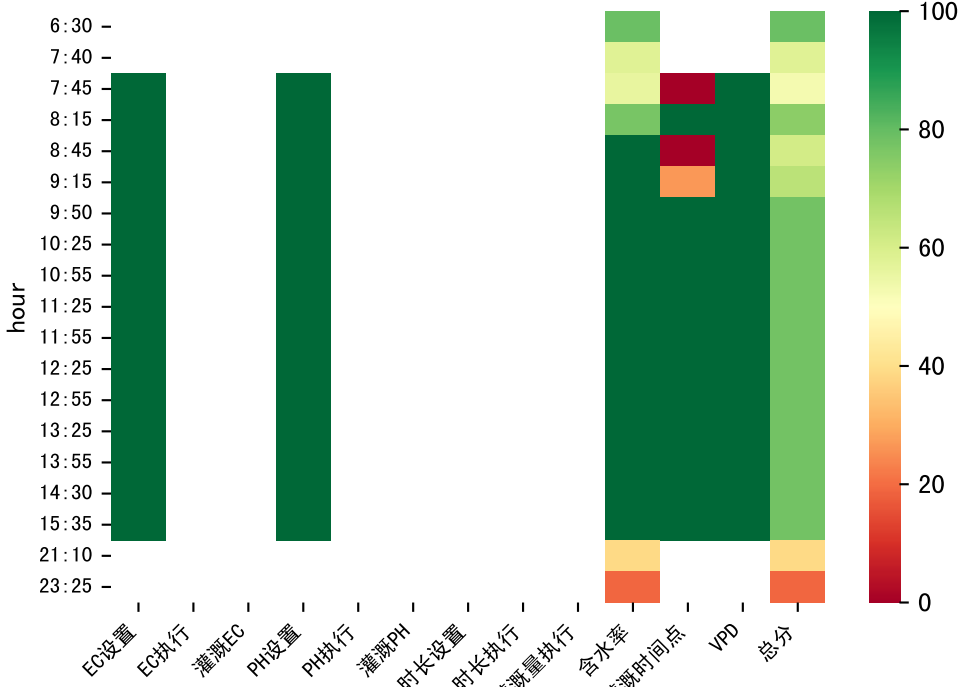

hour
7:40
8:05
8:35
9:05
9:40
10:20
10:50
11:20
11:50
12:20
12:50
13:25
14:00
14:30
15:10
21:25
EC设置
EC执行
灌溉EC
PH设置
PH执行
灌溉PH
时长设置
时长执行
含水率
VPD
总分
100
80
60
40
20
0

时间	灌溉时长(秒)	灌溉量(毫升/株)	灌溉总量(方/次)	天气	注释
08:05	36	20.0	0.081	雾	假设@08:05 自动（未用传感器）
08:35	36	20.0	0.081	雾	假设@08:35 自动（未用传感器）
09:05	36	20.0	0.081	雾	假设@09:05 自动（未用传感器）
09:40	36	20.0	0.081	雾	假设@09:40 自动（未用传感器）
10:20	36	20.0	0.081	雾	假设@10:20 自动（未用传感器）
10:50	36	20.0	0.081	雾	假设@10:50 自动（未用传感器）
11:20	36	20.0	0.081	多云	假设@11:20 自动（未用传感器）
11:50	36	20.0	0.081	多云	假设@11:50 自动（未用传感器）
12:20	36	20.0	0.081	多云	假设@12:20 自动（未用传感器）
12:50	36	20.0	0.081	多云	假设@12:50 自动（未用传感器）
13:25	36	20.0	0.081	多云	假设@13:25 自动（未用传感器）
14:00	36	20.0	0.081	多云	假设@14:00 自动（未用传感器）
14:30	36	20.0	0.081	多云	假设@14:30 自动（未用传感器）
15:10	36	20.0	0.081	多云	假设@15:10 自动（未用传感器）
总计	504.0 (14次)	280.0			建议进液EC：1900， PH：6.0

L1A4_4, Day=88 (2026-01-02)

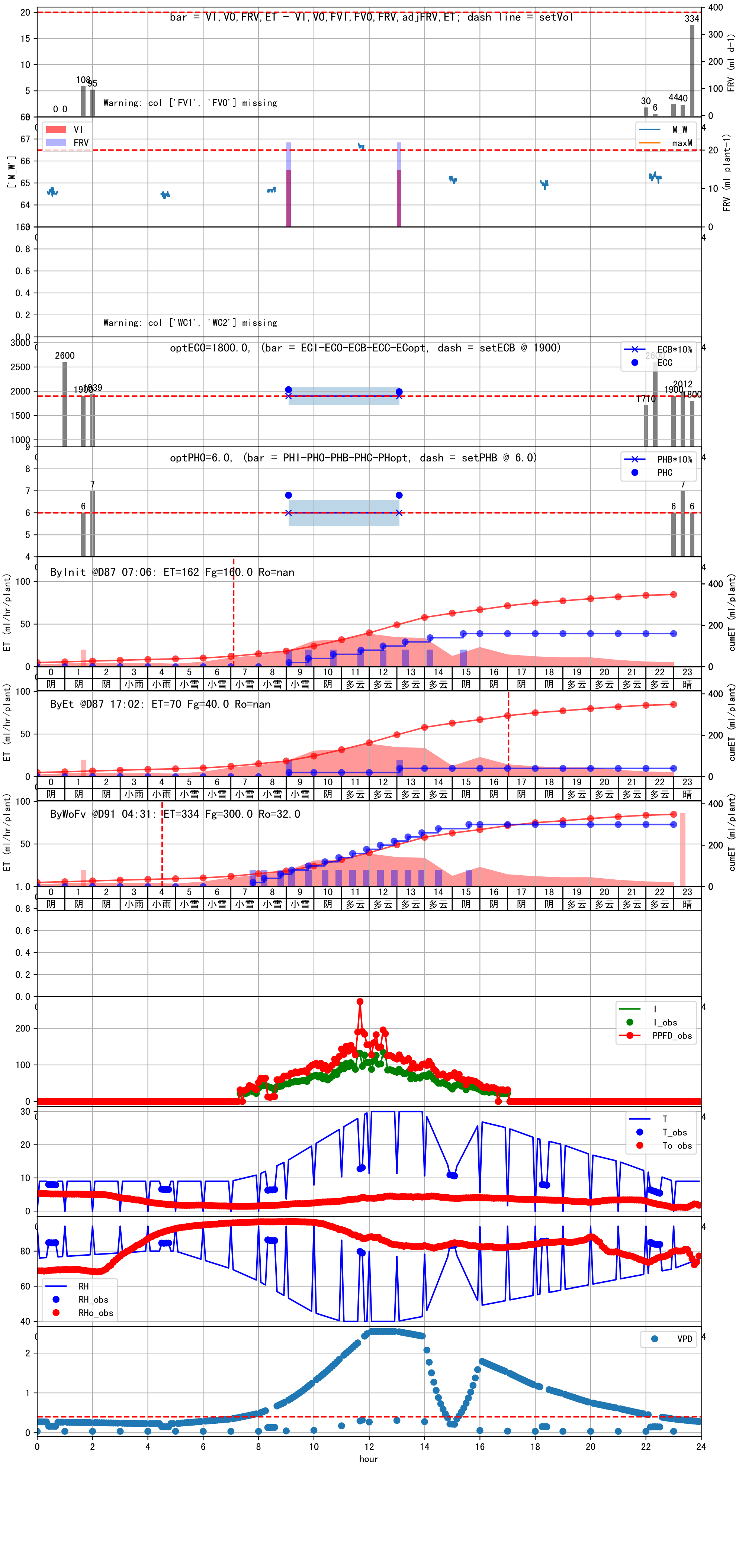


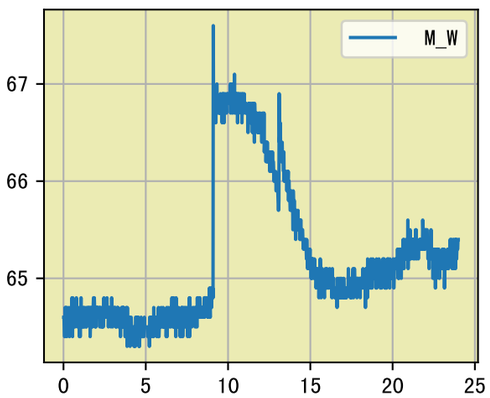

M_W
hour
m=625, FV0=0, deltaM=1.6
m=685, FV0=0, deltaM=-1.0
m=810, FV0=0, deltaM=1.3
minute
Ws_W68
m=625, FV0=0, deltaM=0.07
m=685, FV0=0, deltaM=0.08
m=810, FV0=0, deltaM=0.08

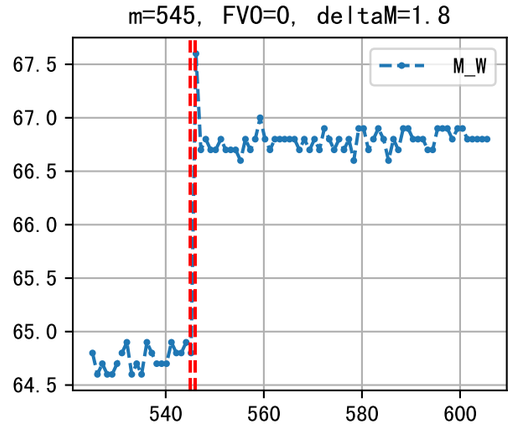

hour
6:30
7:40
7:45
8:15
8:45
9:15
9:50
10:25
10:55
11:25
11:55
12:25
12:55
13:25
13:55
14:30
15:35
21:10
23:25
EC设置
EC执行
灌溉EC
PH设置
PH执行
灌溉PH
时长设置
时长执行
灌溉量执行
含水率
灌溉时间点
VPD
总分
100
80
60
40
20
0

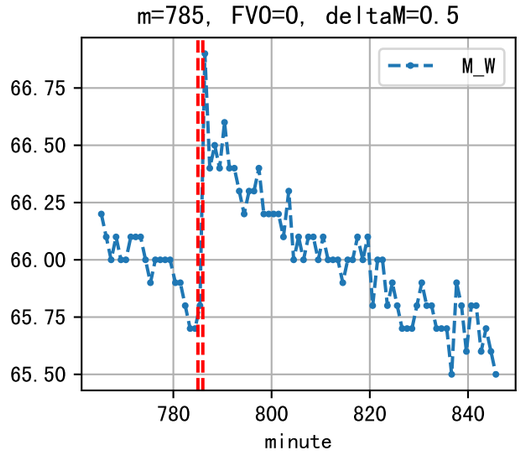
时间	灌溉时长(秒)	灌溉量(毫升/株)	灌溉总量(方/次)	天气	注释
07:45	36	20.0	0.081	小雪	假设@07:45 自动（未用传感器）
08:15	36	20.0	0.081	小雪	假设@08:15 自动（未用传感器）
08:45	36	20.0	0.081	小雪	假设@08:45 自动（未用传感器）
09:15	36	20.0	0.081	小雪	假设@09:15 自动（未用传感器）
09:50	36	20.0	0.081	小雪	假设@09:50 自动（未用传感器）
10:25	36	20.0	0.081	阴	假设@10:25 自动（未用传感器）
10:55	36	20.0	0.081	阴	假设@10:55 自动（未用传感器）
11:25	36	20.0	0.081	多云	假设@11:25 自动（未用传感器）
11:55	36	20.0	0.081	多云	假设@11:55 自动（未用传感器）
12:25	36	20.0	0.081	多云	假设@12:25 自动（未用传感器）
12:55	36	20.0	0.081	多云	假设@12:55 自动（未用传感器）
13:25	36	20.0	0.081	多云	假设@13:25 自动（未用传感器）
13:55	36	20.0	0.081	多云	假设@13:55 自动（未用传感器）
14:30	36	20.0	0.081	多云	假设@14:30 自动（未用传感器）
15:35	36	20.0	0.081	阴	假设@15:35 自动（未用传感器）
总计	540.0 (15次)	300.0			建议进液EC：1900， PH：6.0

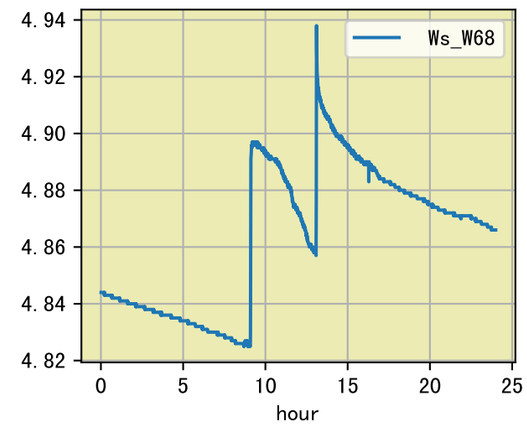
L1A4_4, Day=87 (2026-01-01)

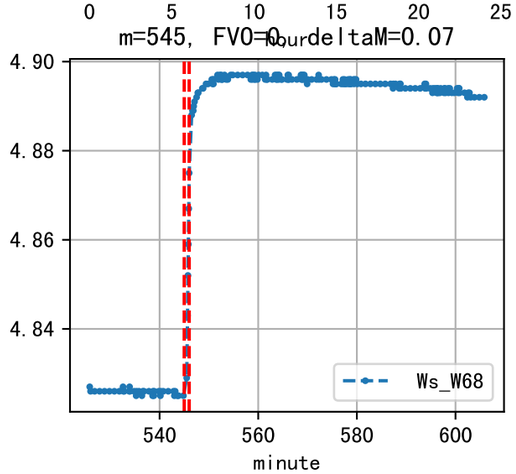


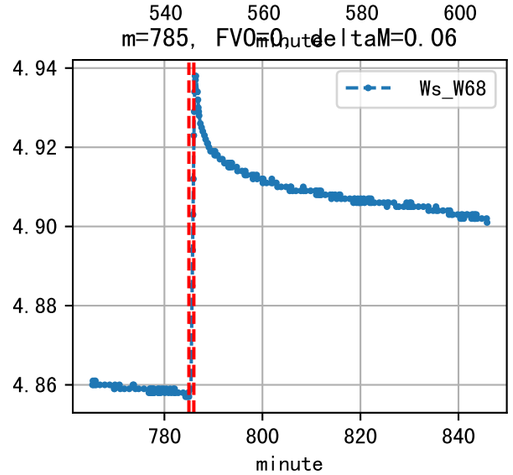

M_W
67
66
65
0
5
10
15
20
25


m=545, FV0=0, deltaM=1.8
M_W
67.5
67.0
66.5
66.0
65.5
65.0
64.5
540
560
580
600


m=785, FV0=0, deltaM=0.5
M_W
66.75
66.50
66.25
66.00
65.75
65.50
780
800
820
840
minute


Ws_W68
4.94
4.92
4.90
4.88
4.86
4.84
4.82
0
5
10
15
20
25
hour


m=545, FV0=0, deltaM=0.07
Ws_W68
4.90
4.88
4.86
4.84
540
560
580
600
minute


m=785, FV0=0, deltaM=0.06
Ws_W68
4.94
4.92
4.90
4.88
4.86
780
800
820
840
minute