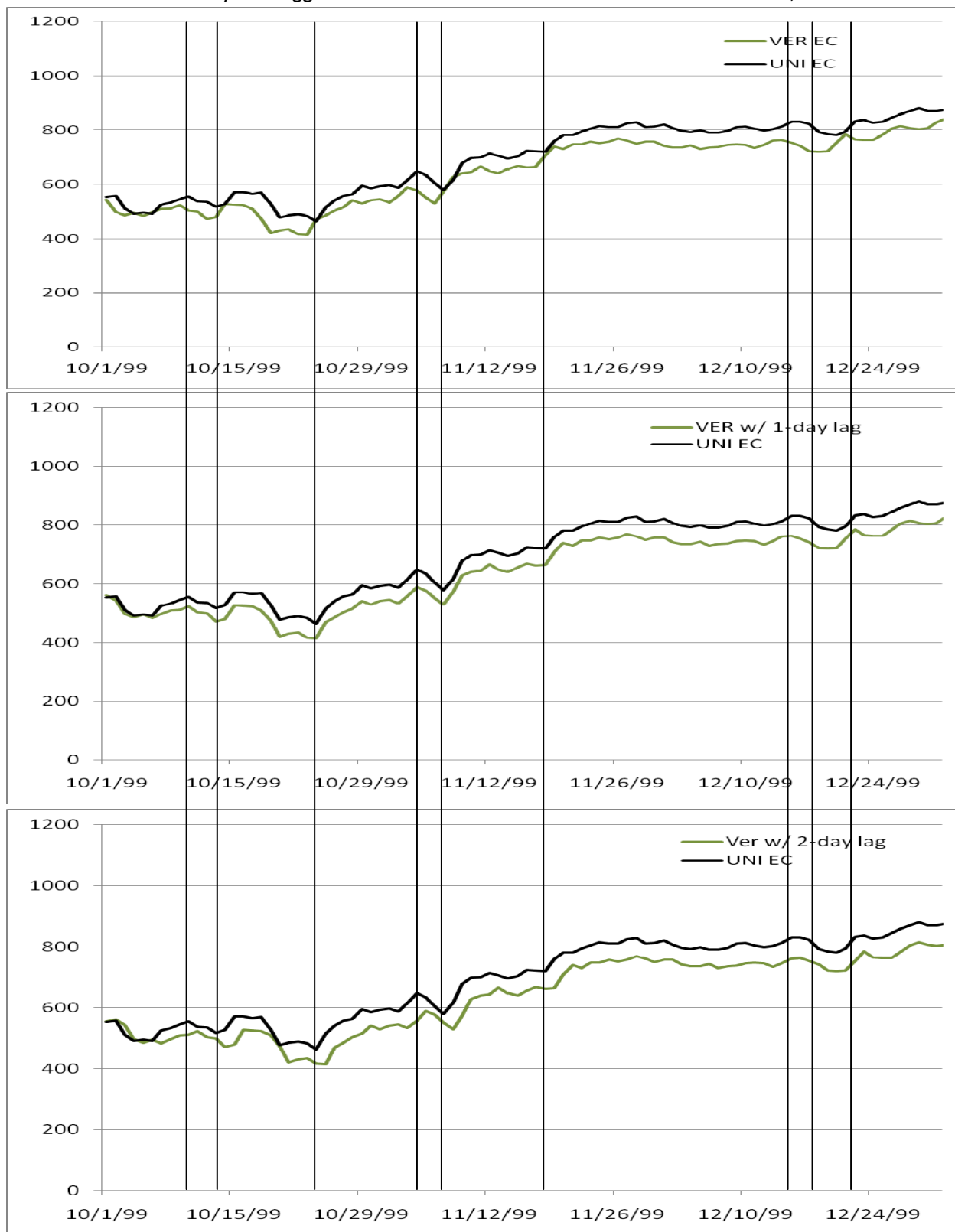
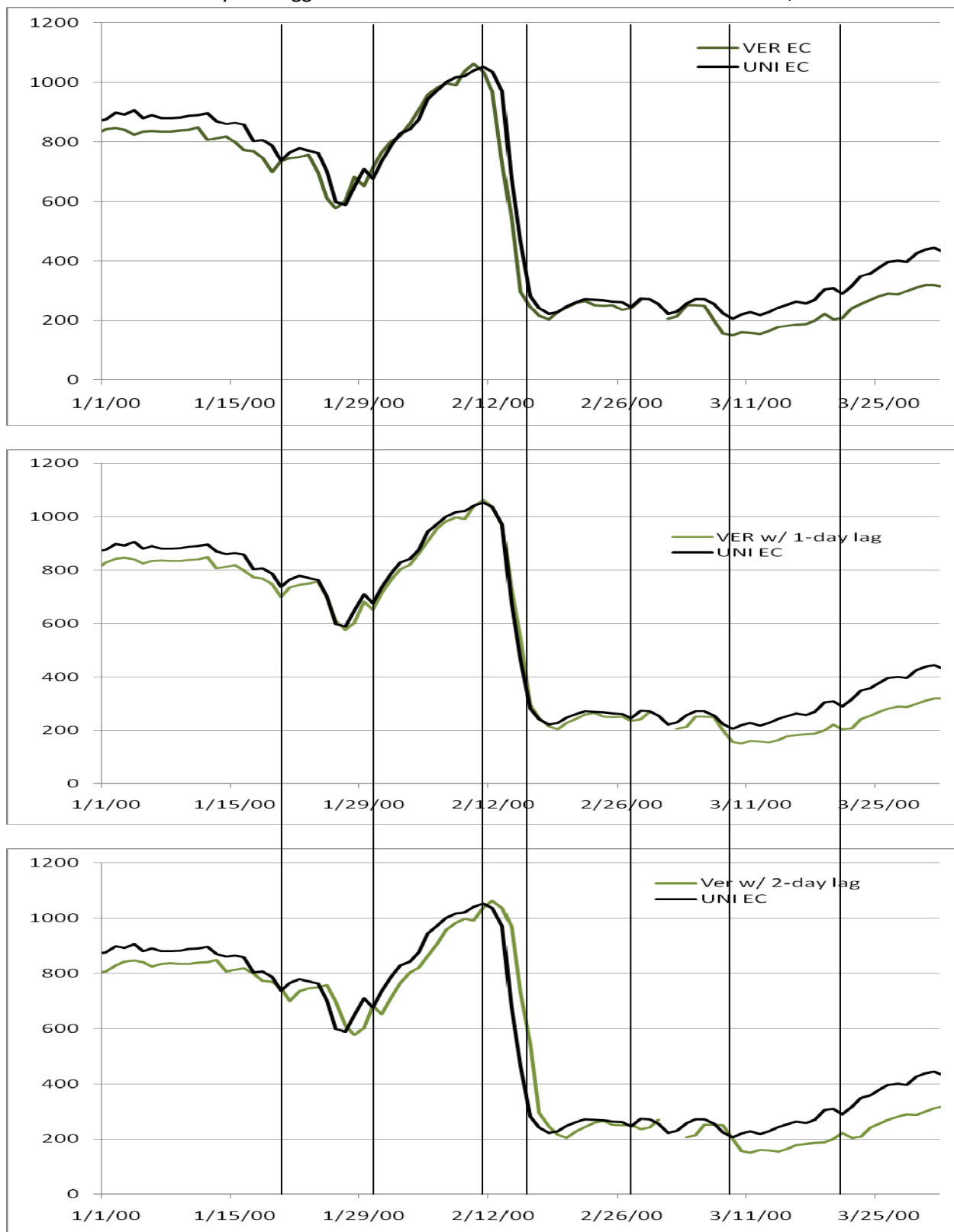
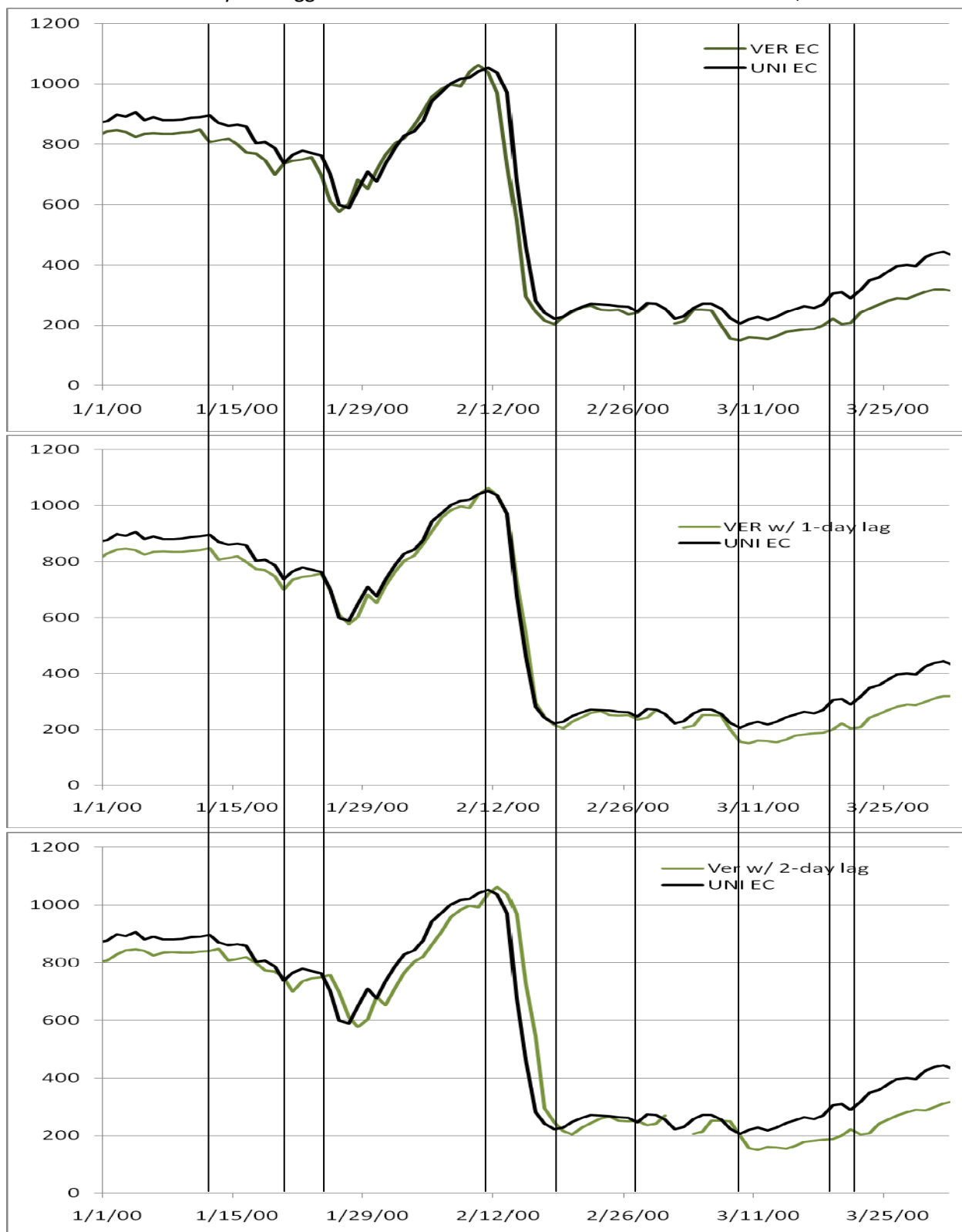


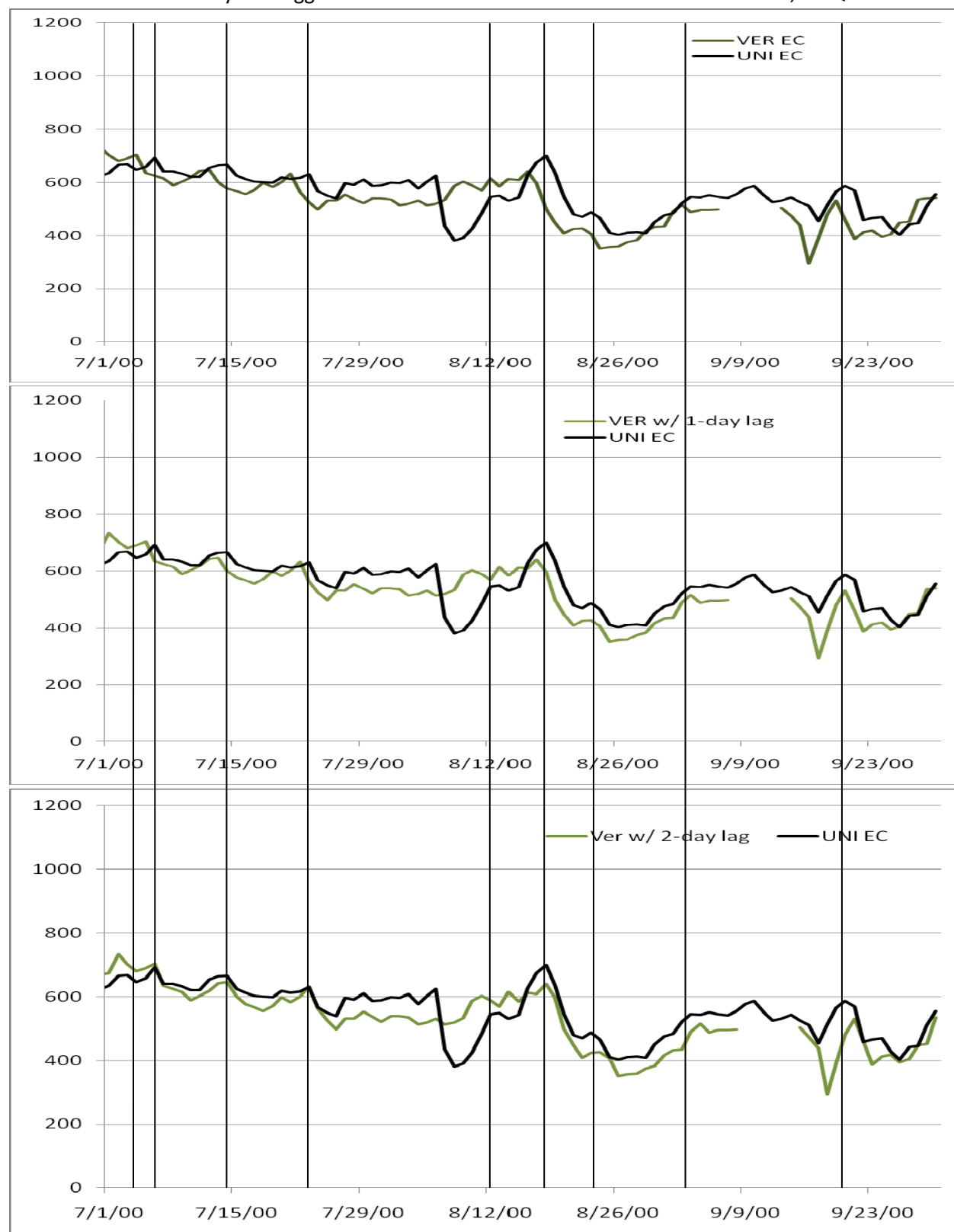
Appendix D

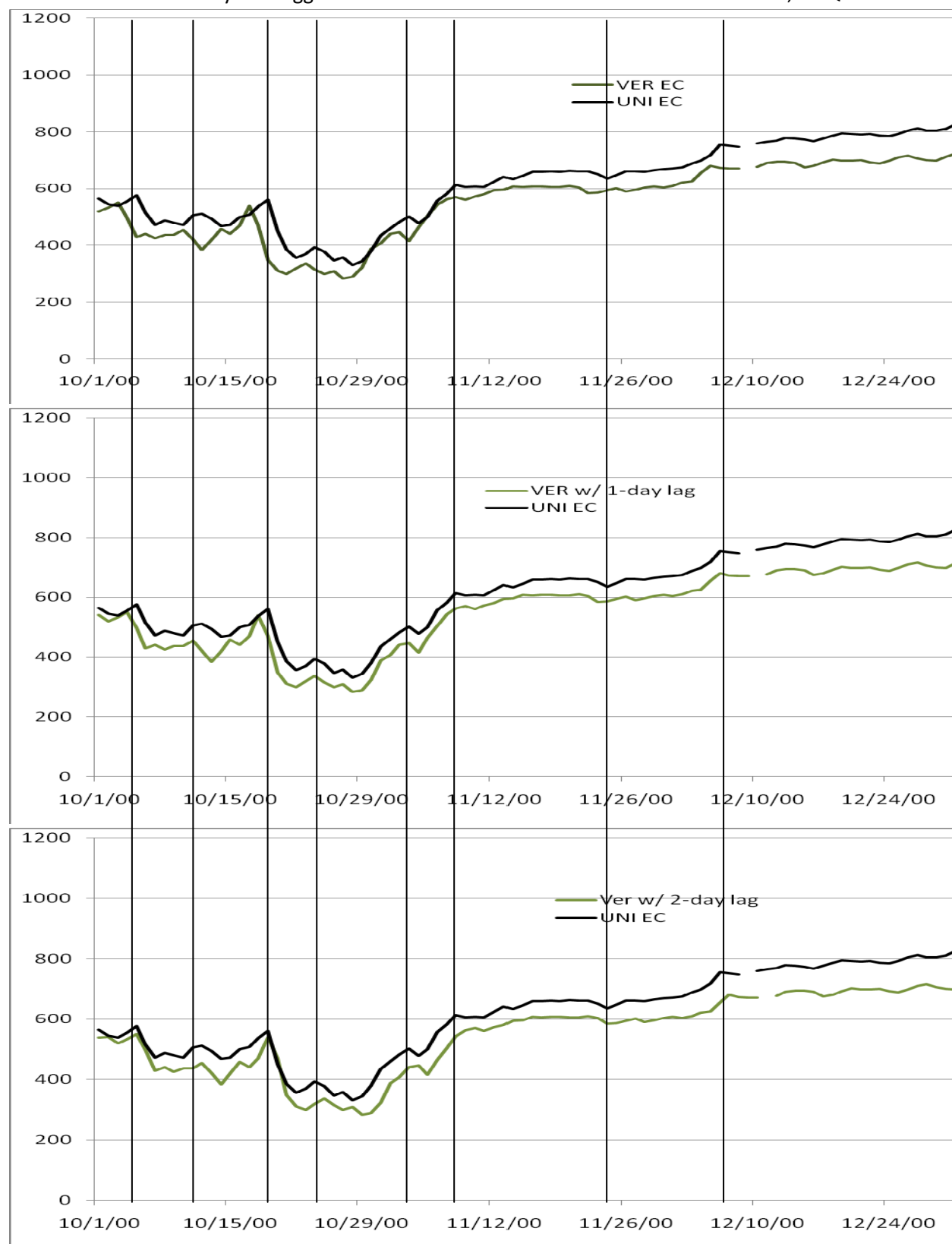
Electrical Conductivity Lag (Travel) Time Analysis Plots

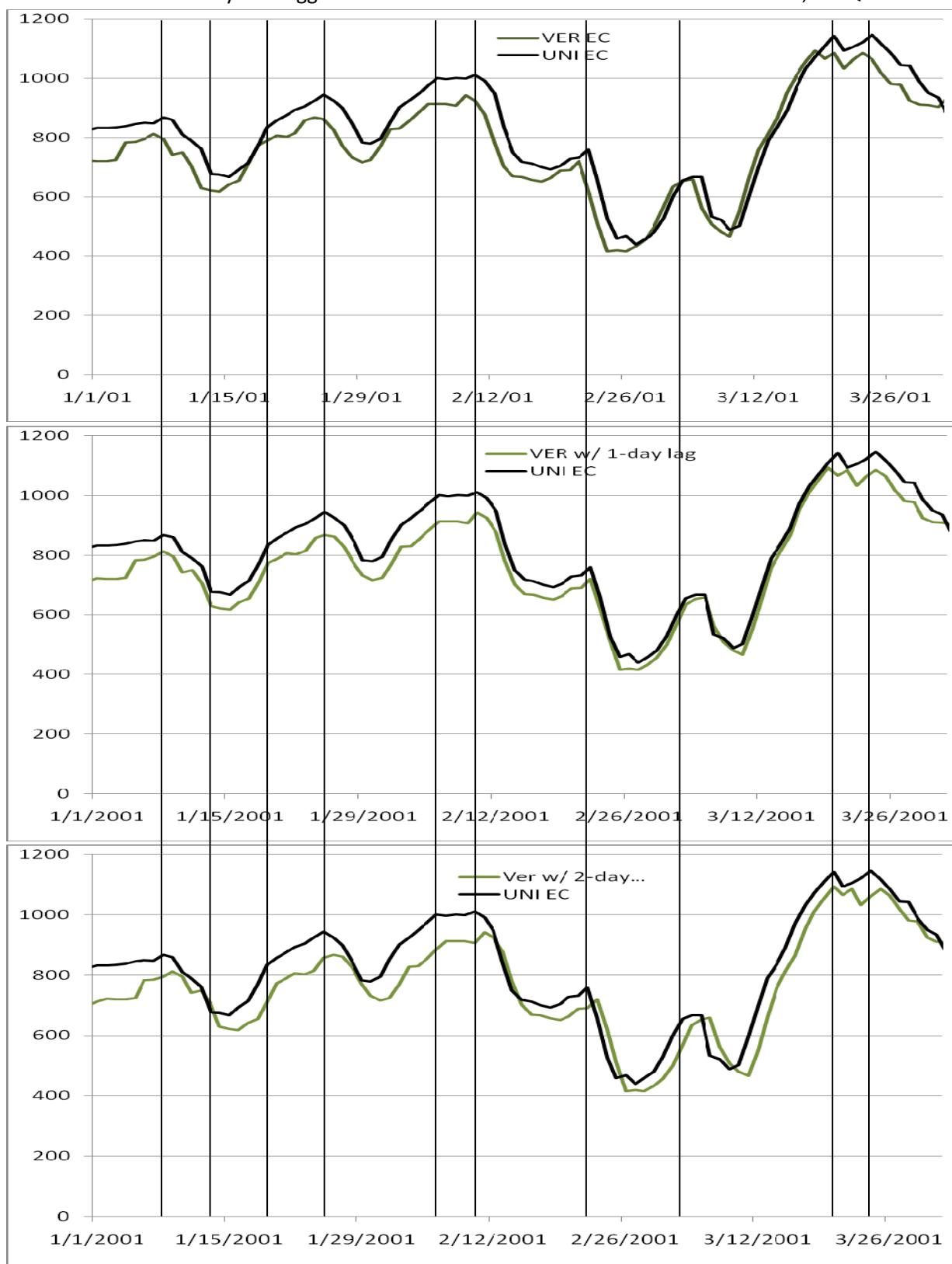
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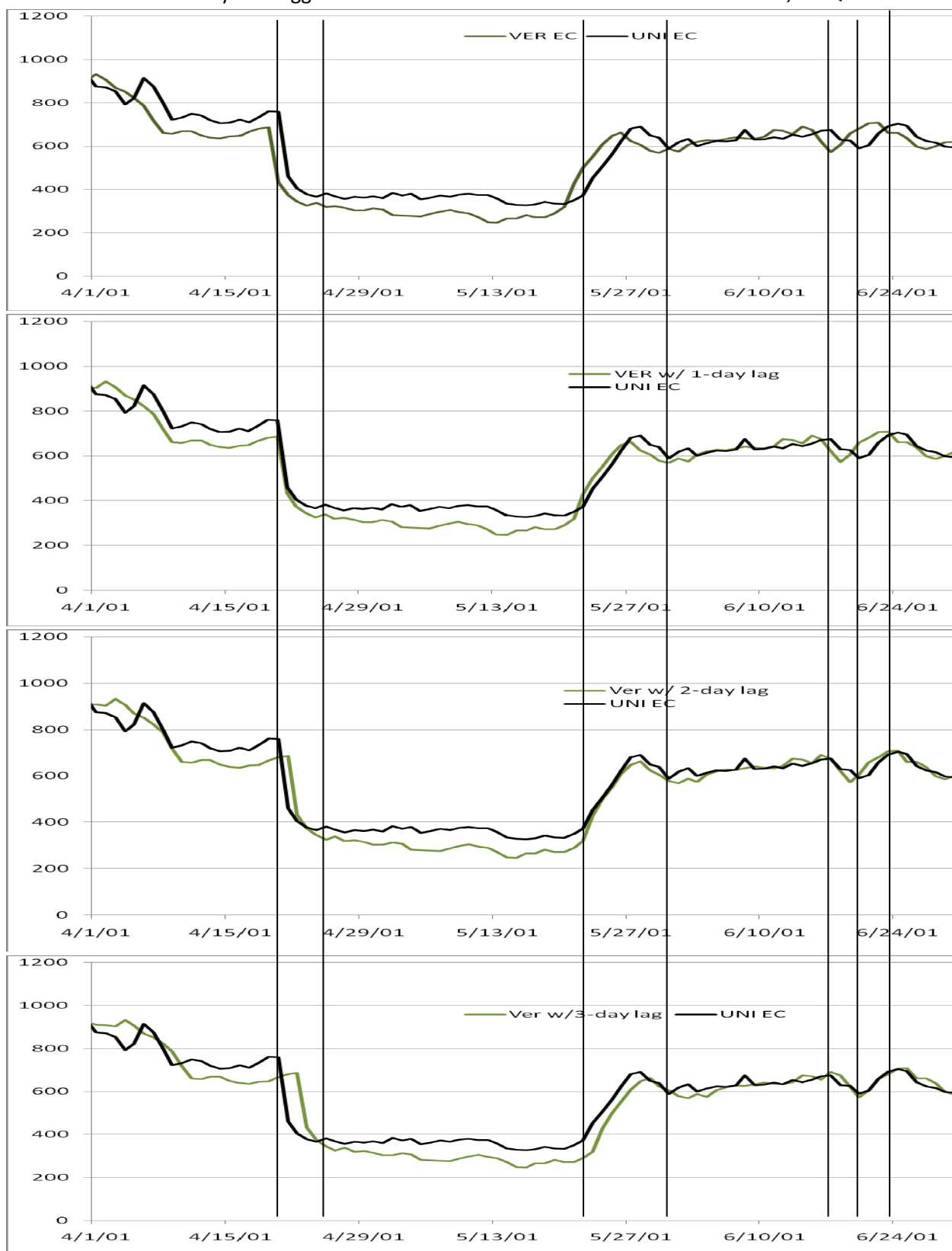
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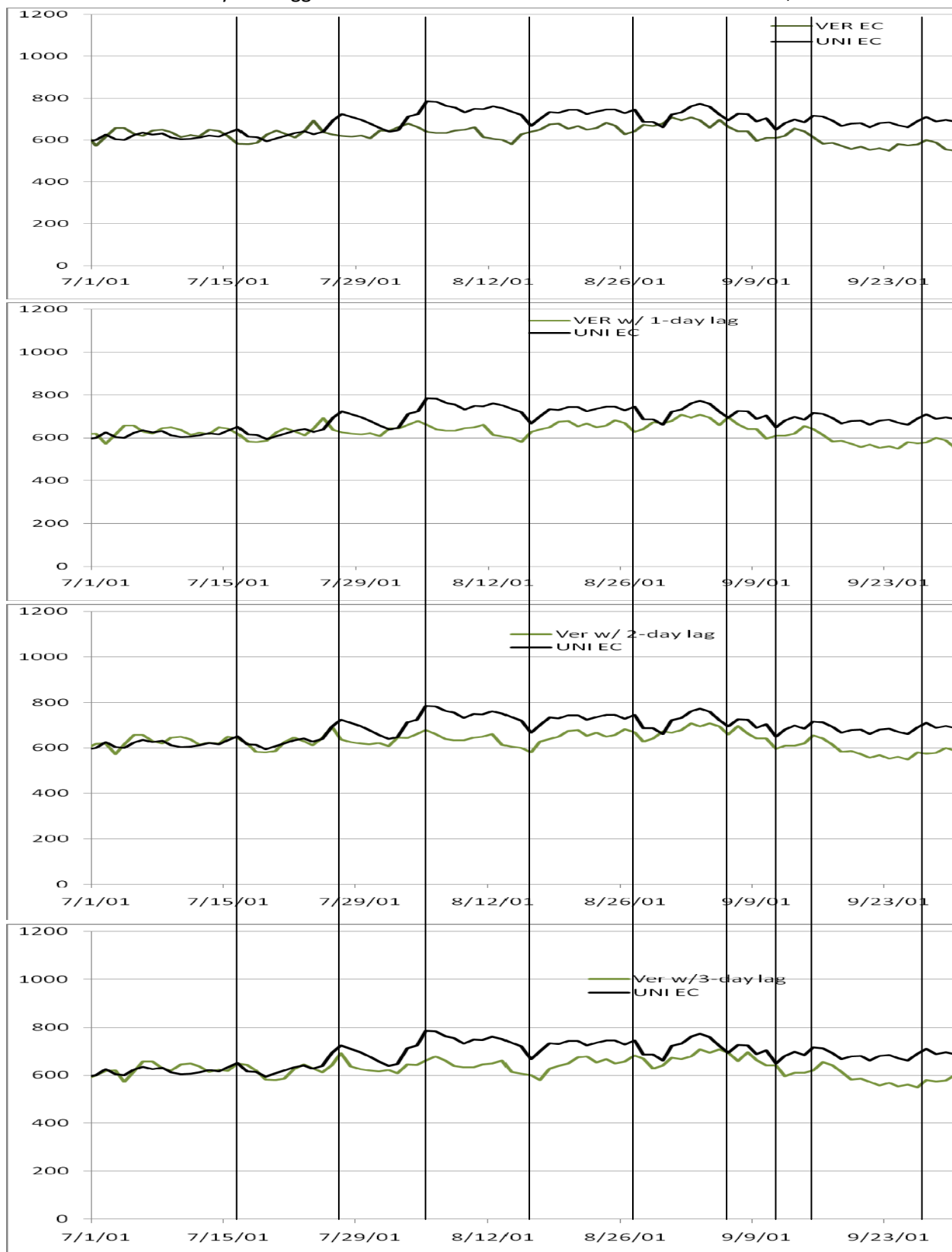
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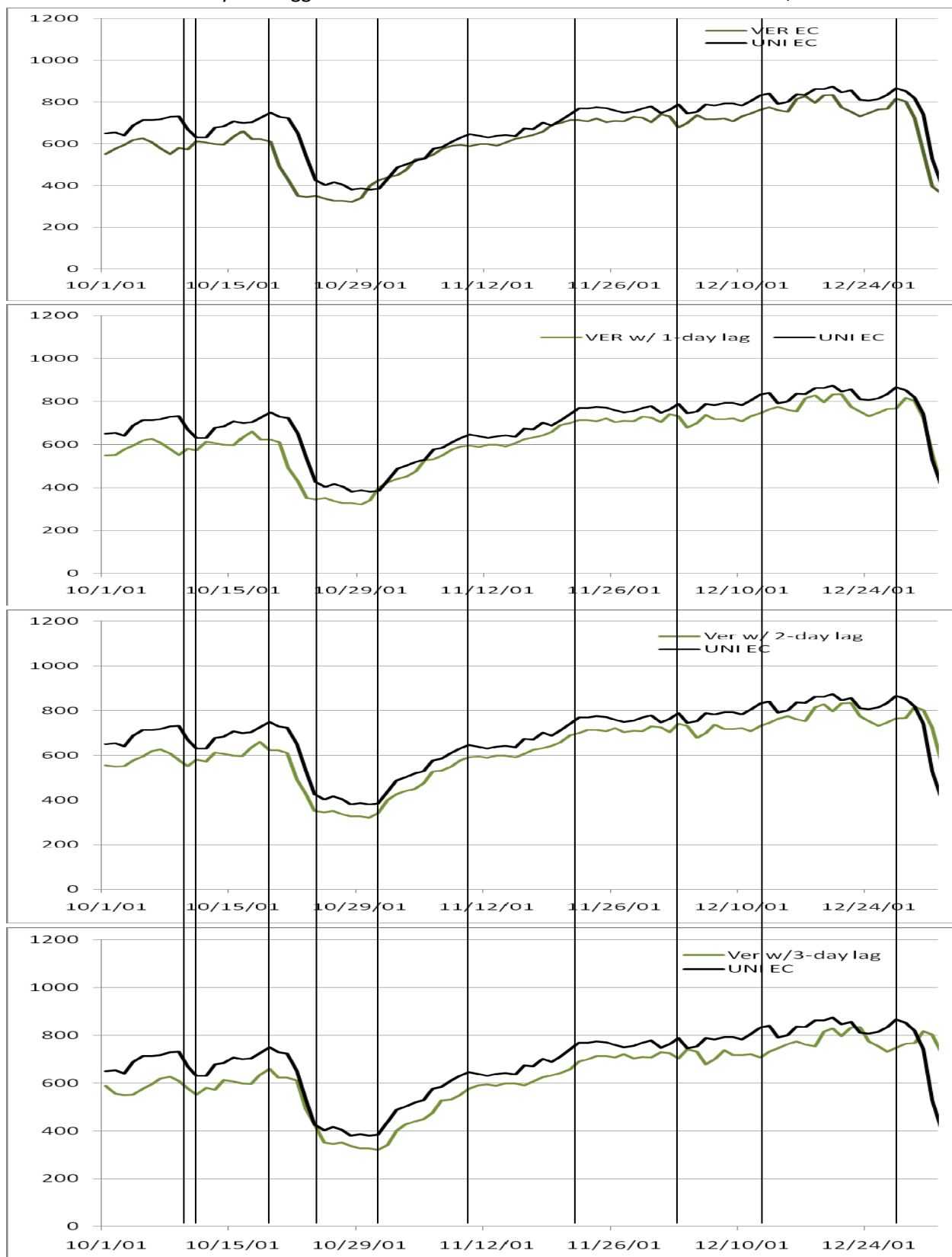
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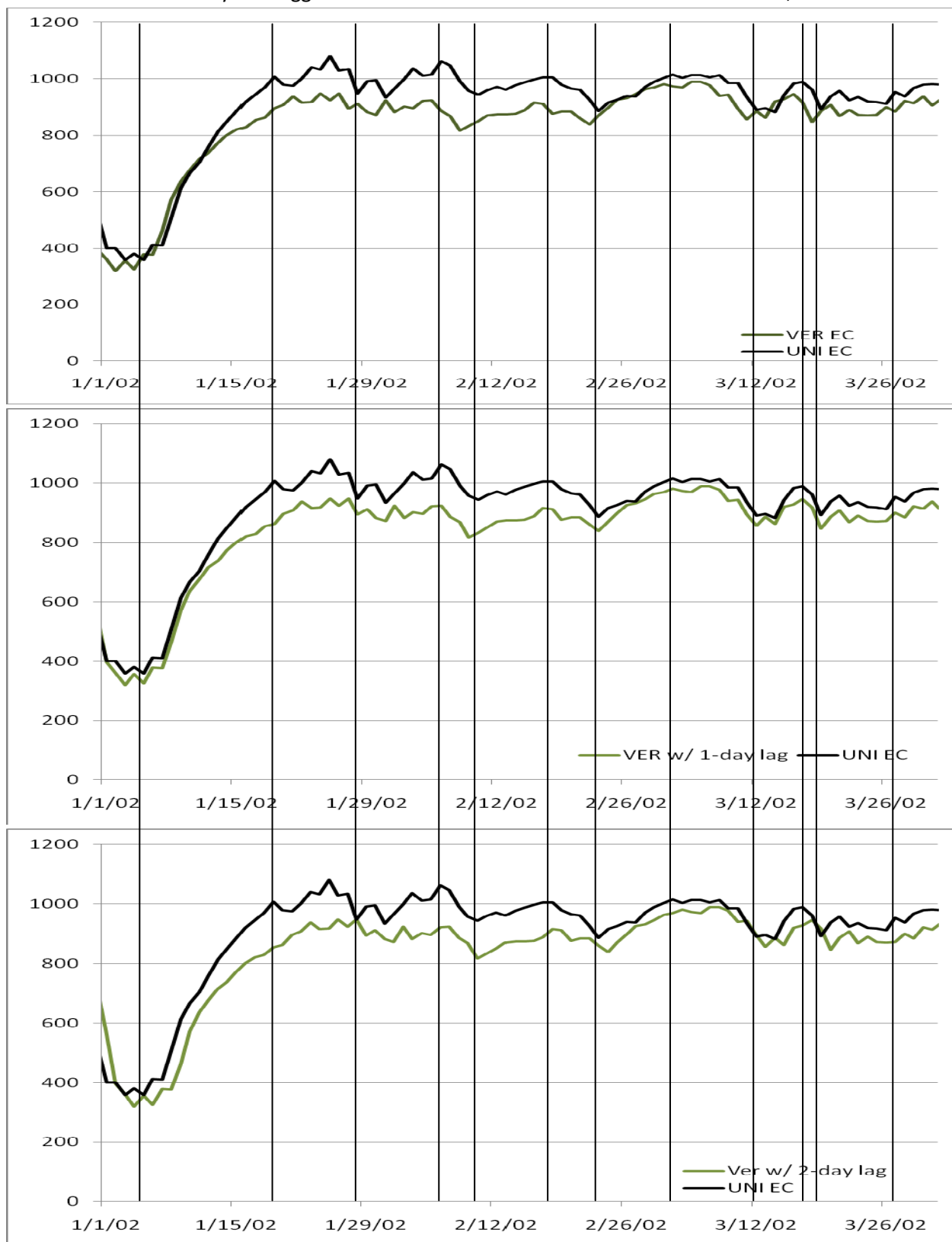
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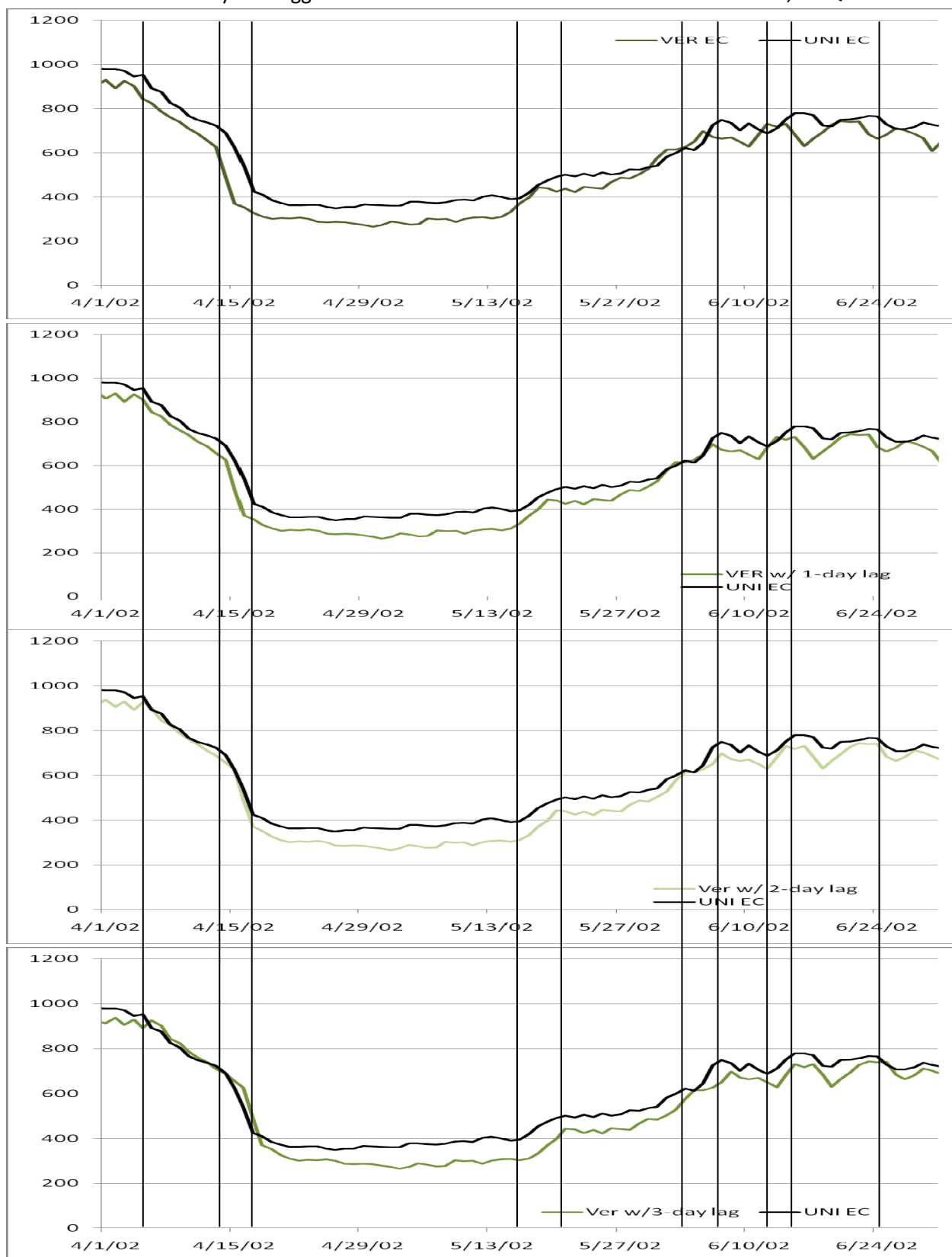
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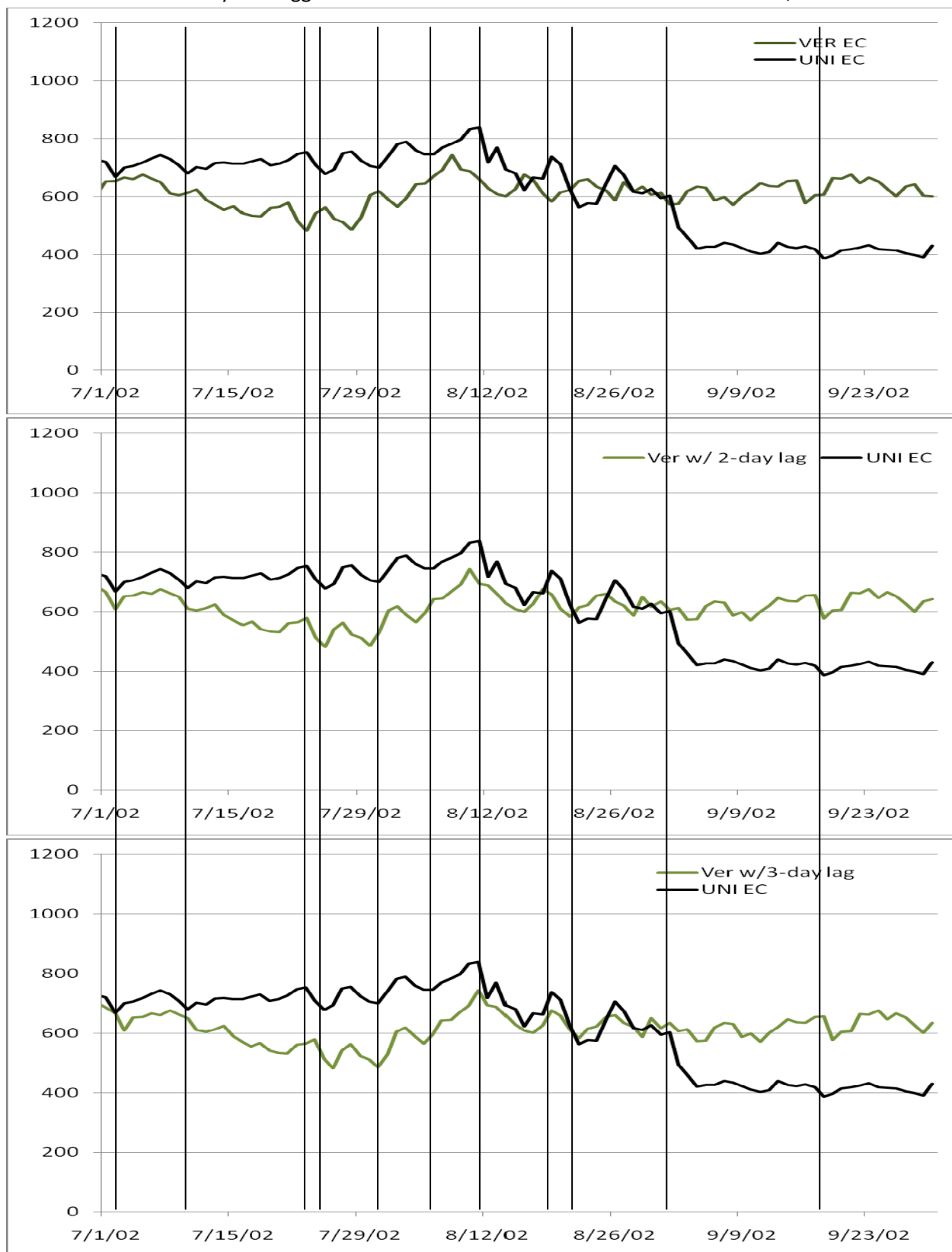
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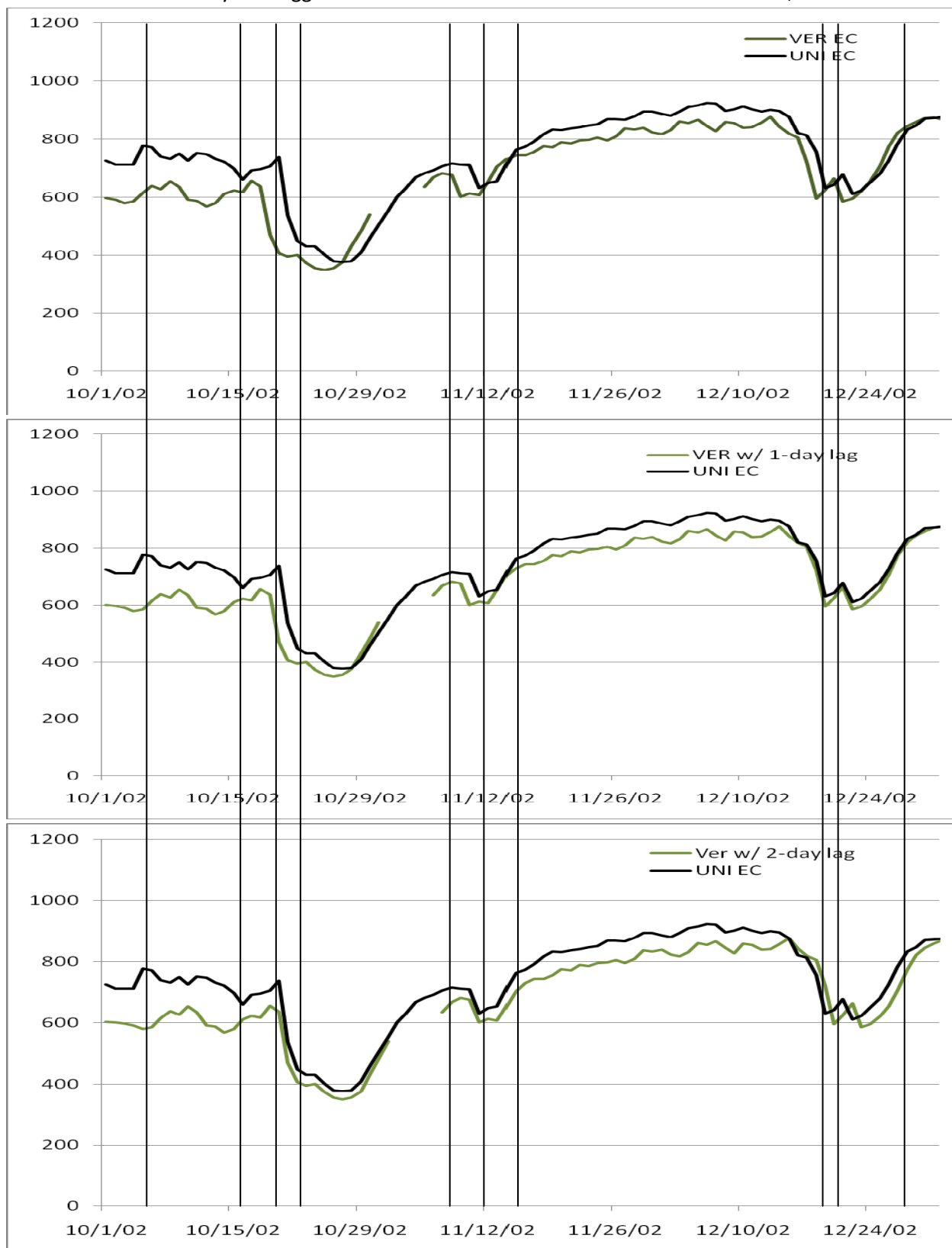
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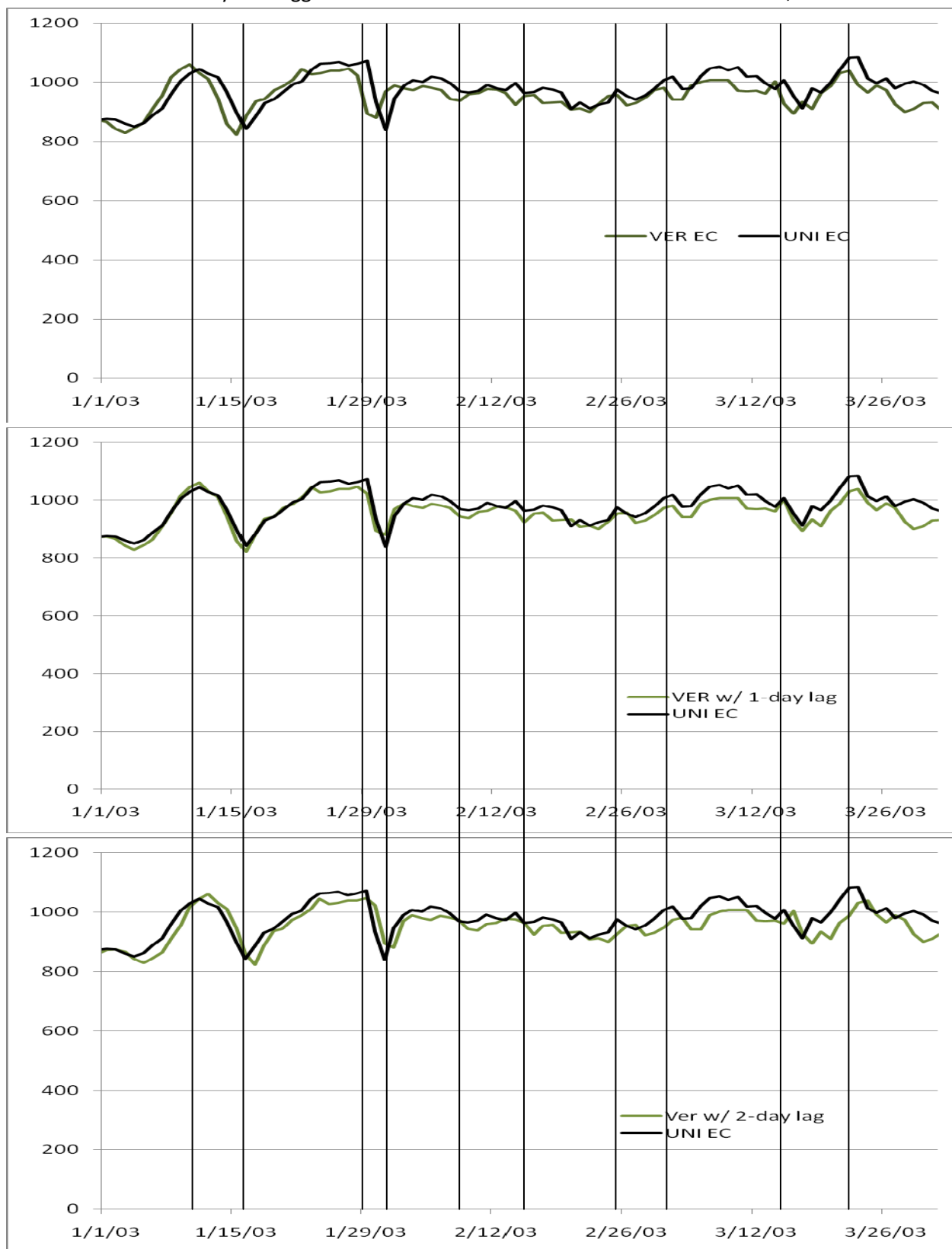
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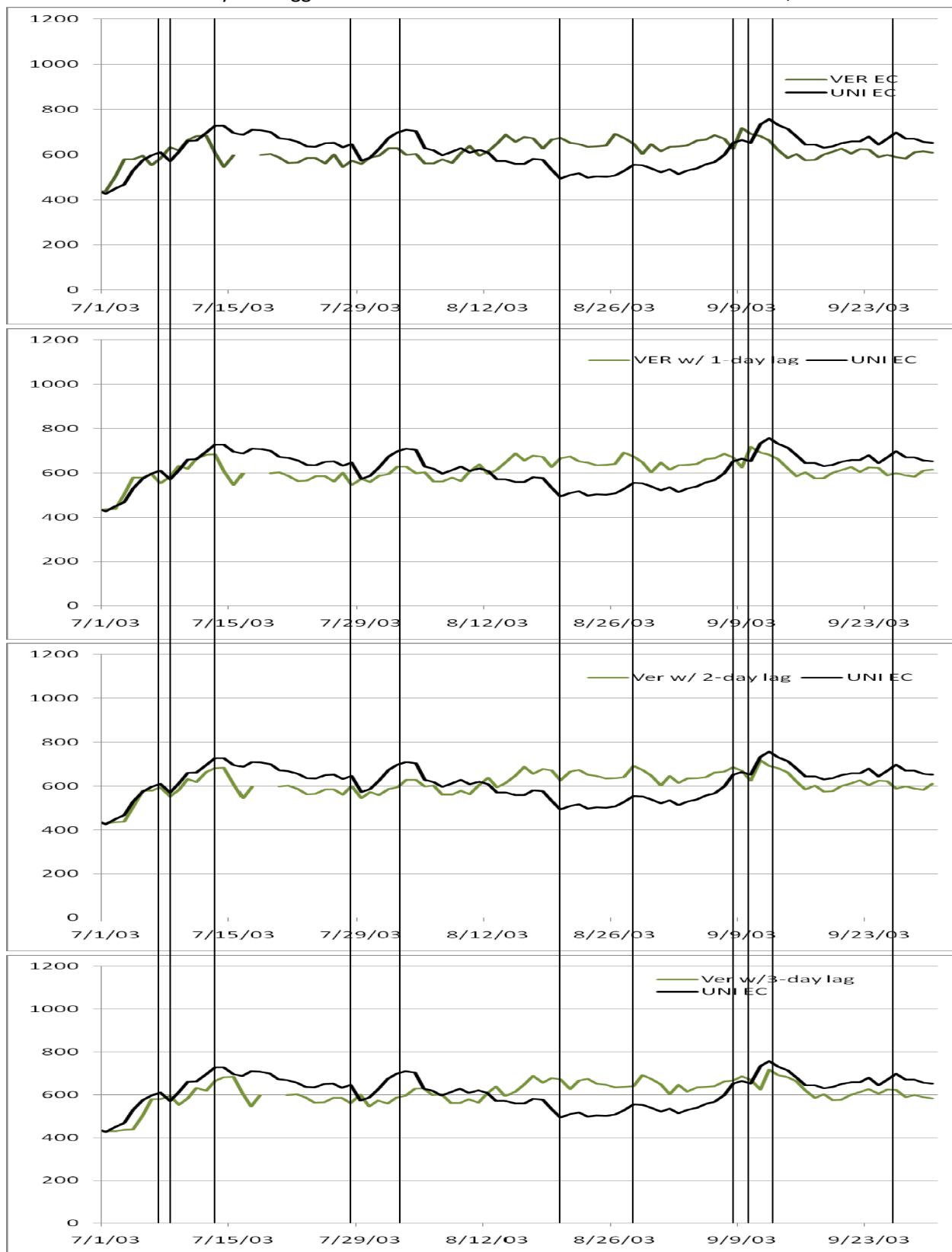
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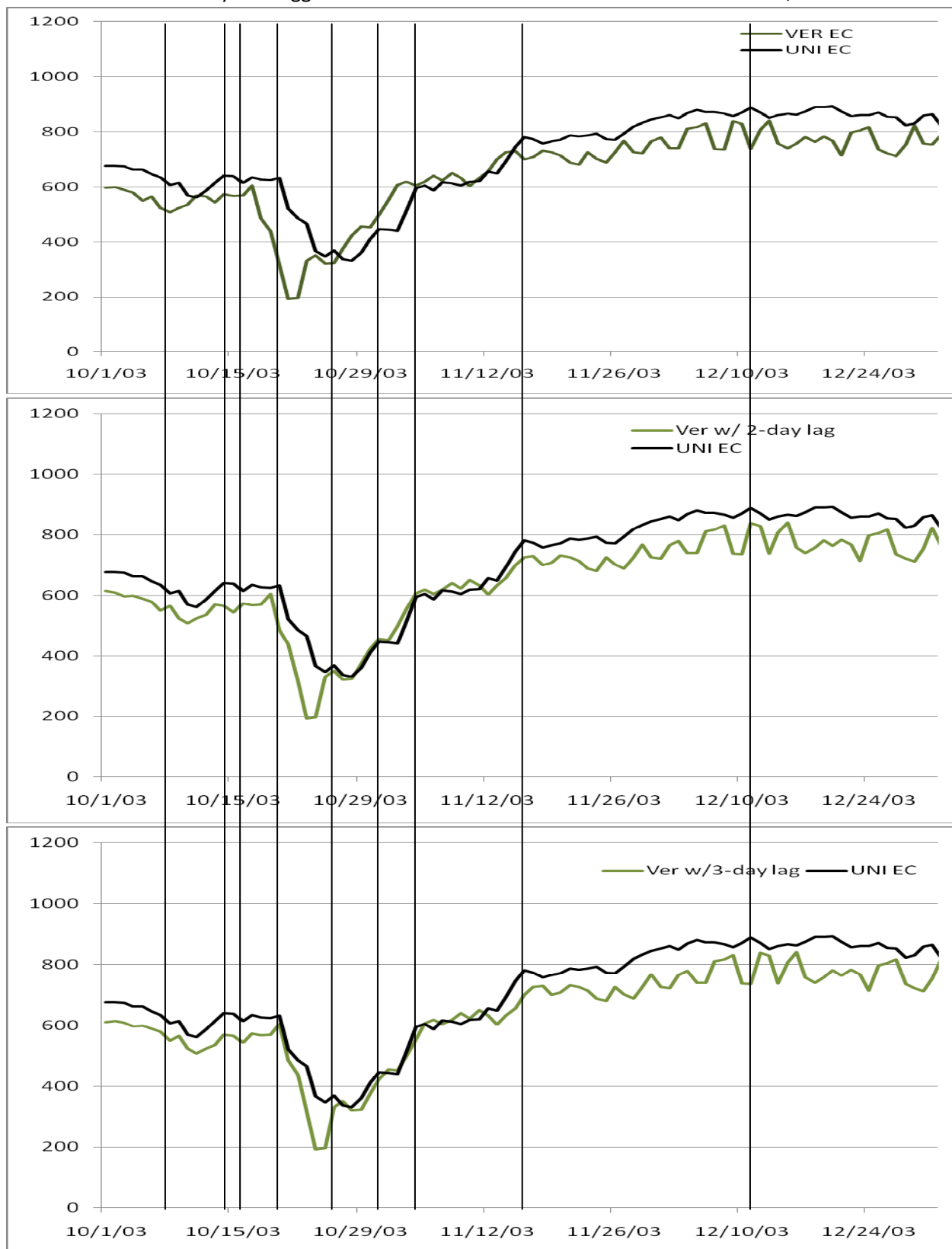
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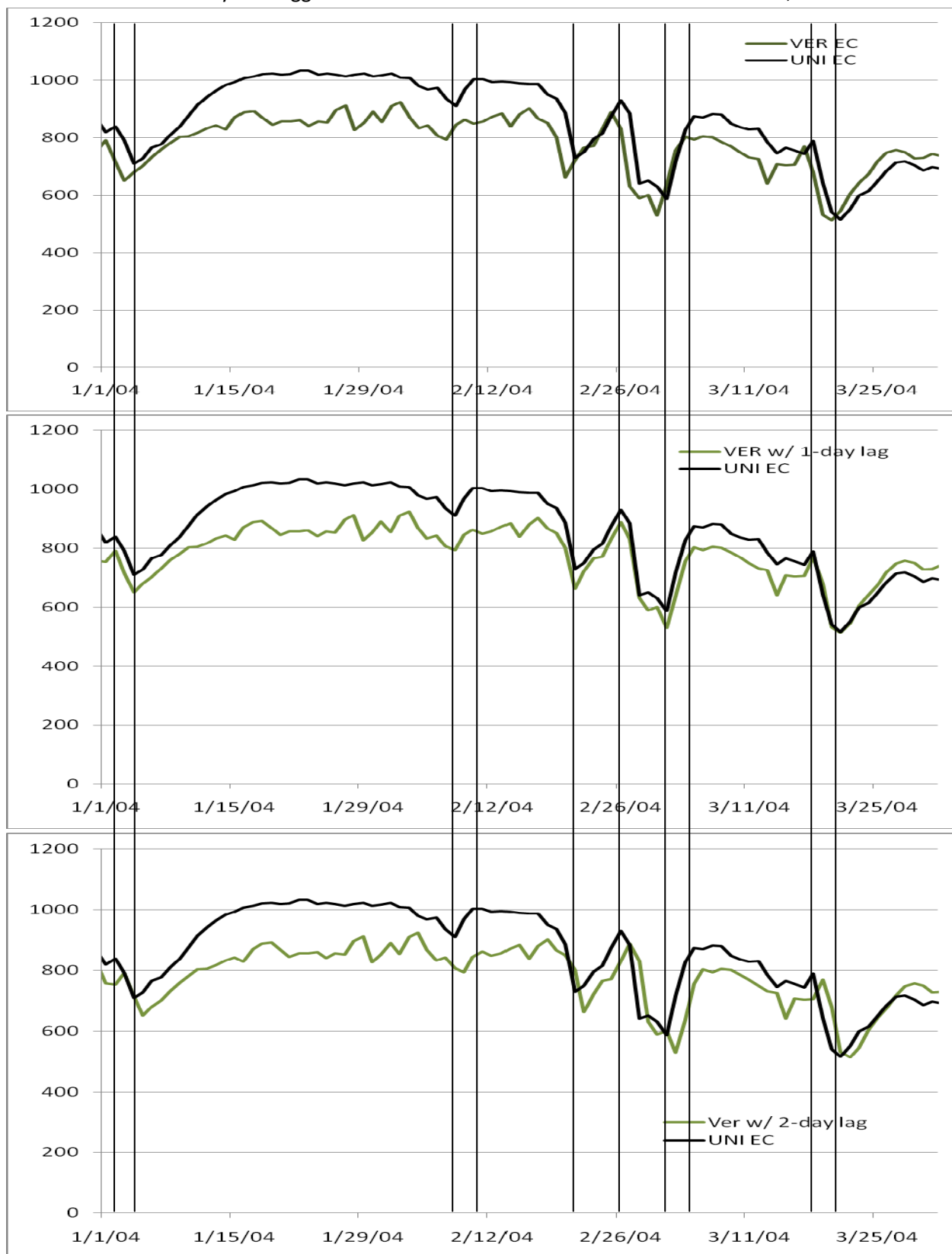
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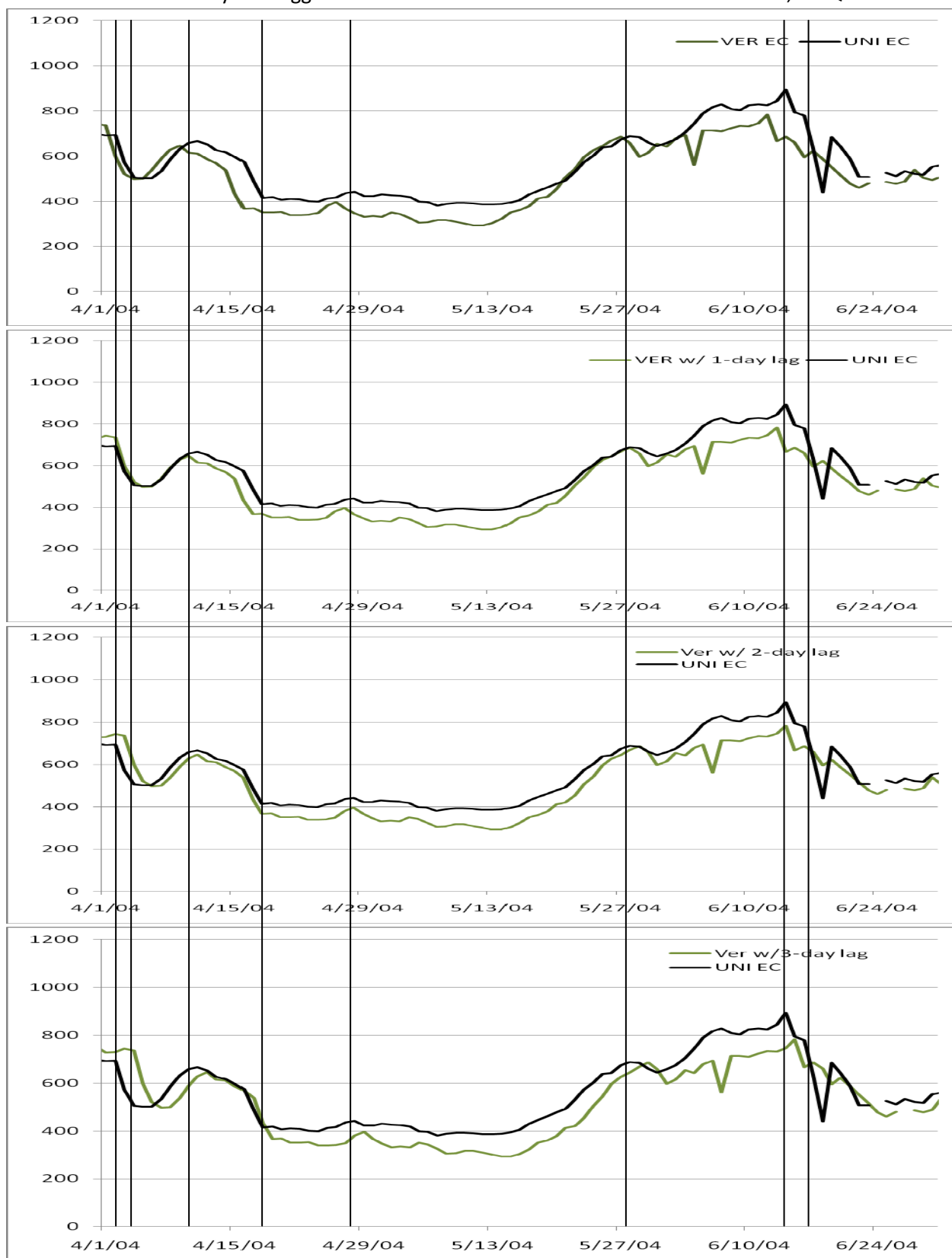
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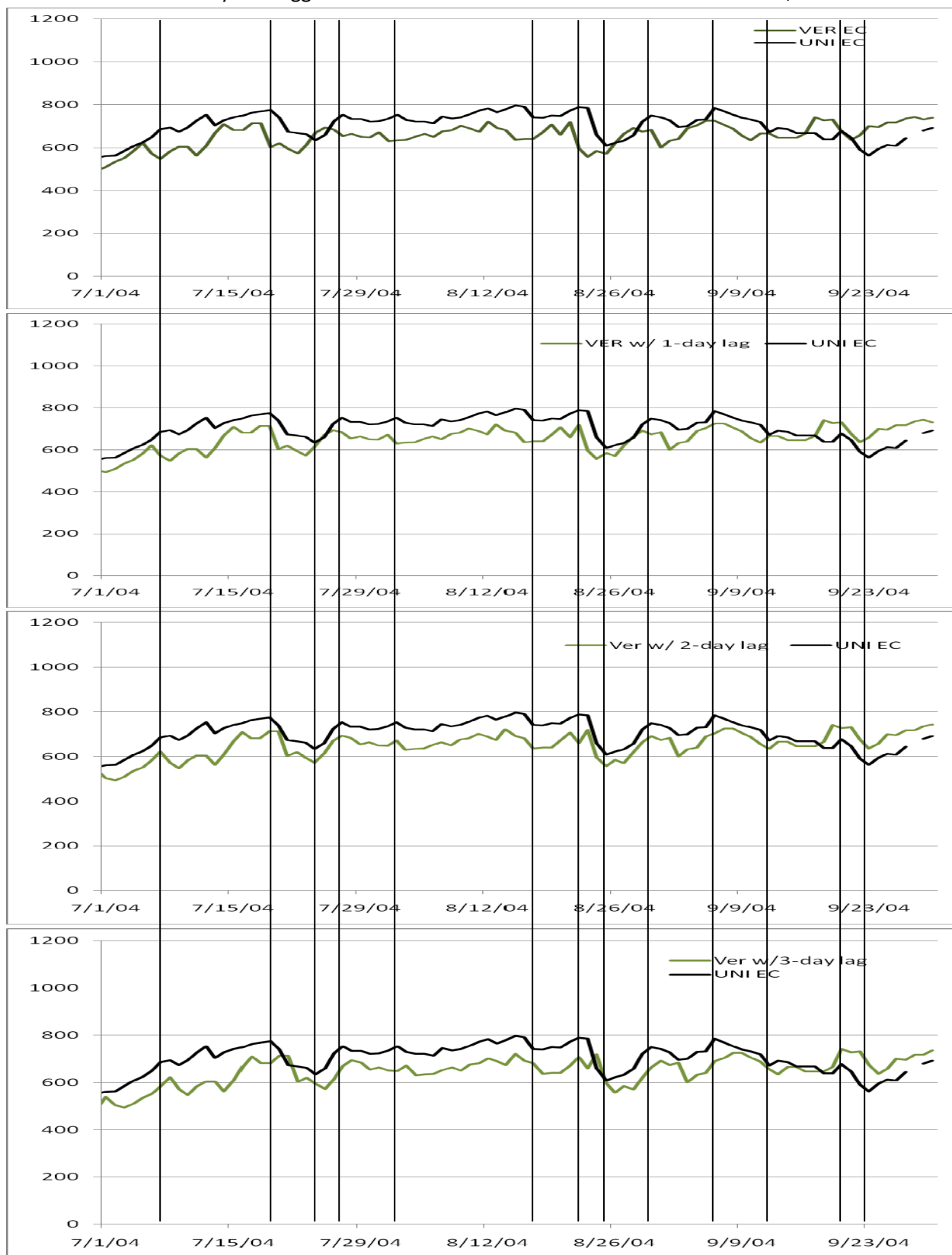
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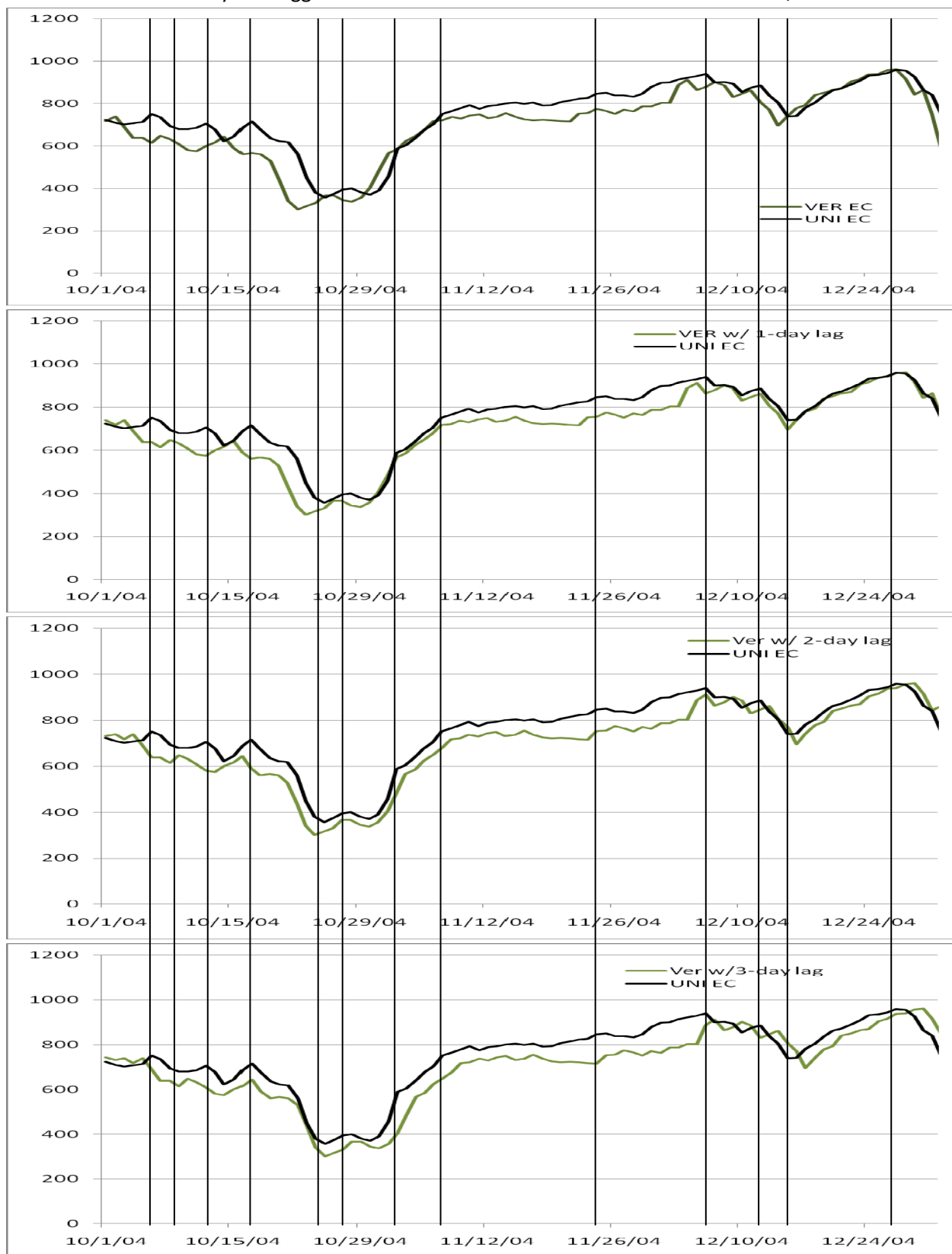
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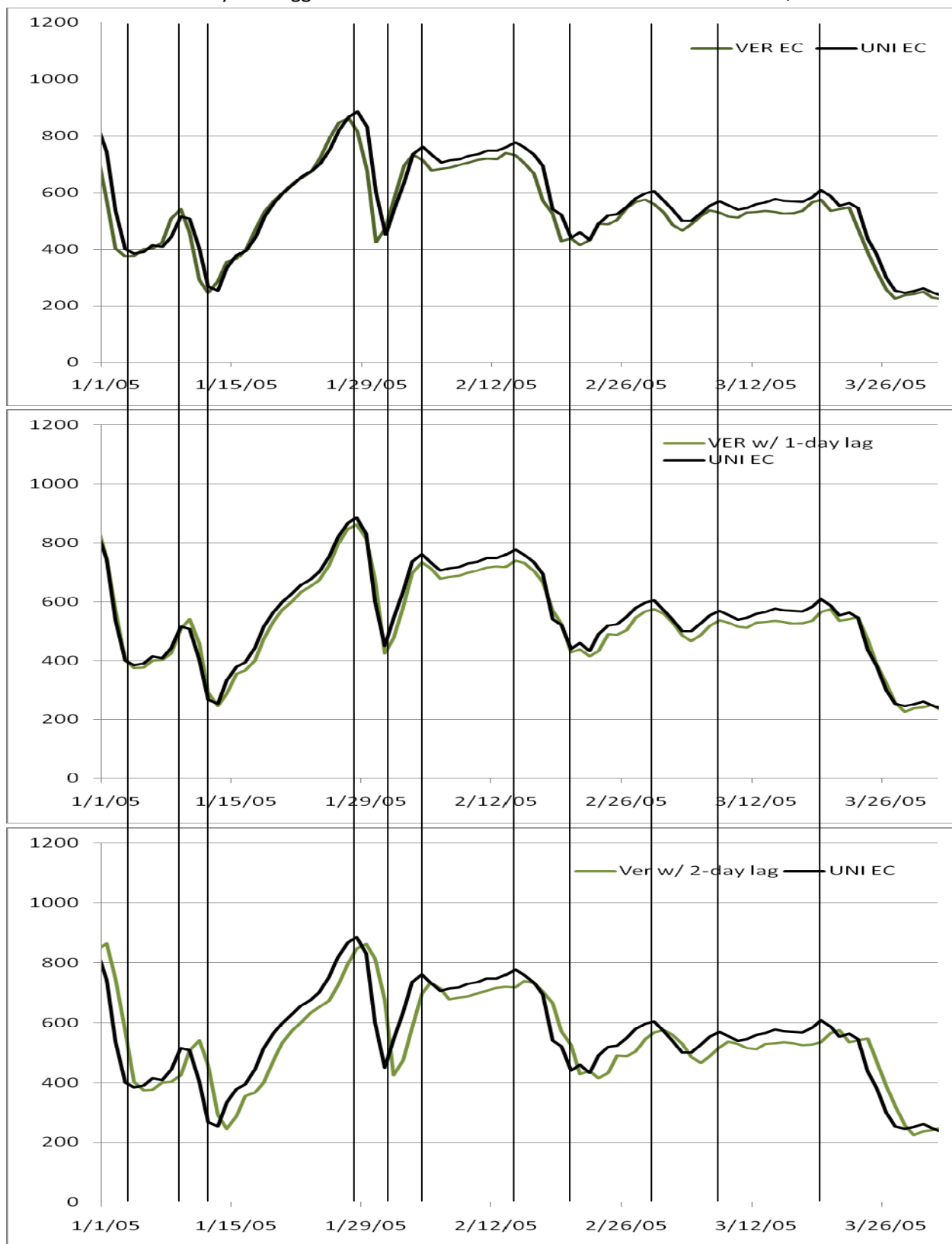
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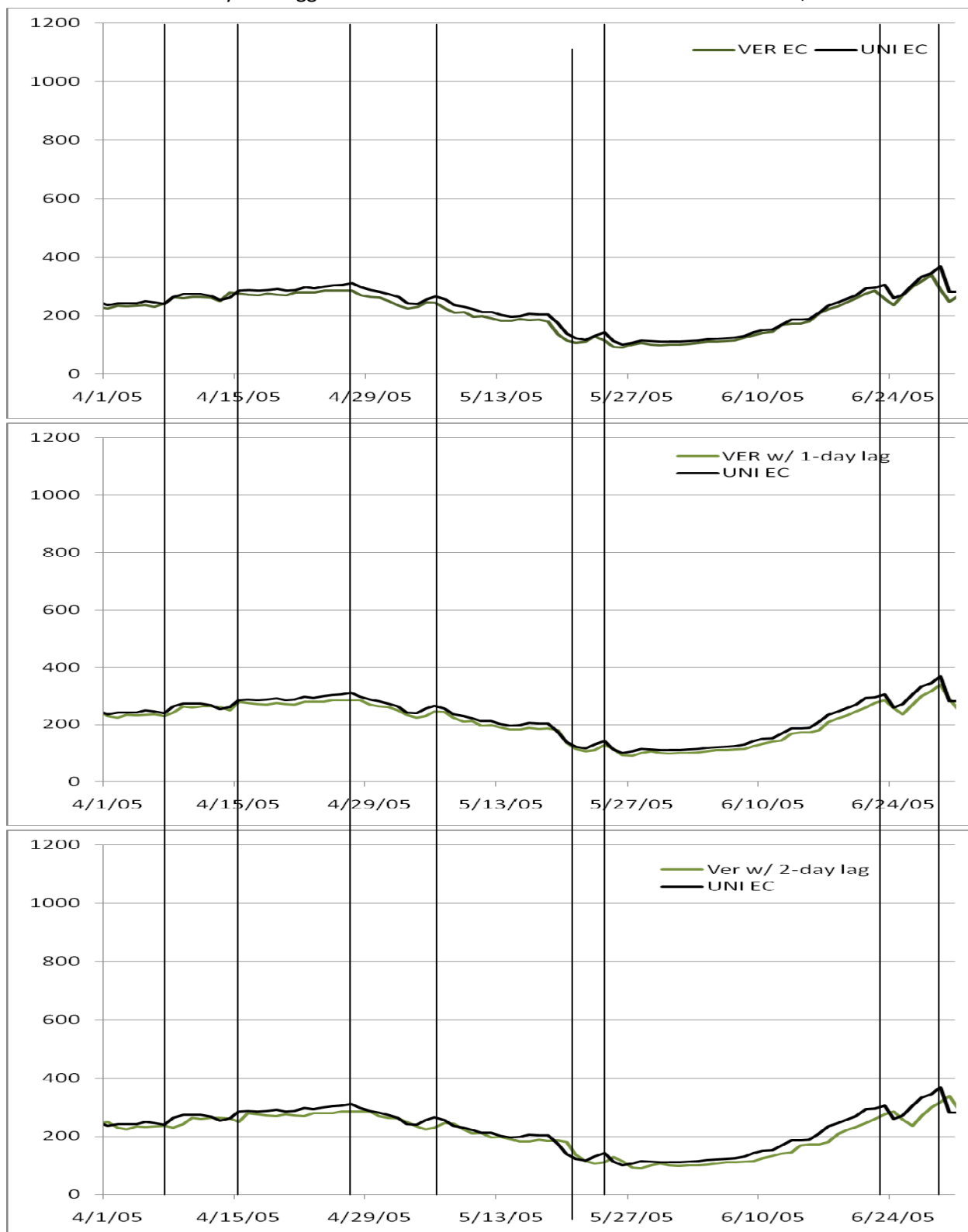
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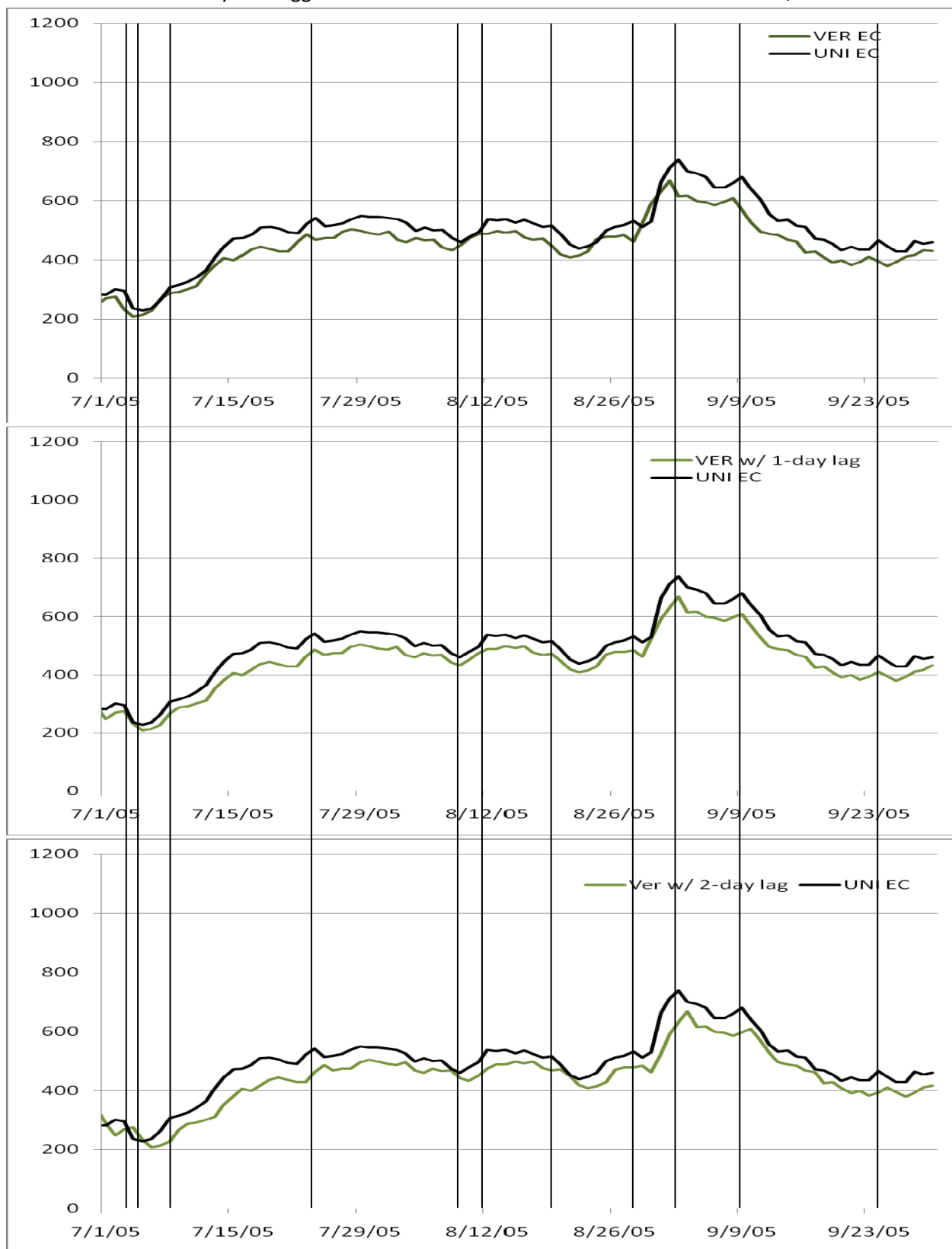
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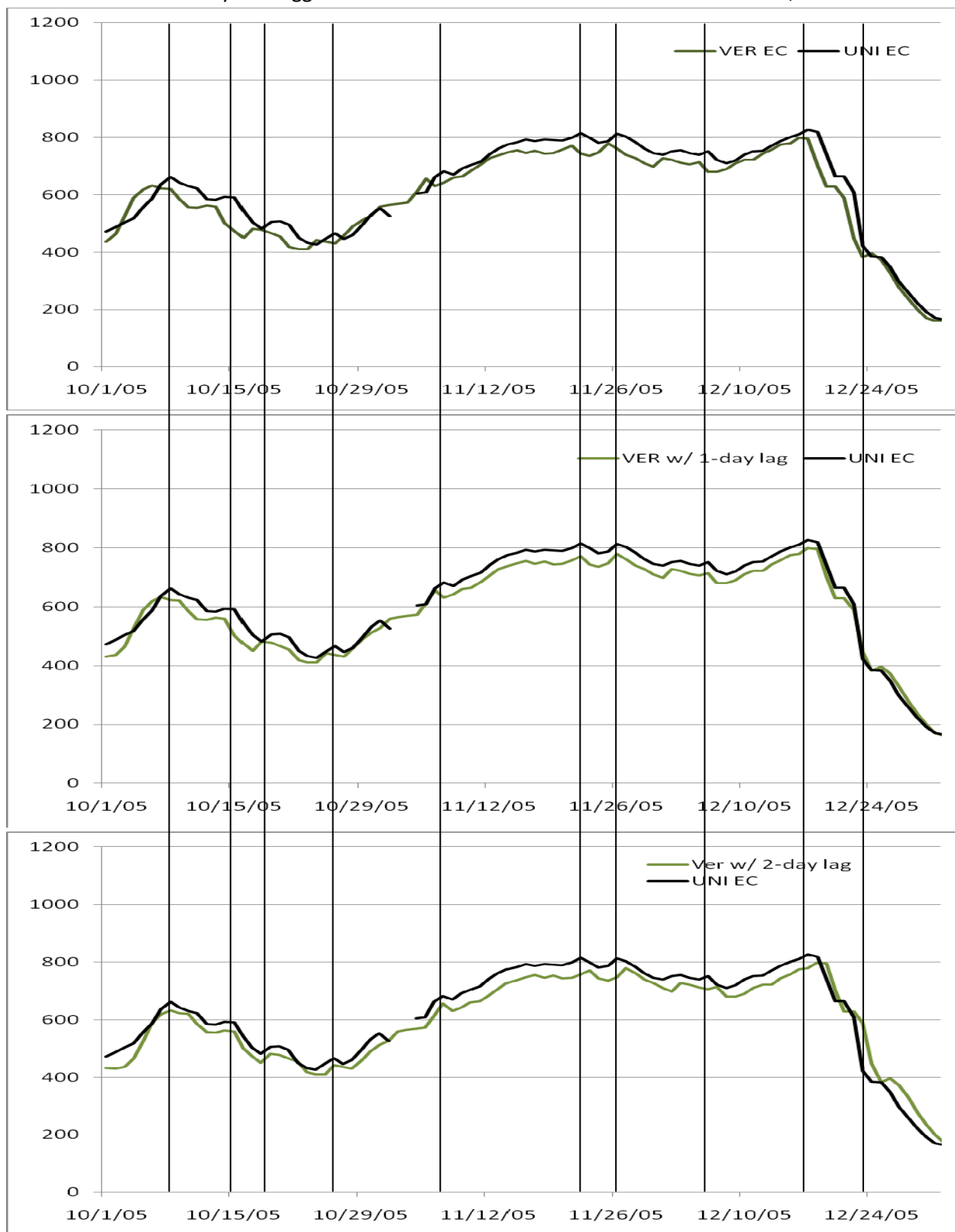
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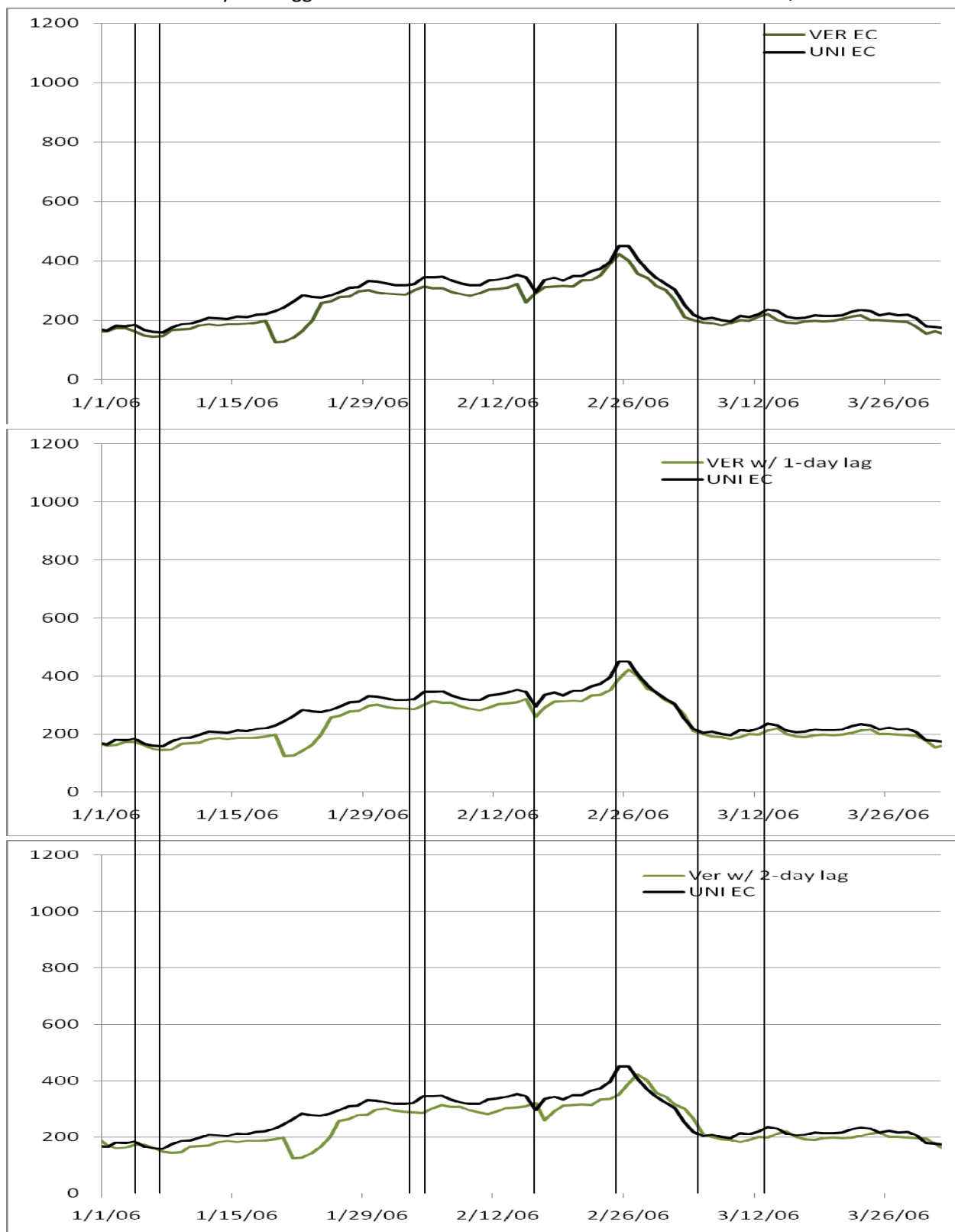
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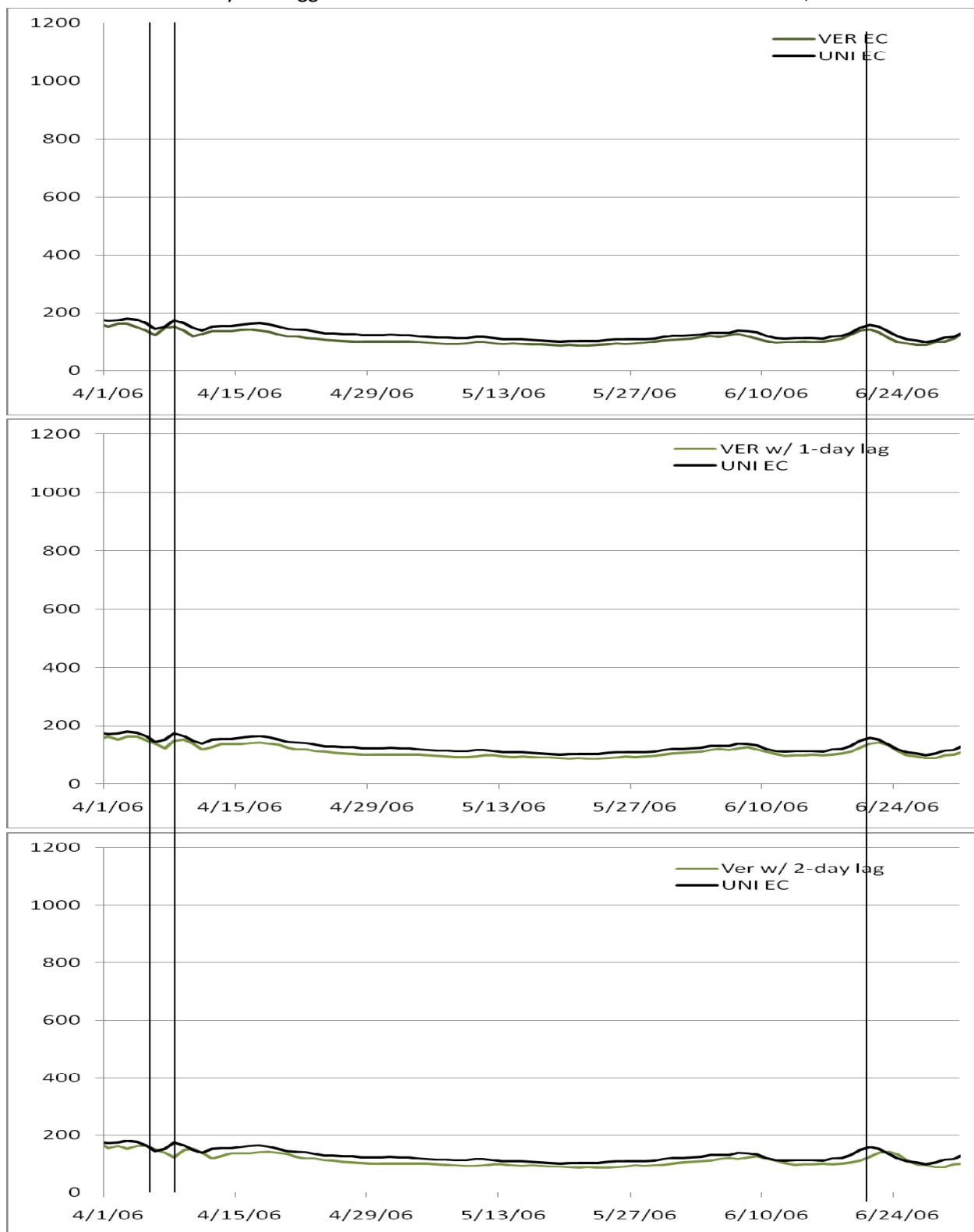
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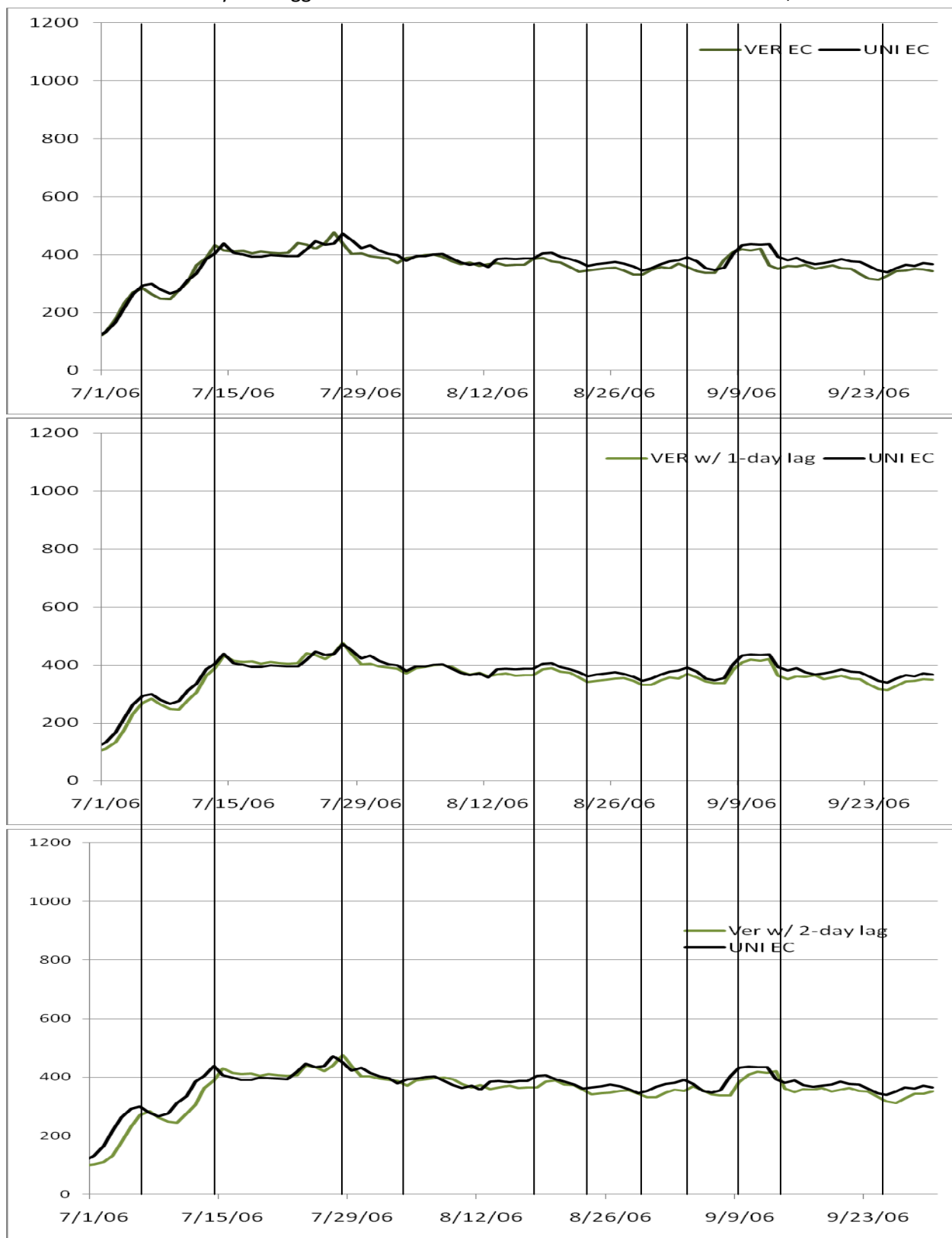
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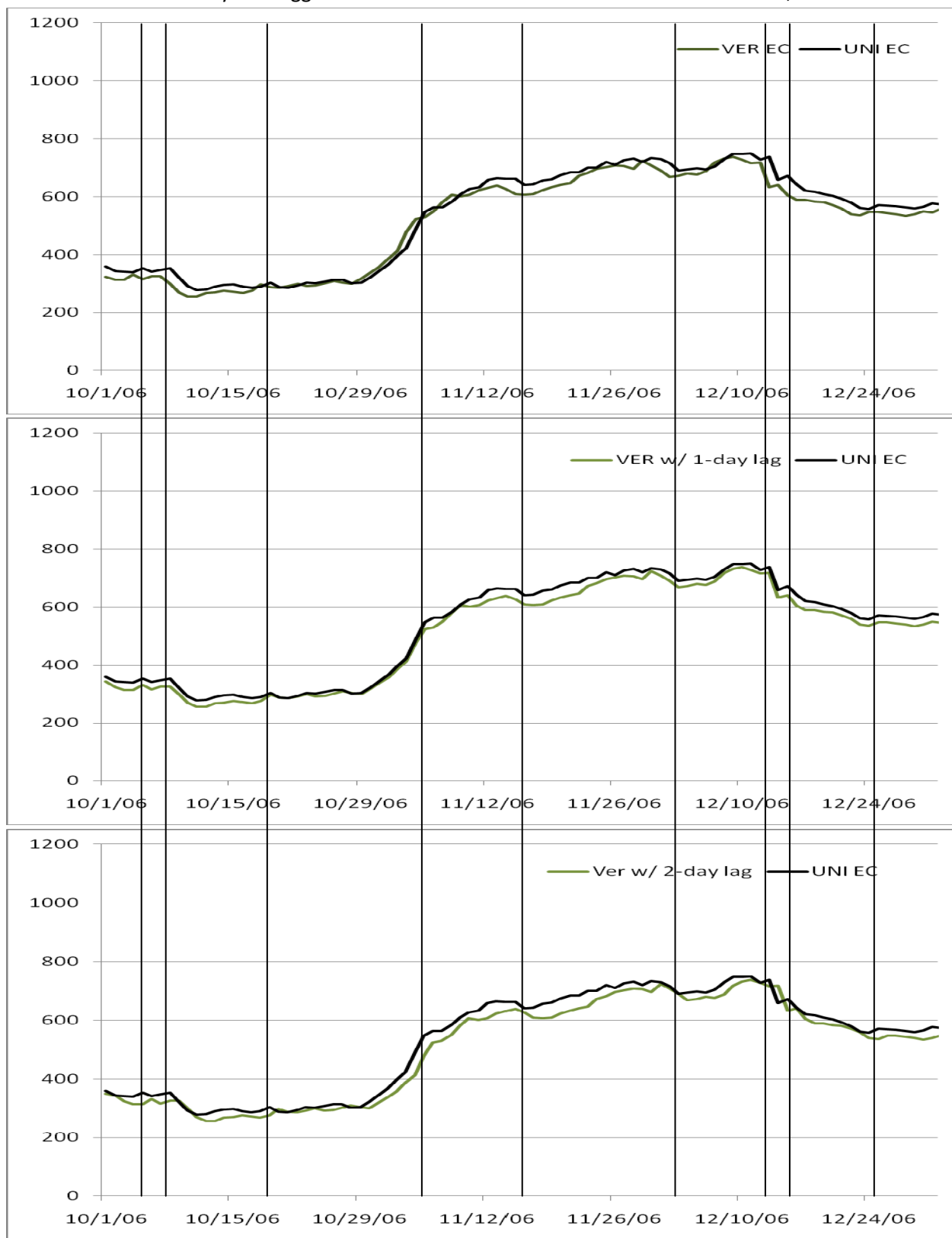
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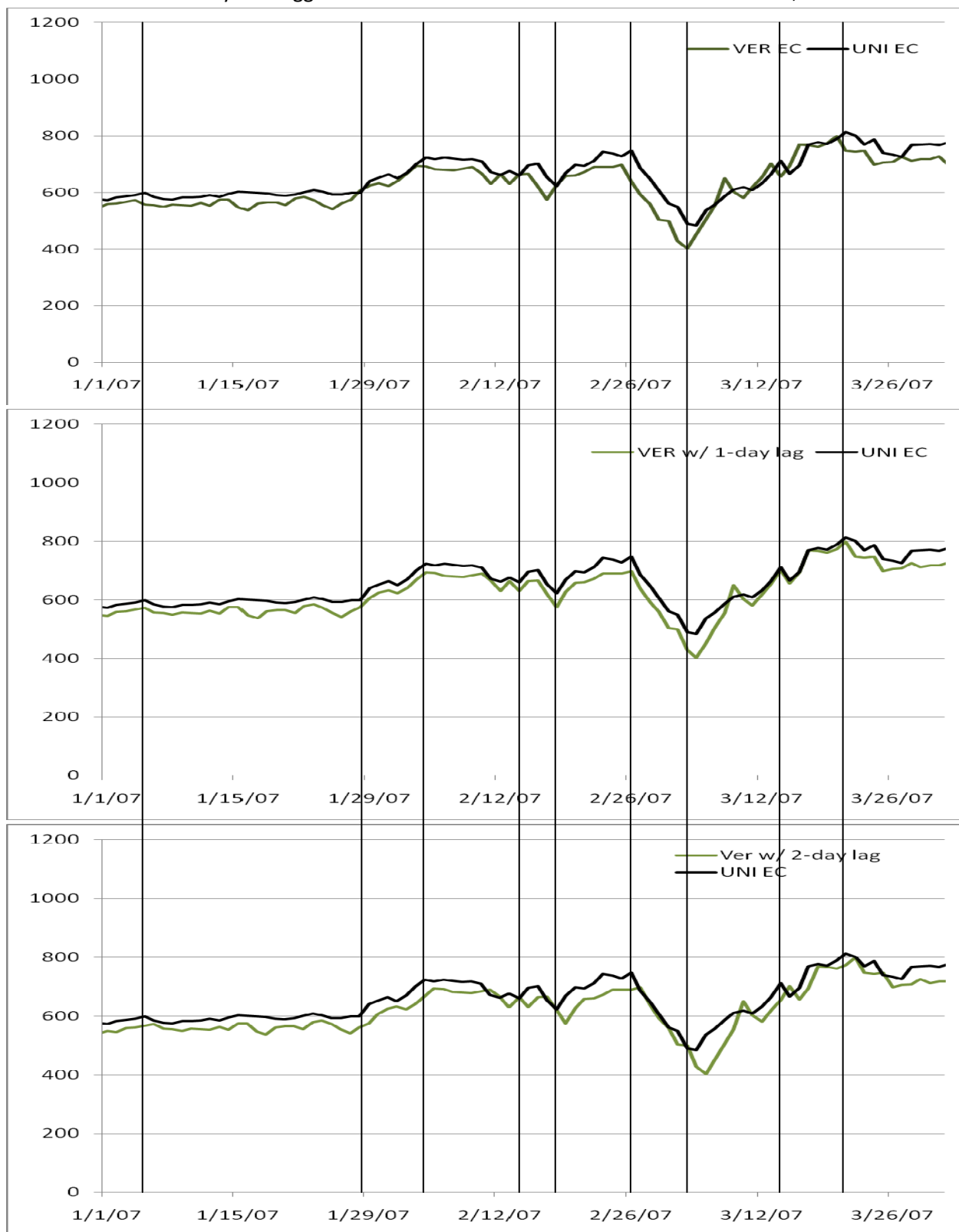
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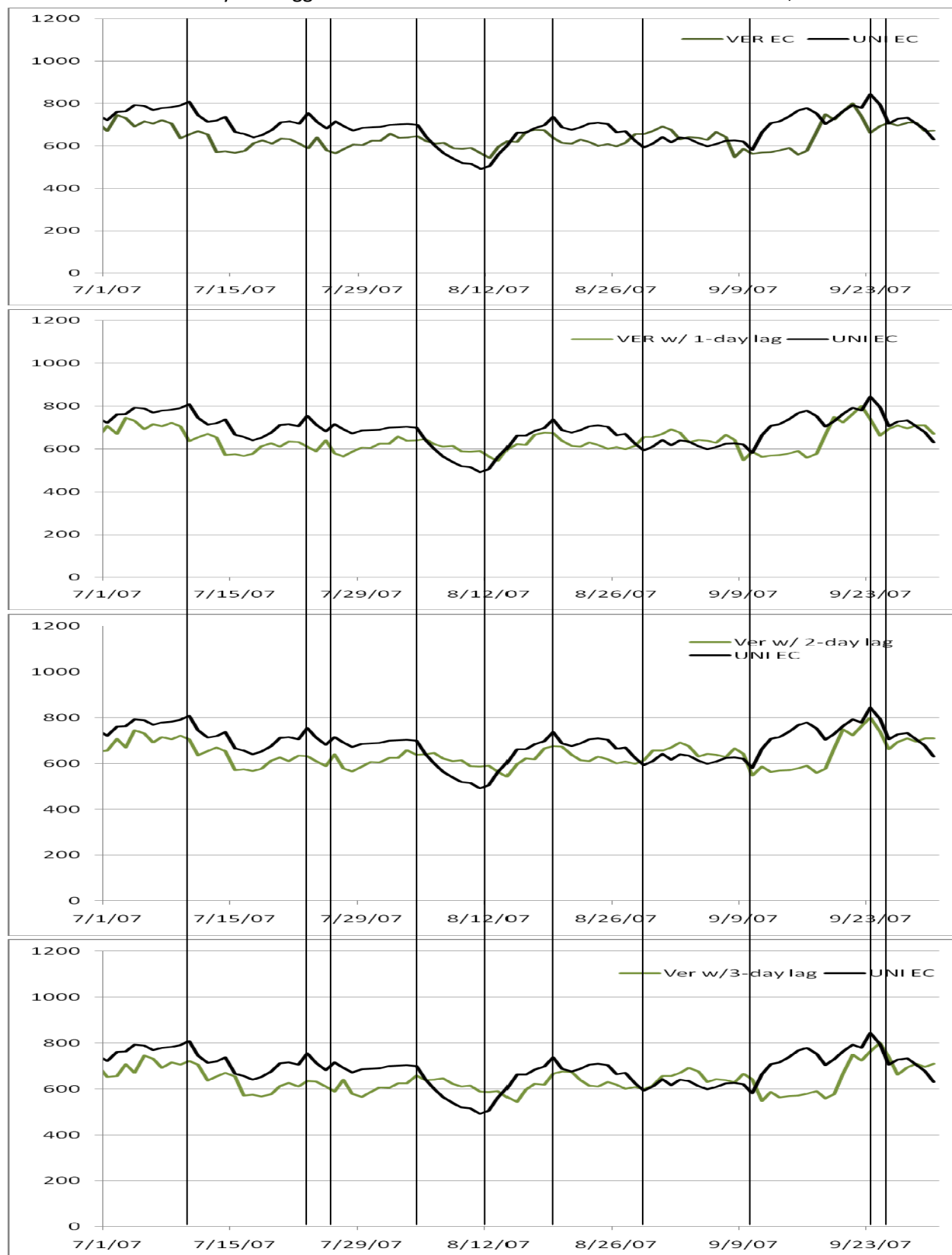
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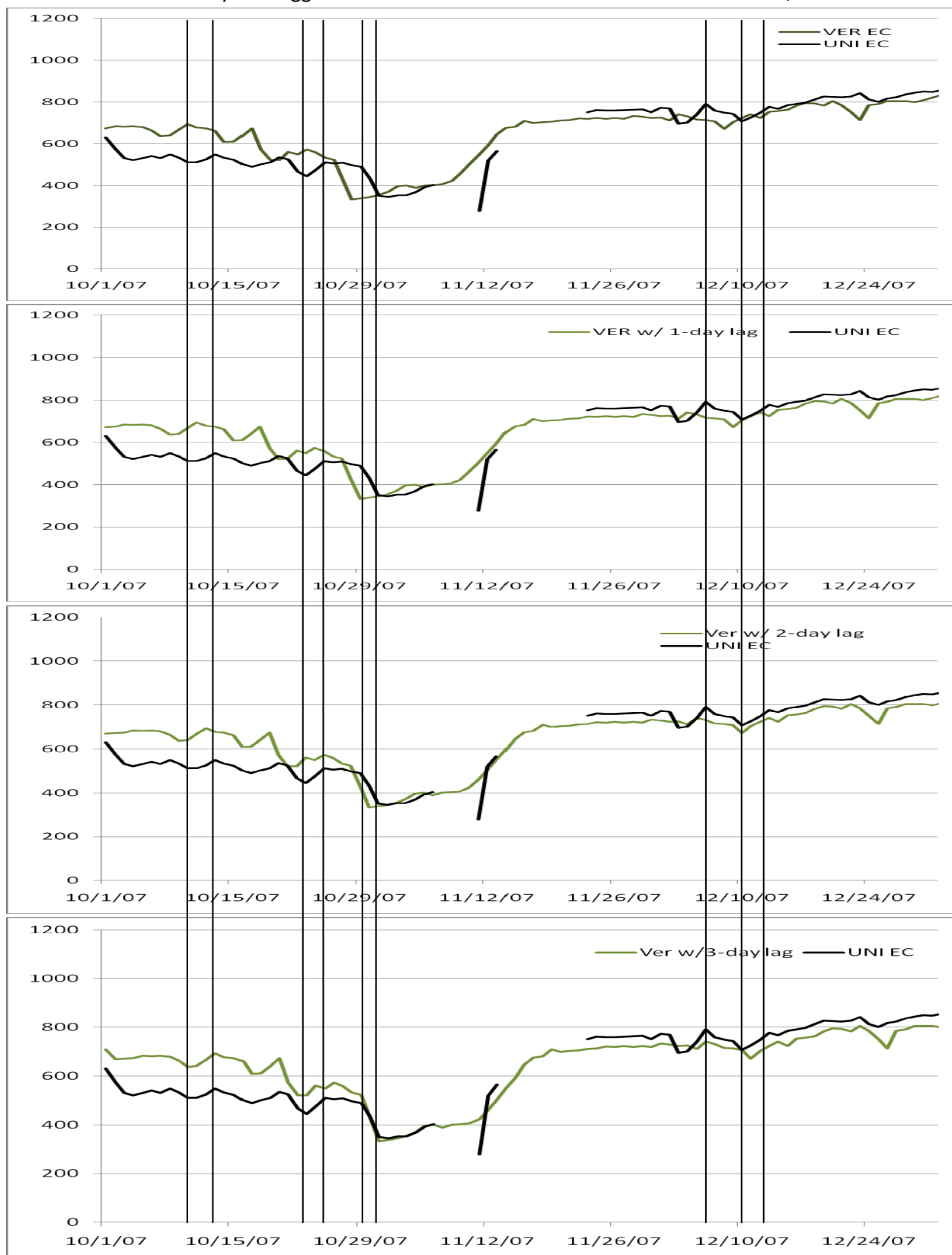
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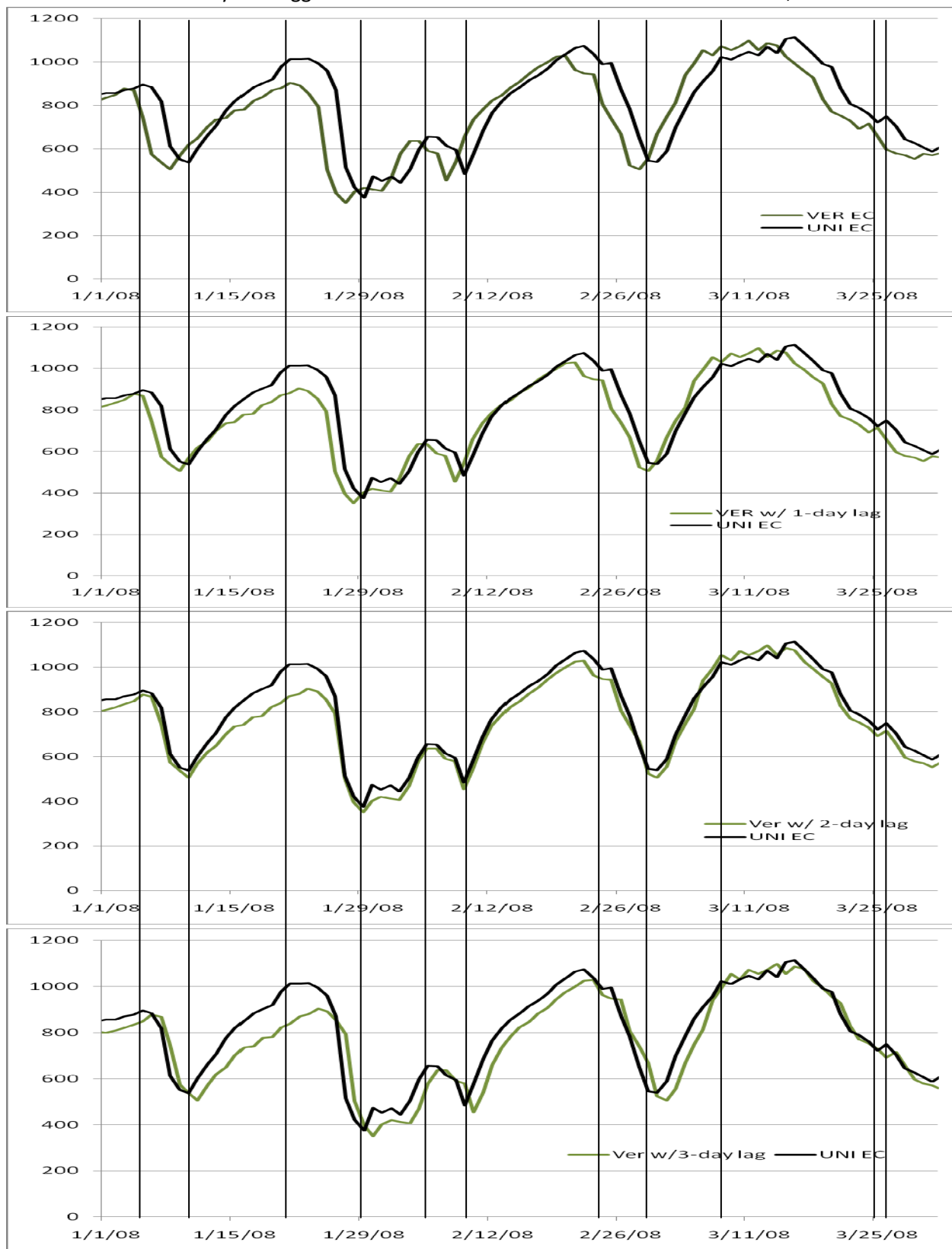
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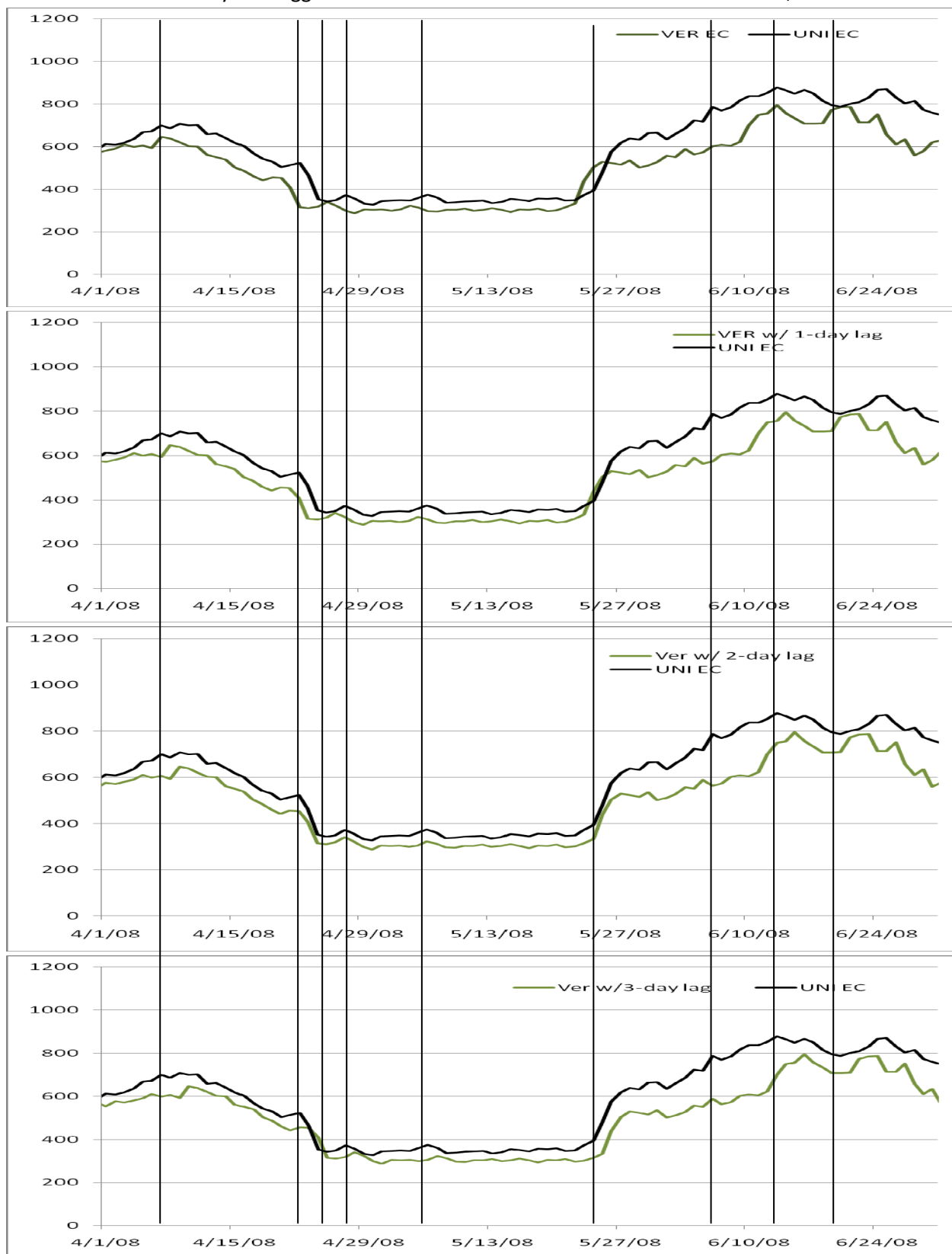
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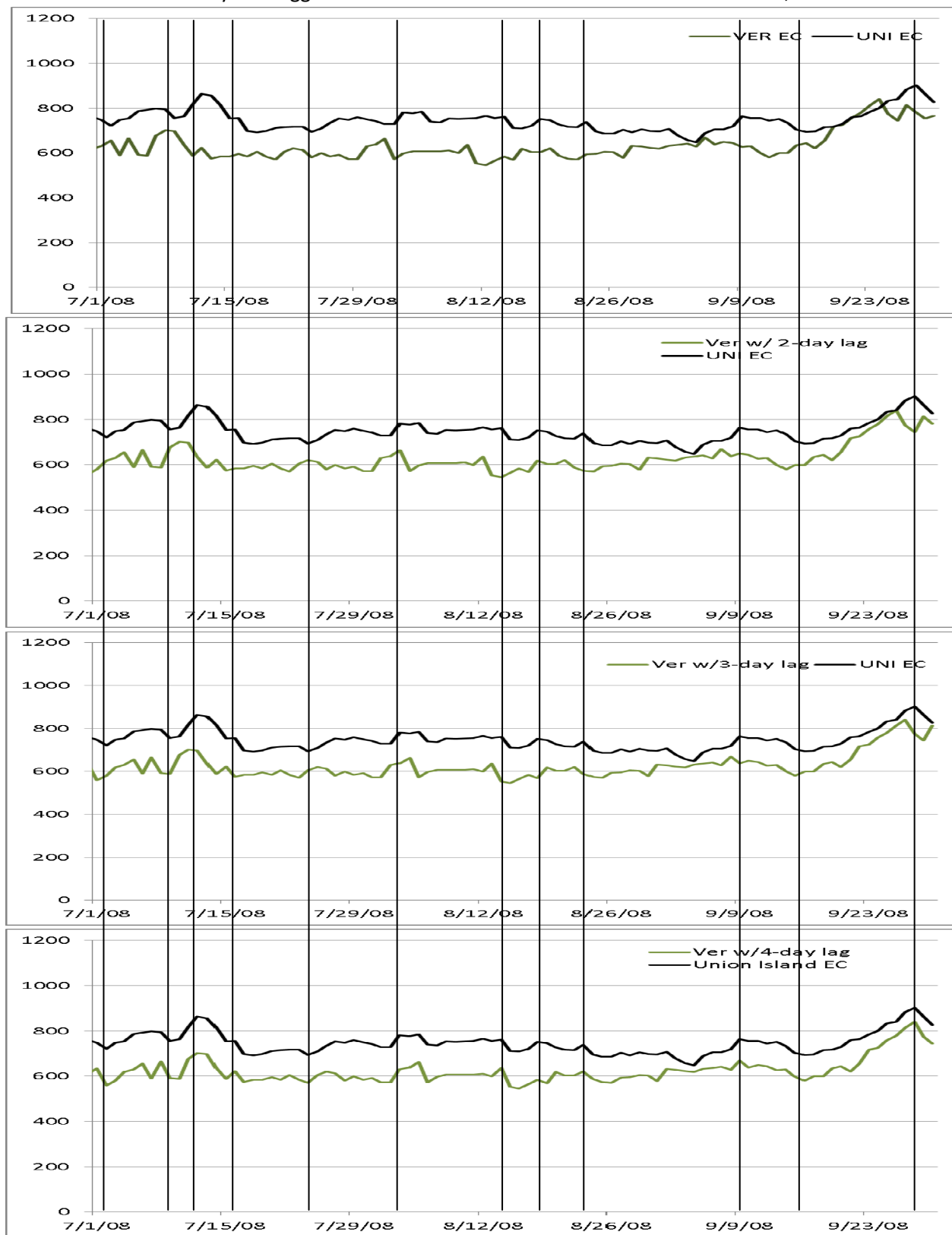
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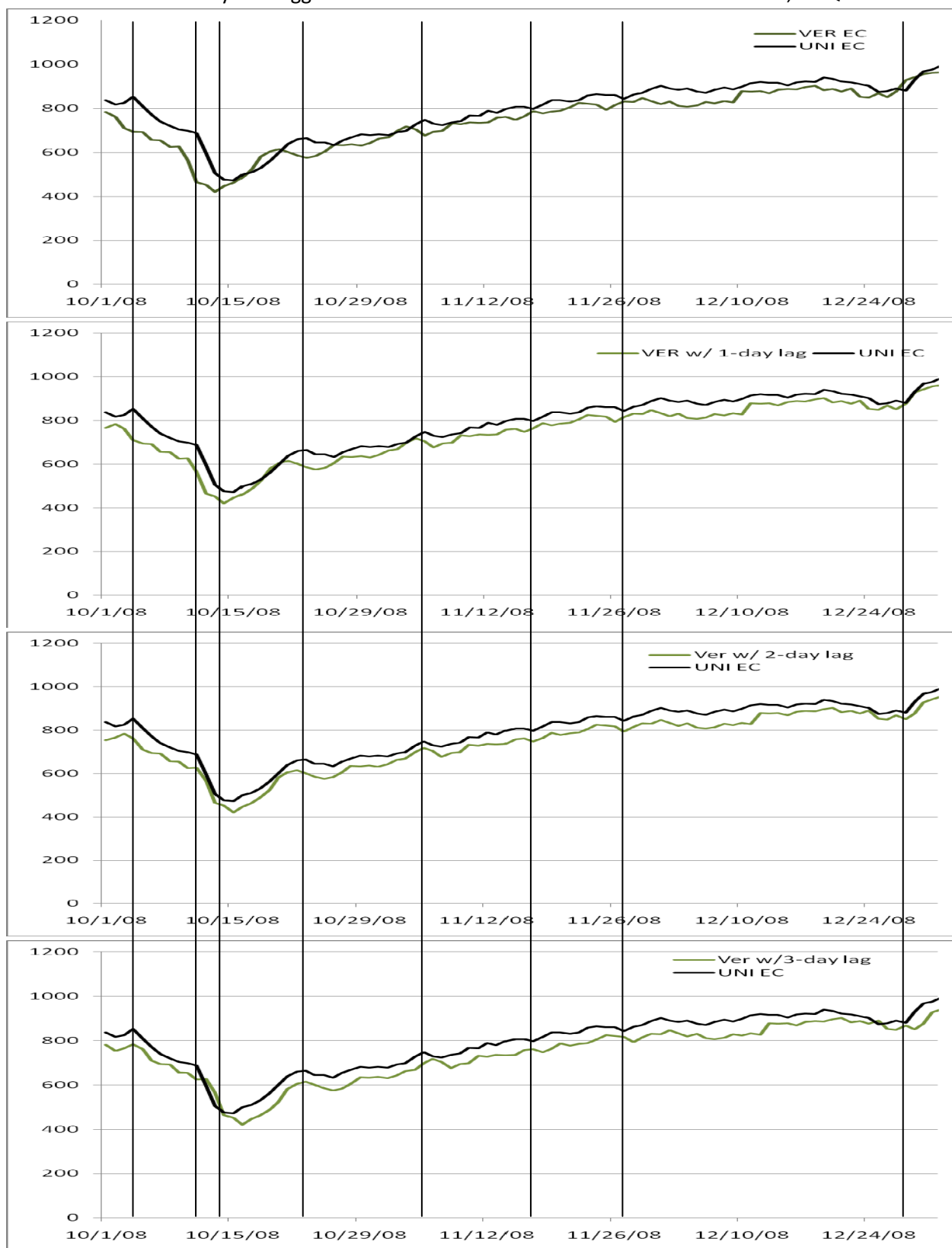
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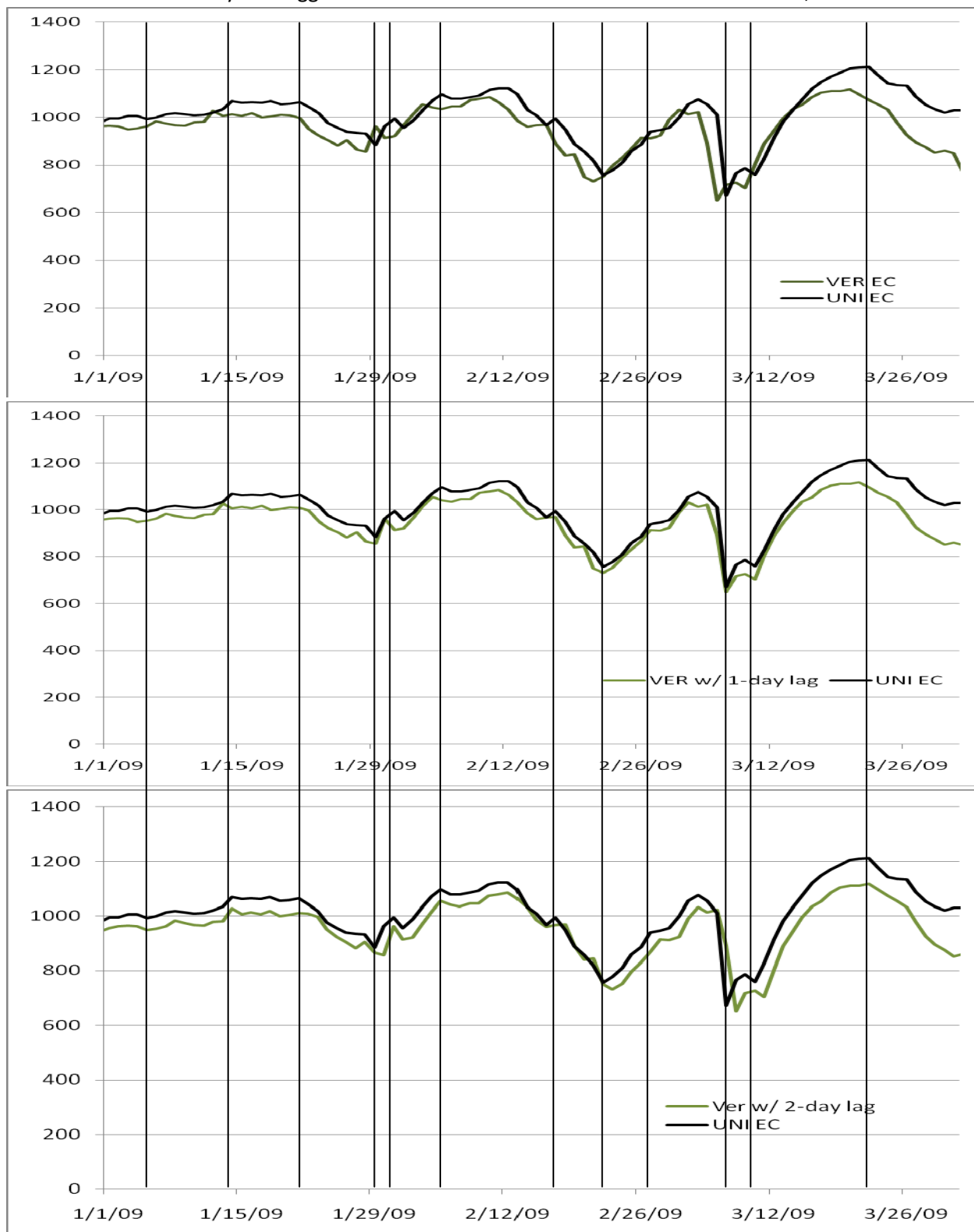
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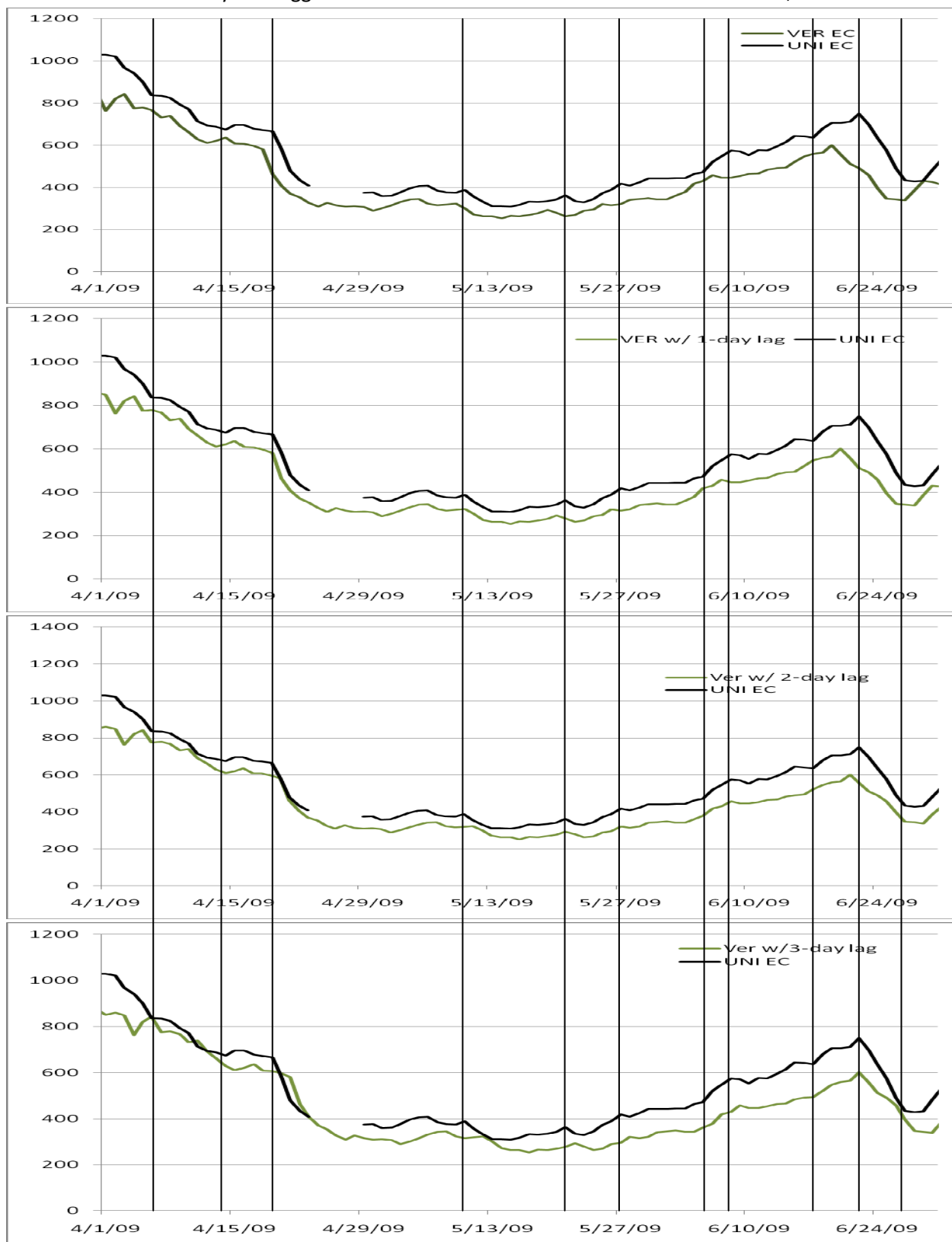
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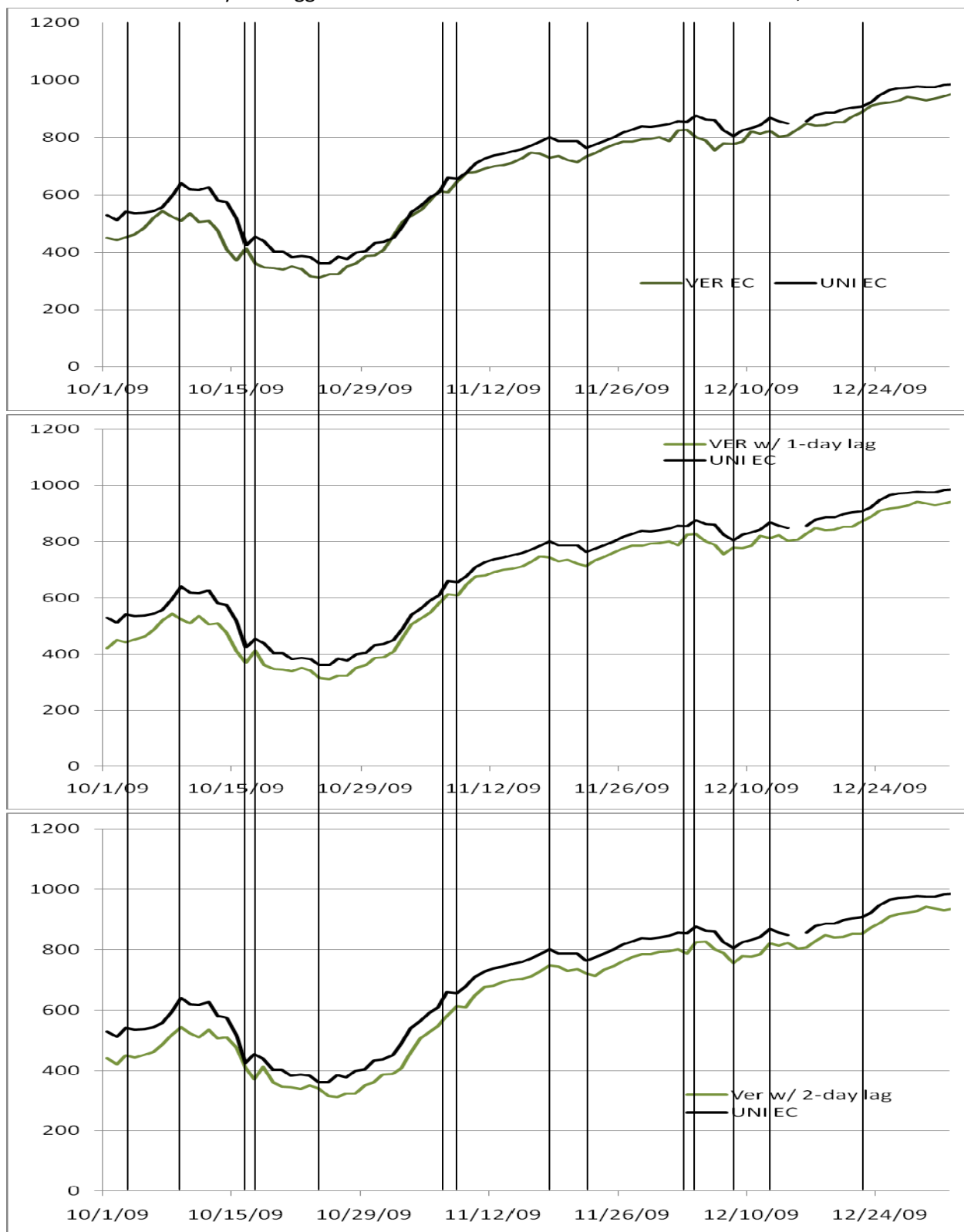
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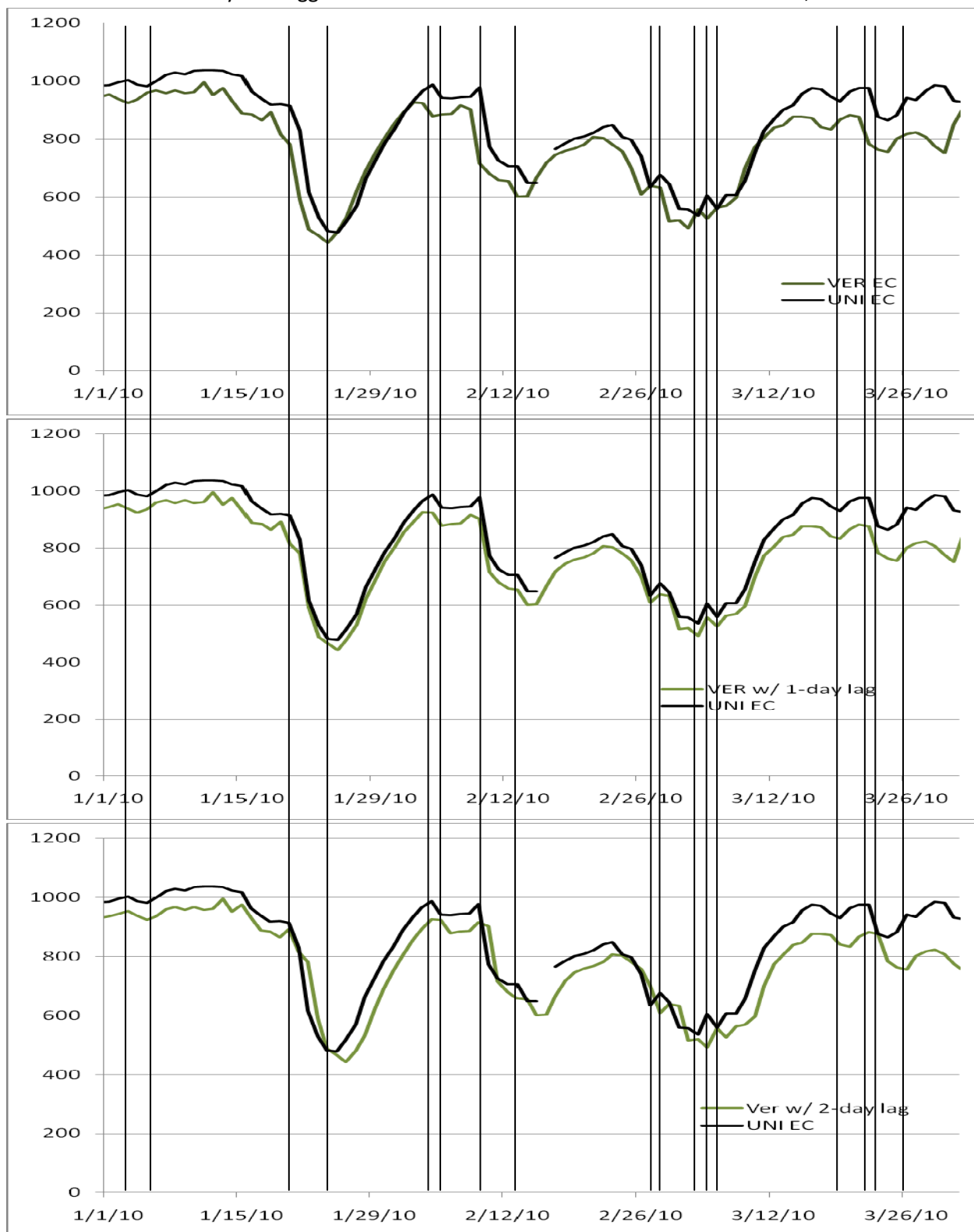
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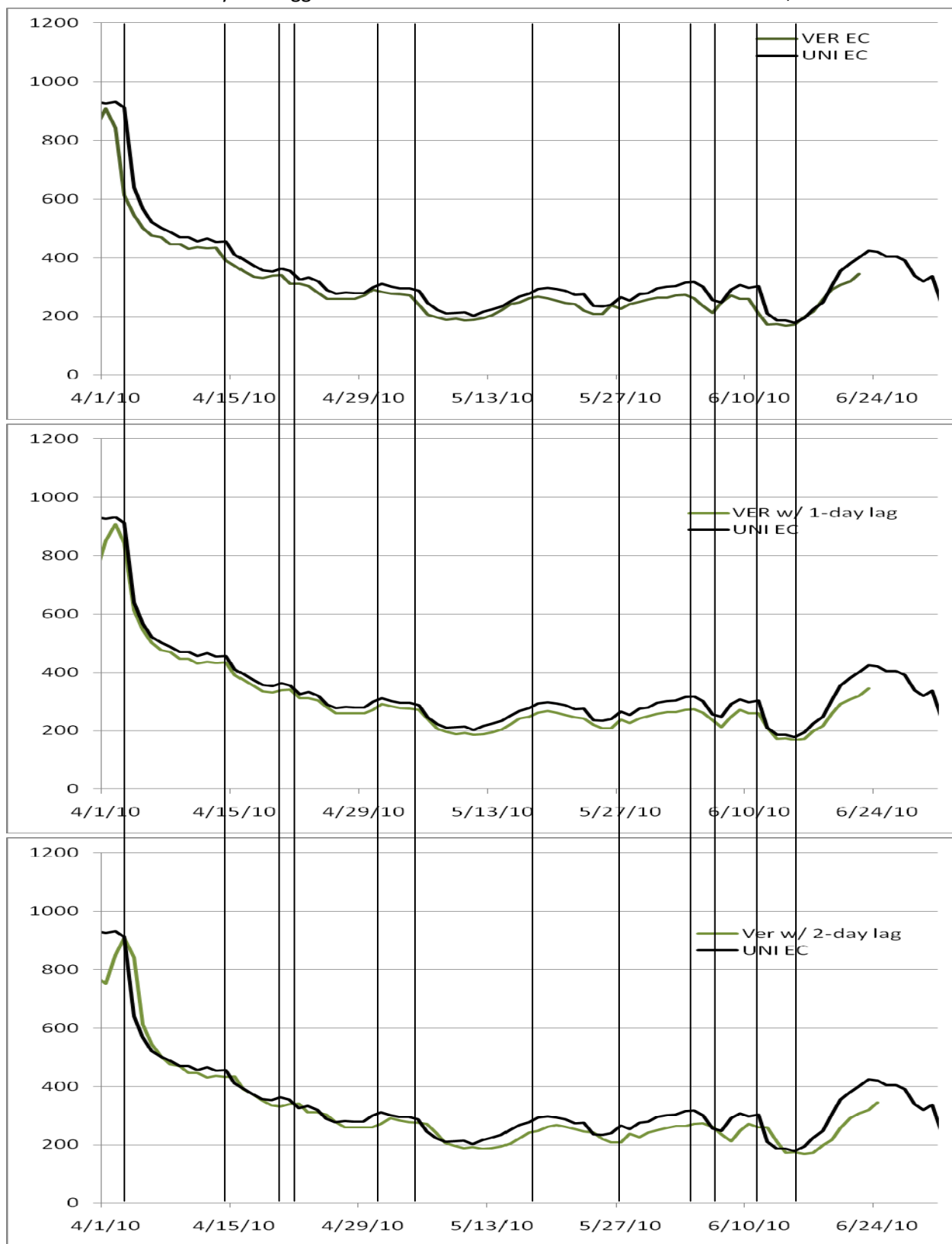
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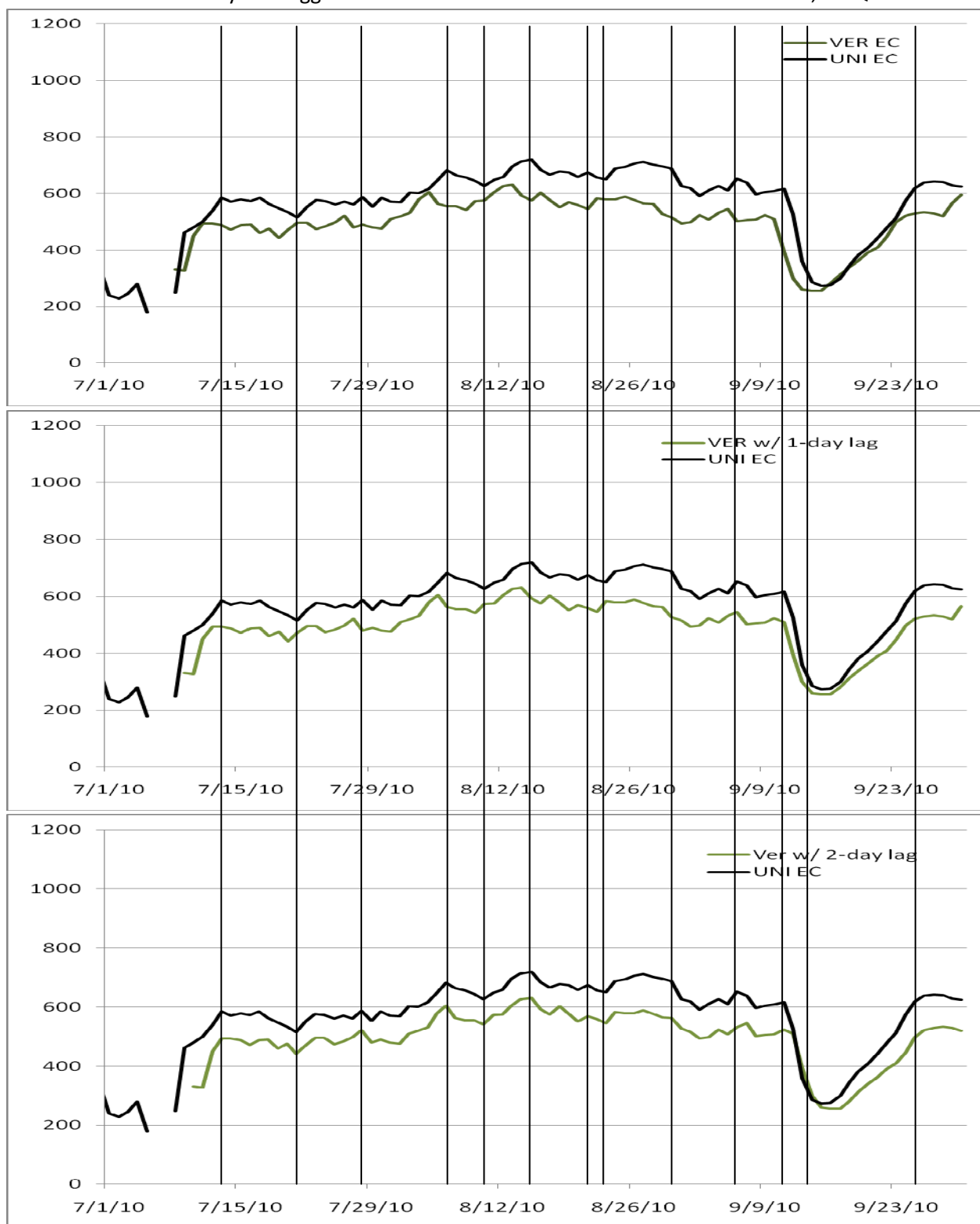
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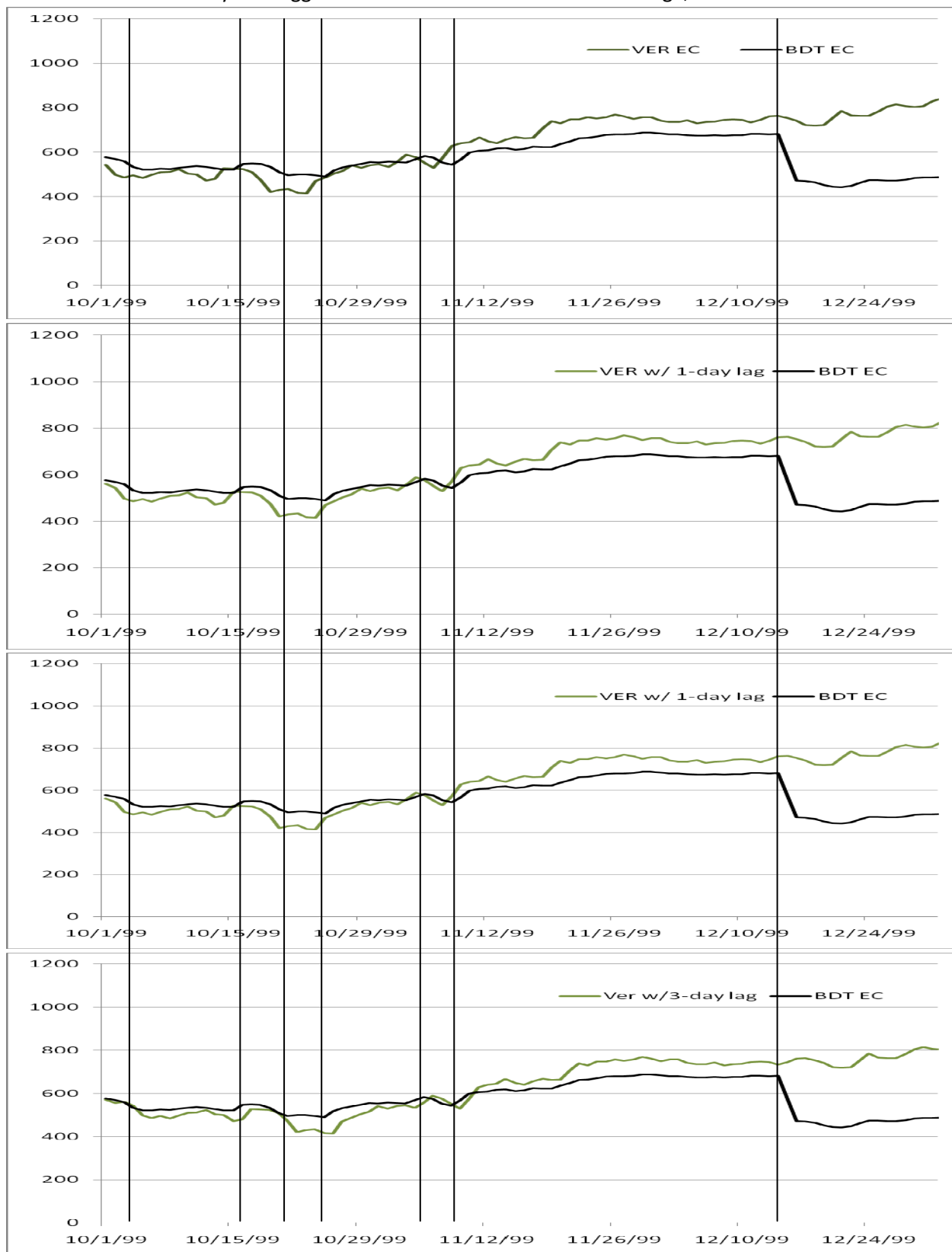
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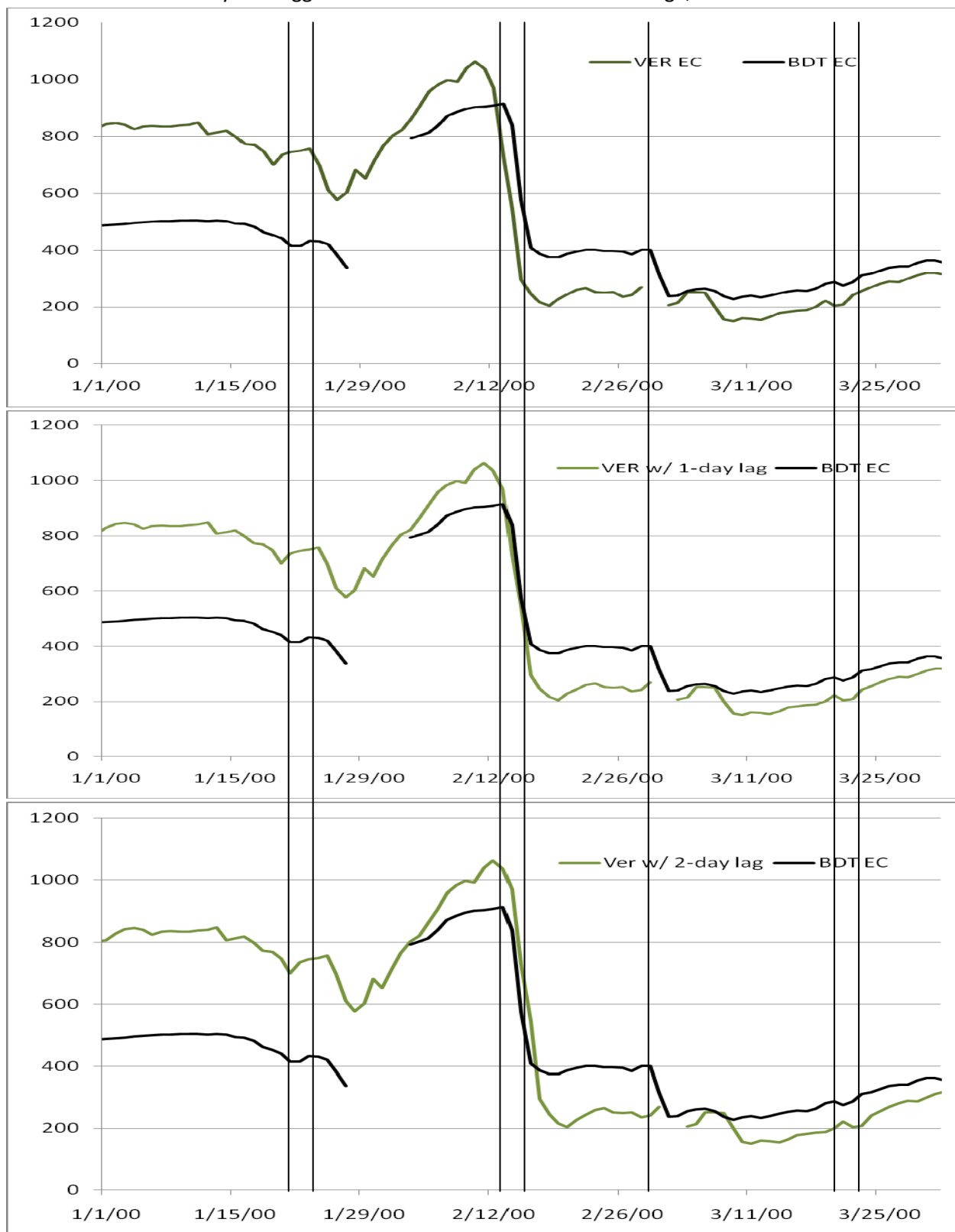
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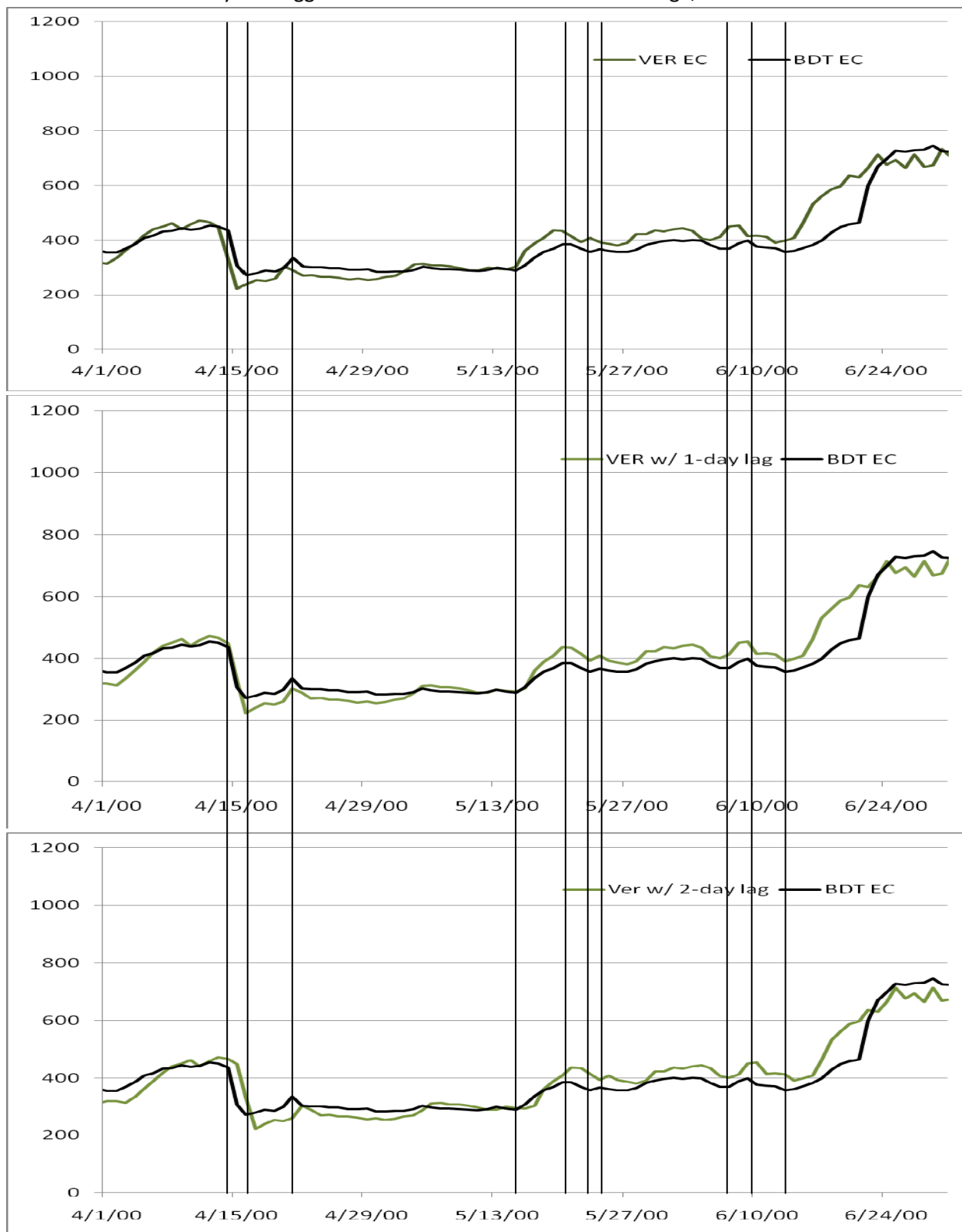
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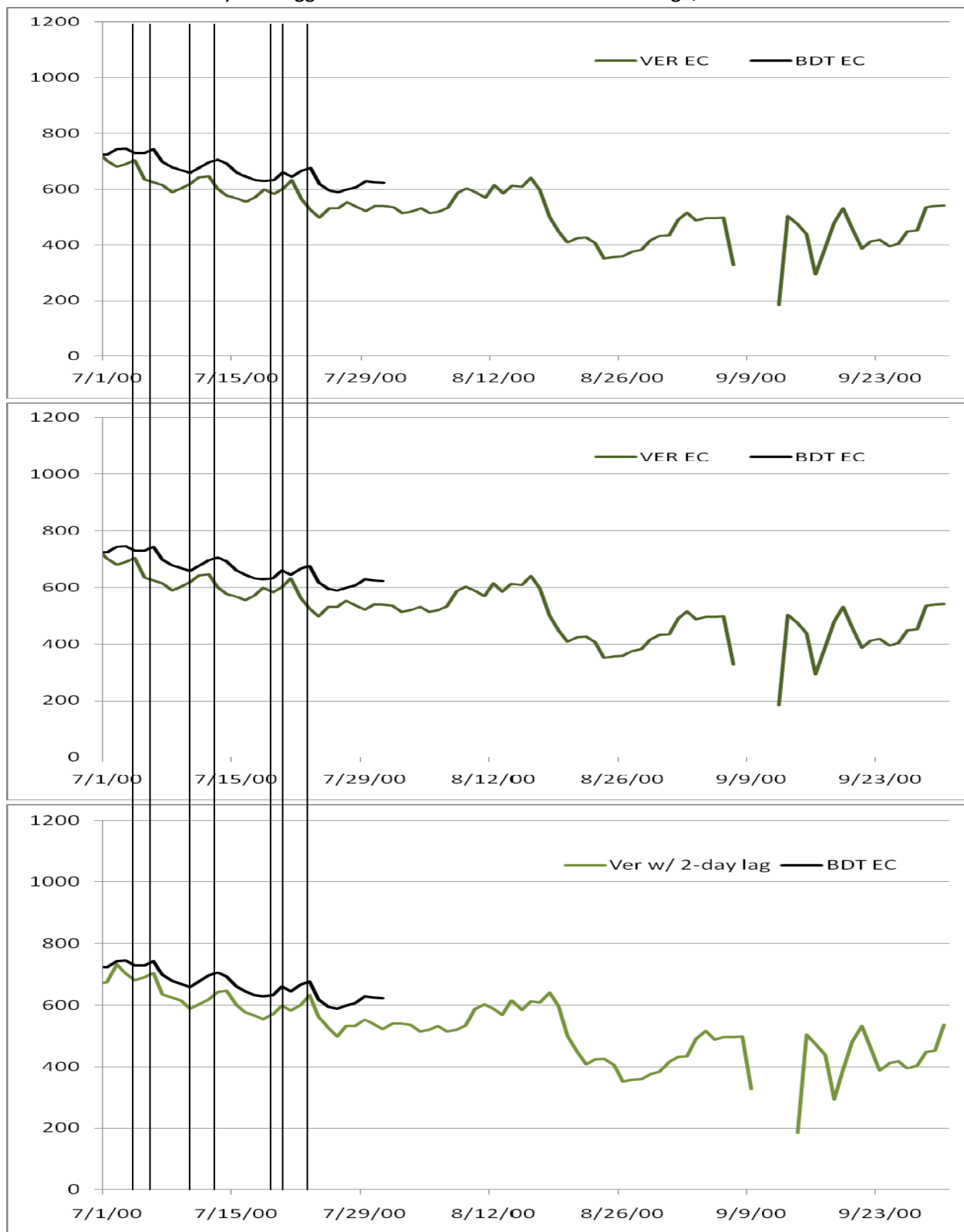
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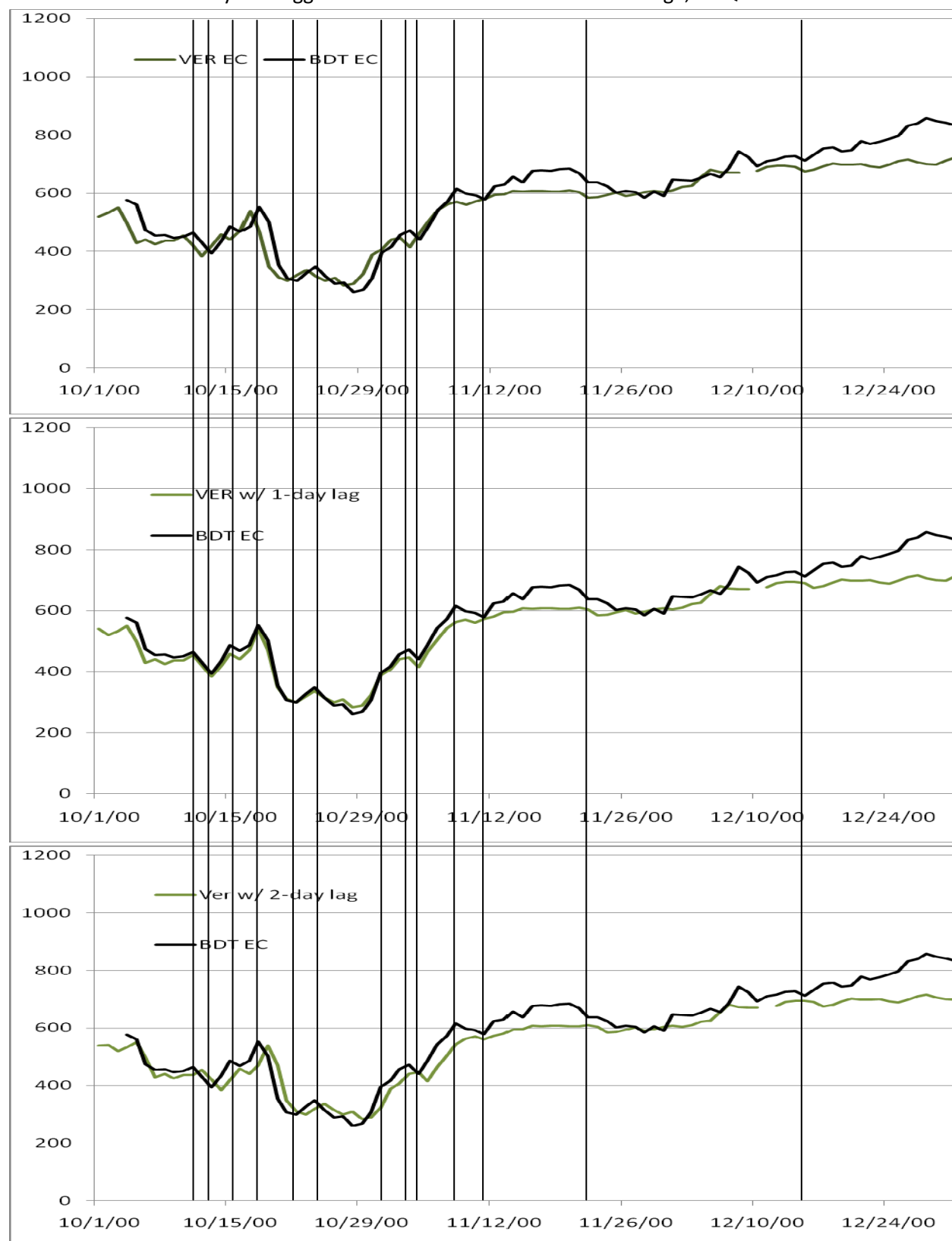
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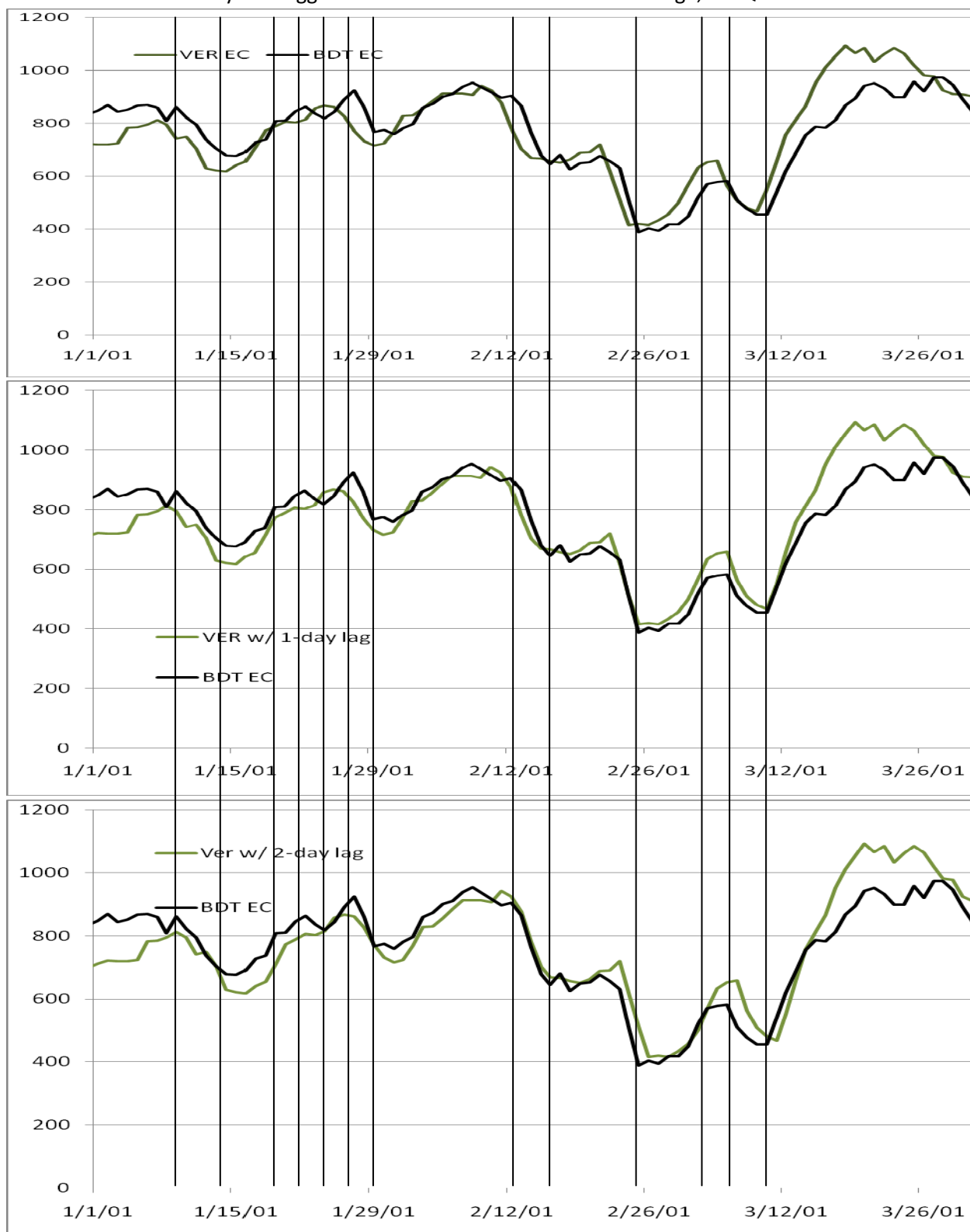
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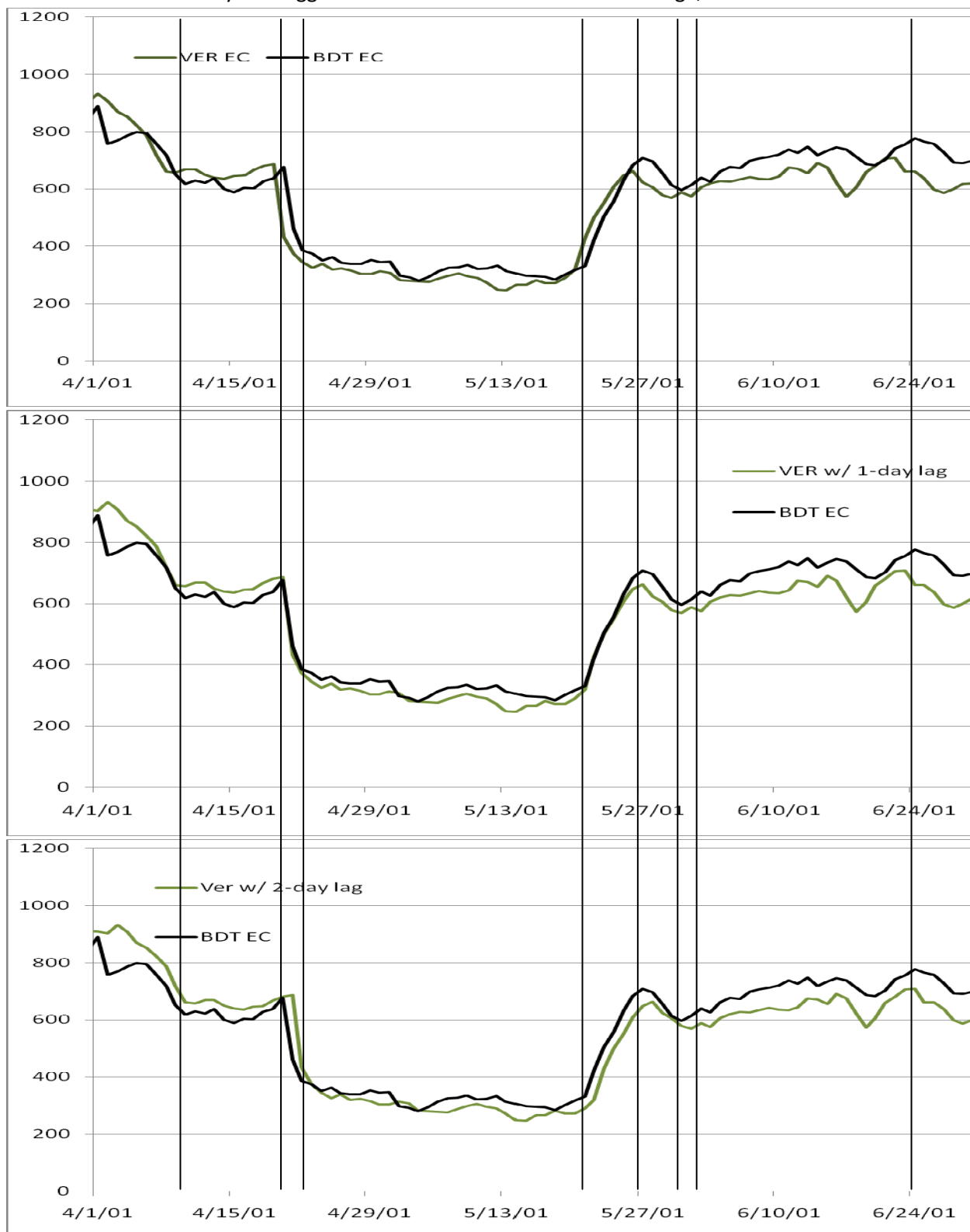
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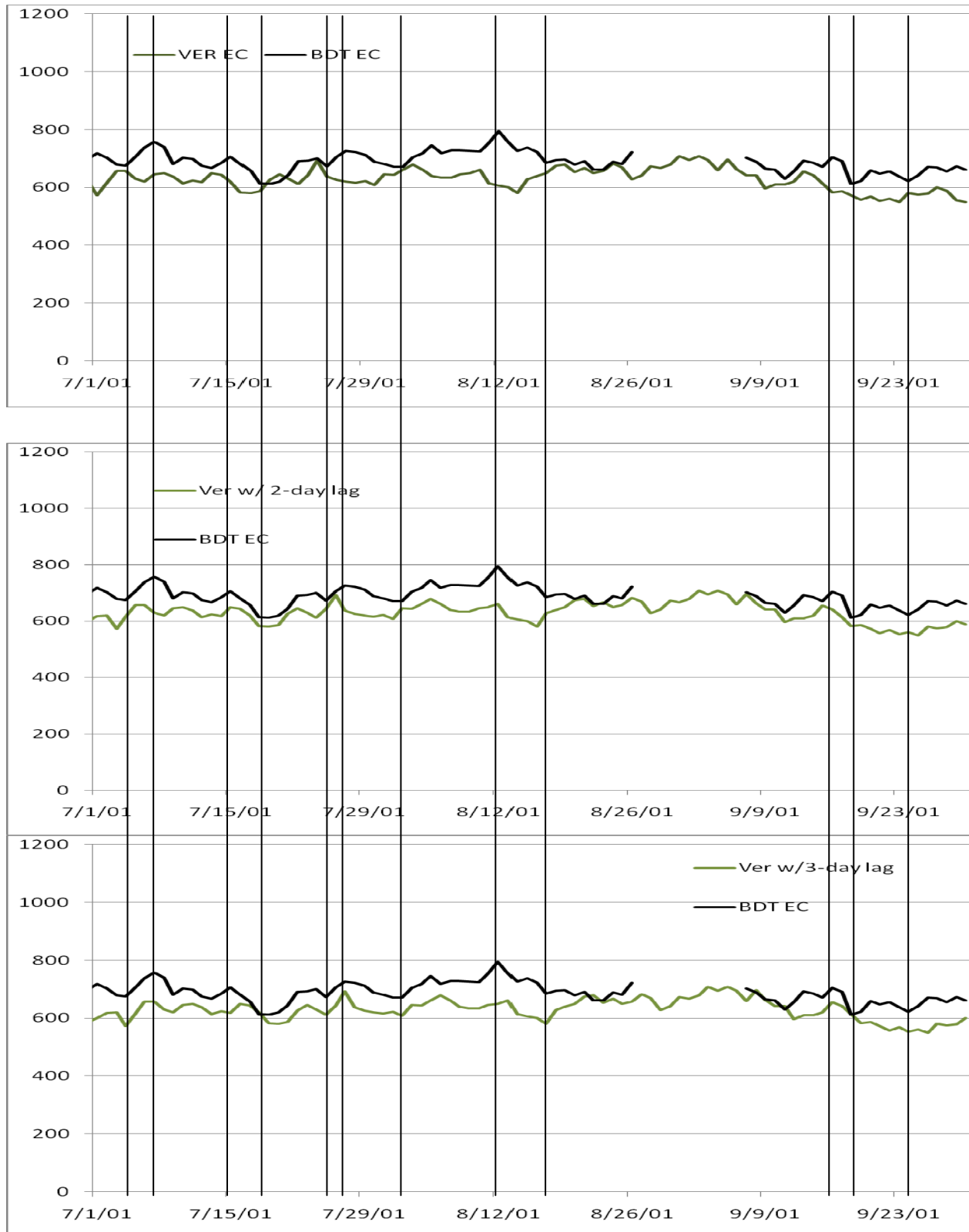
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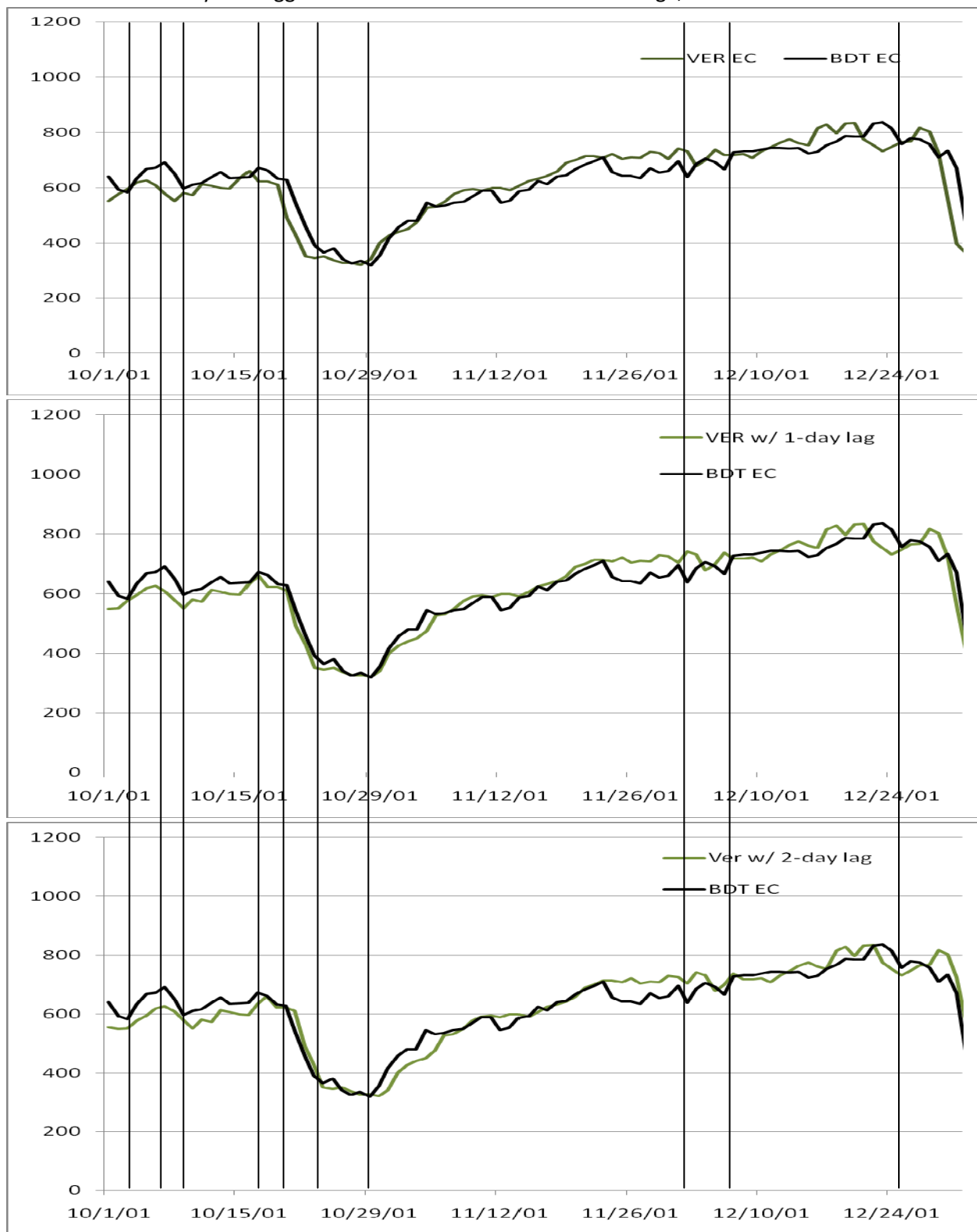
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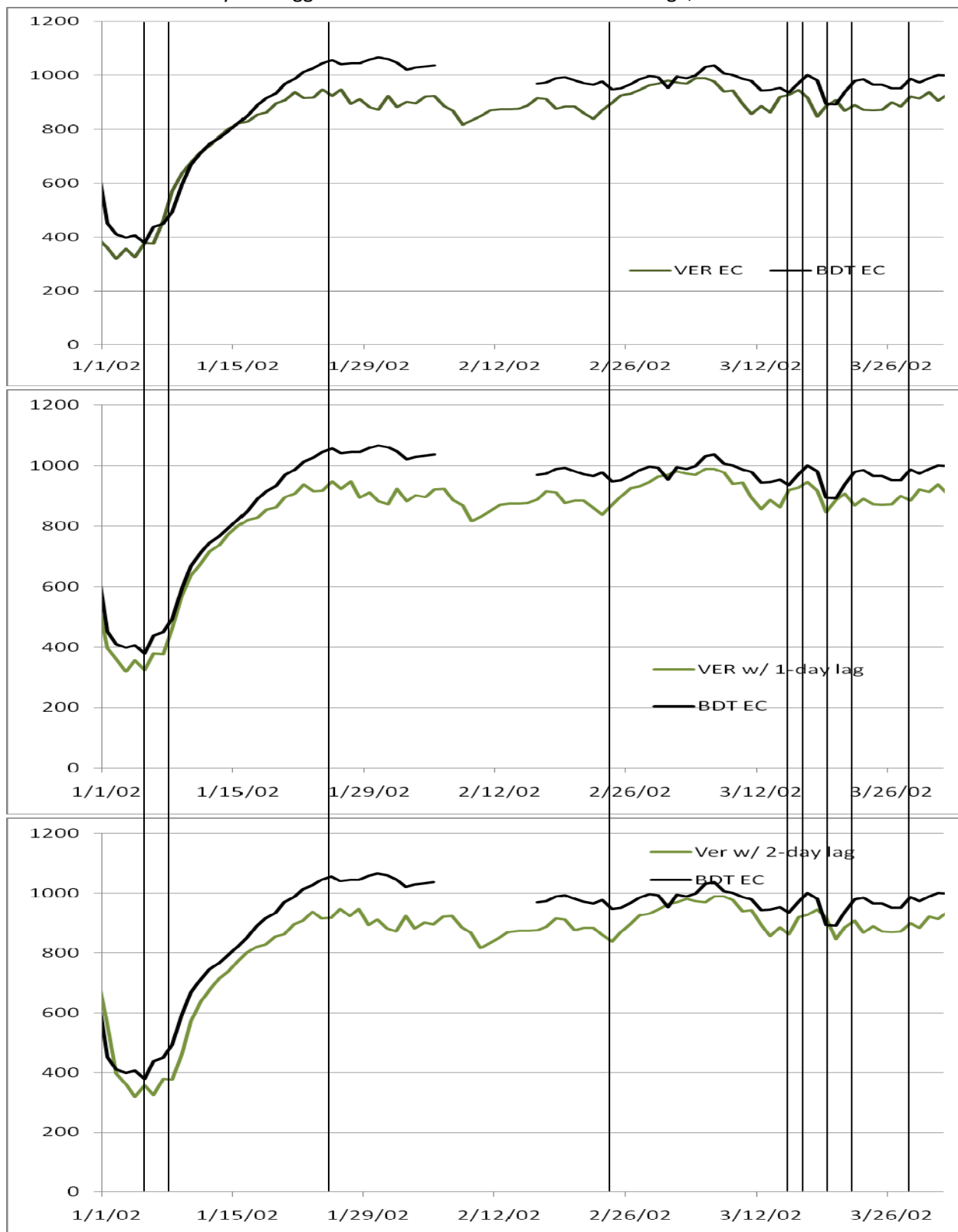
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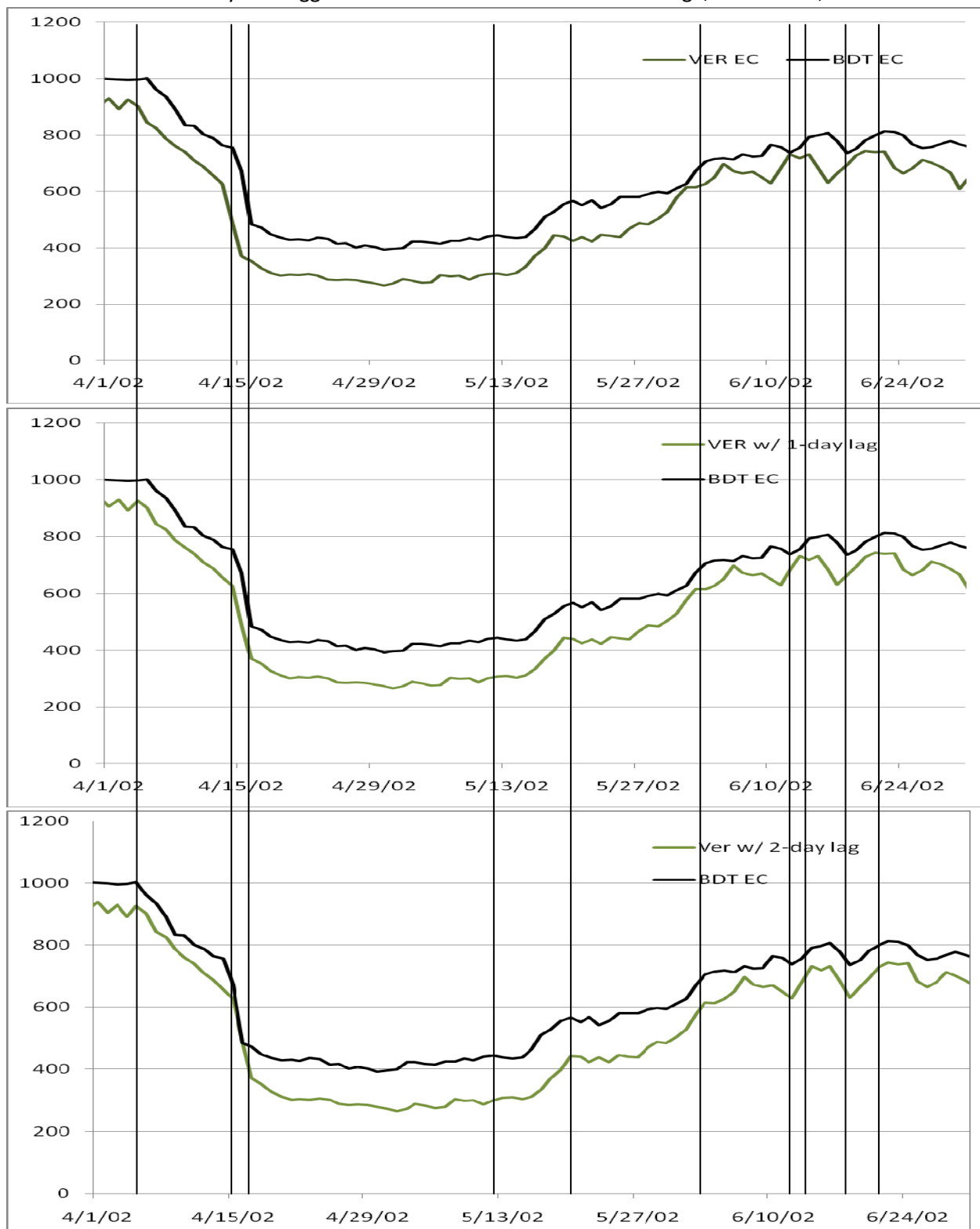
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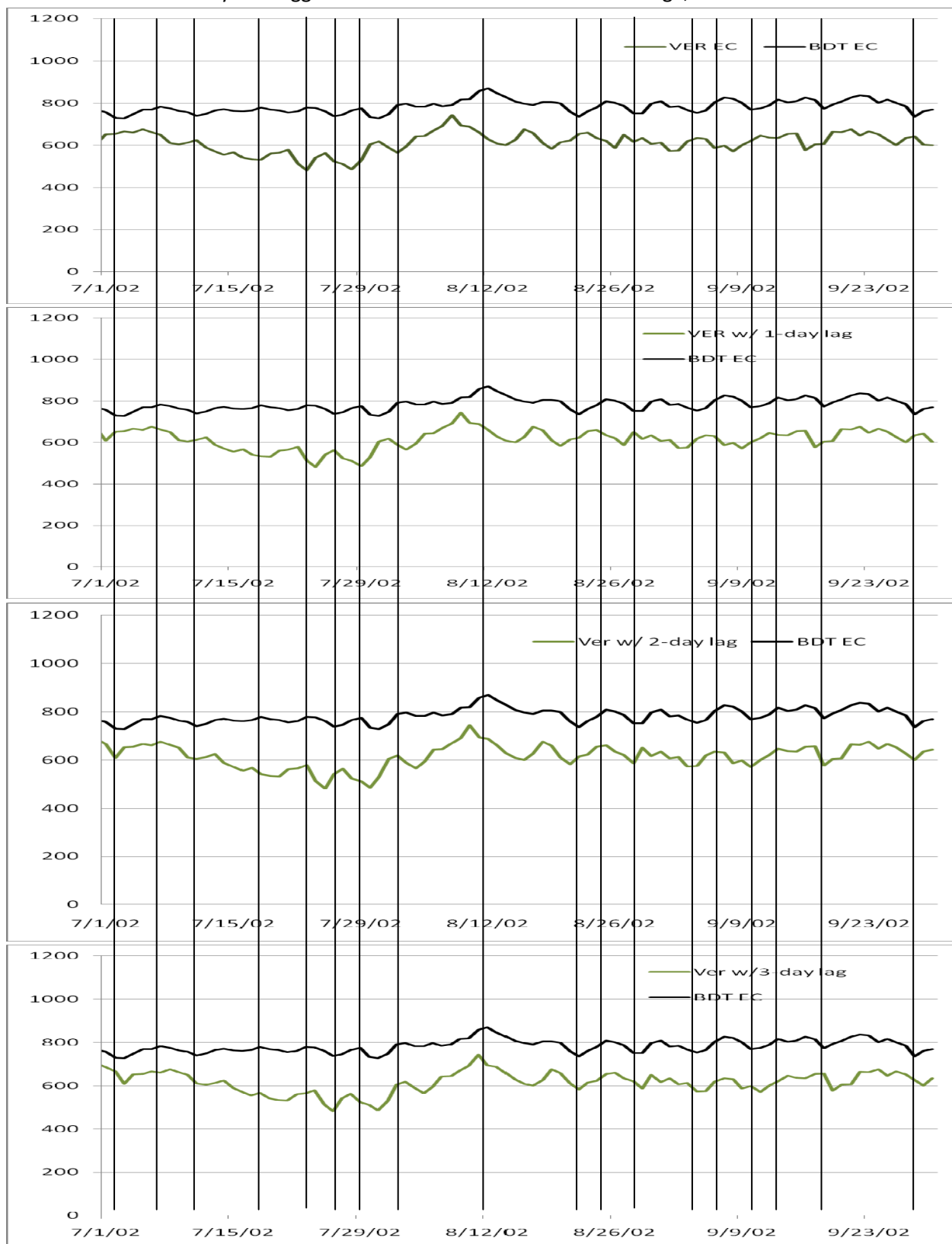
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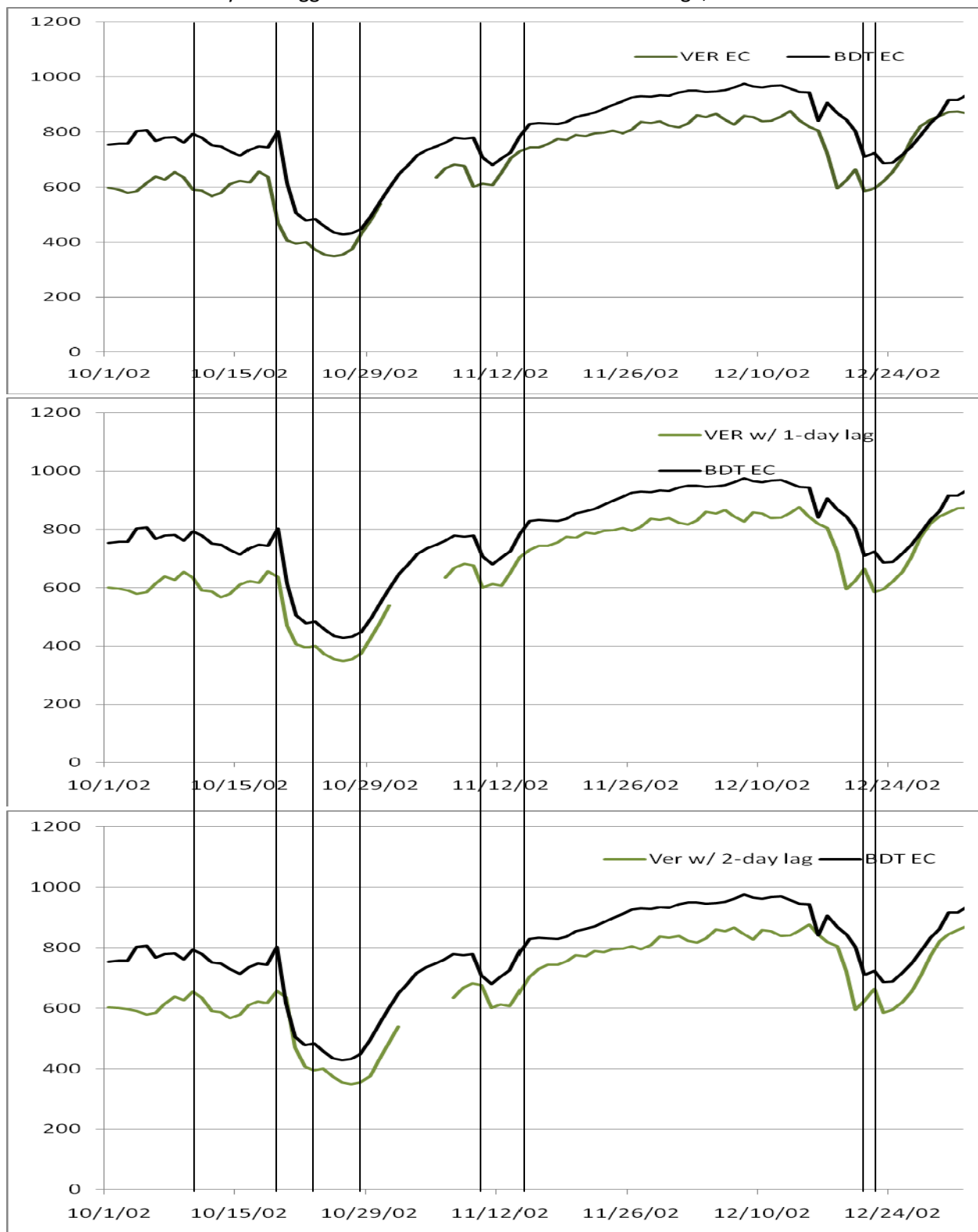
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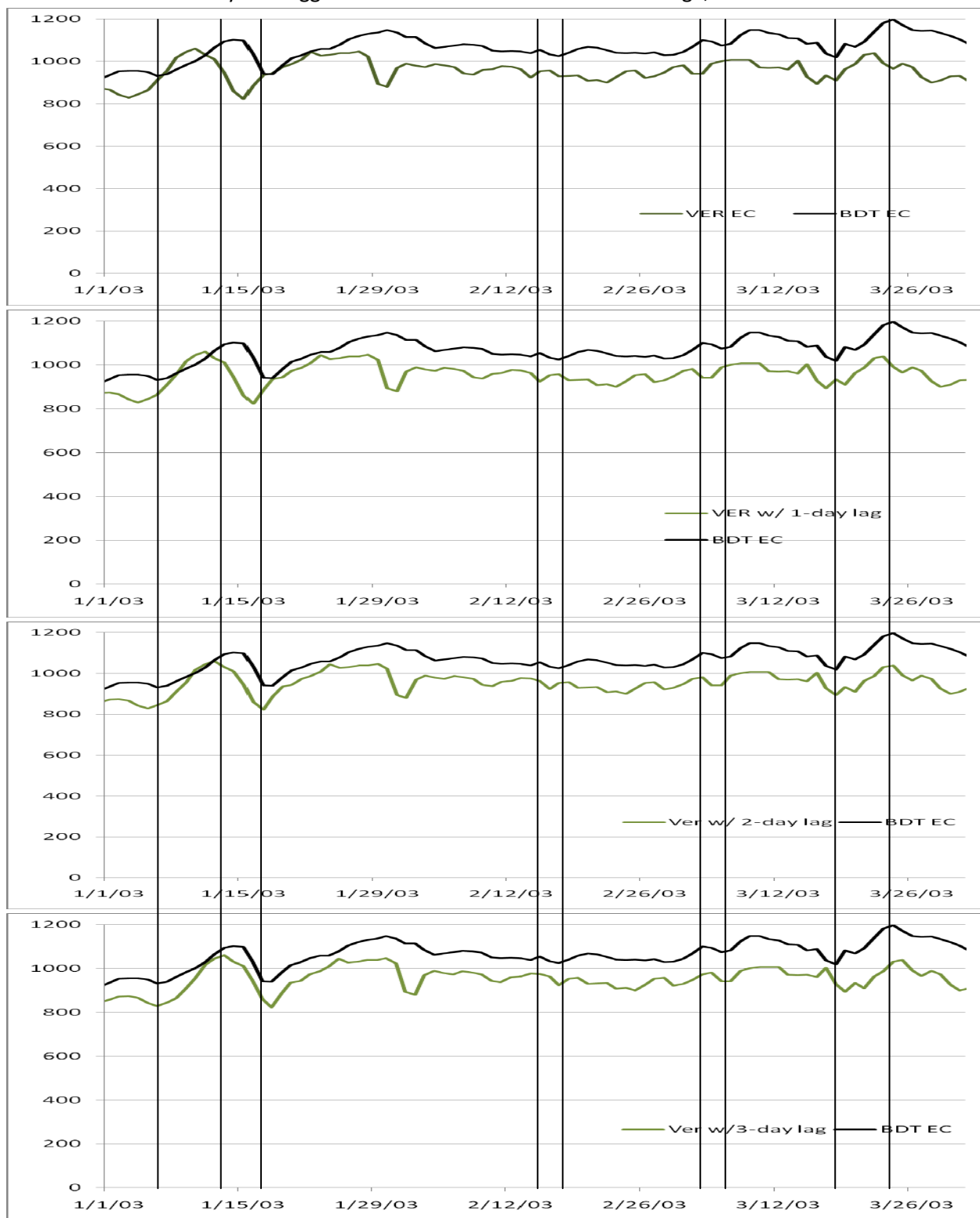
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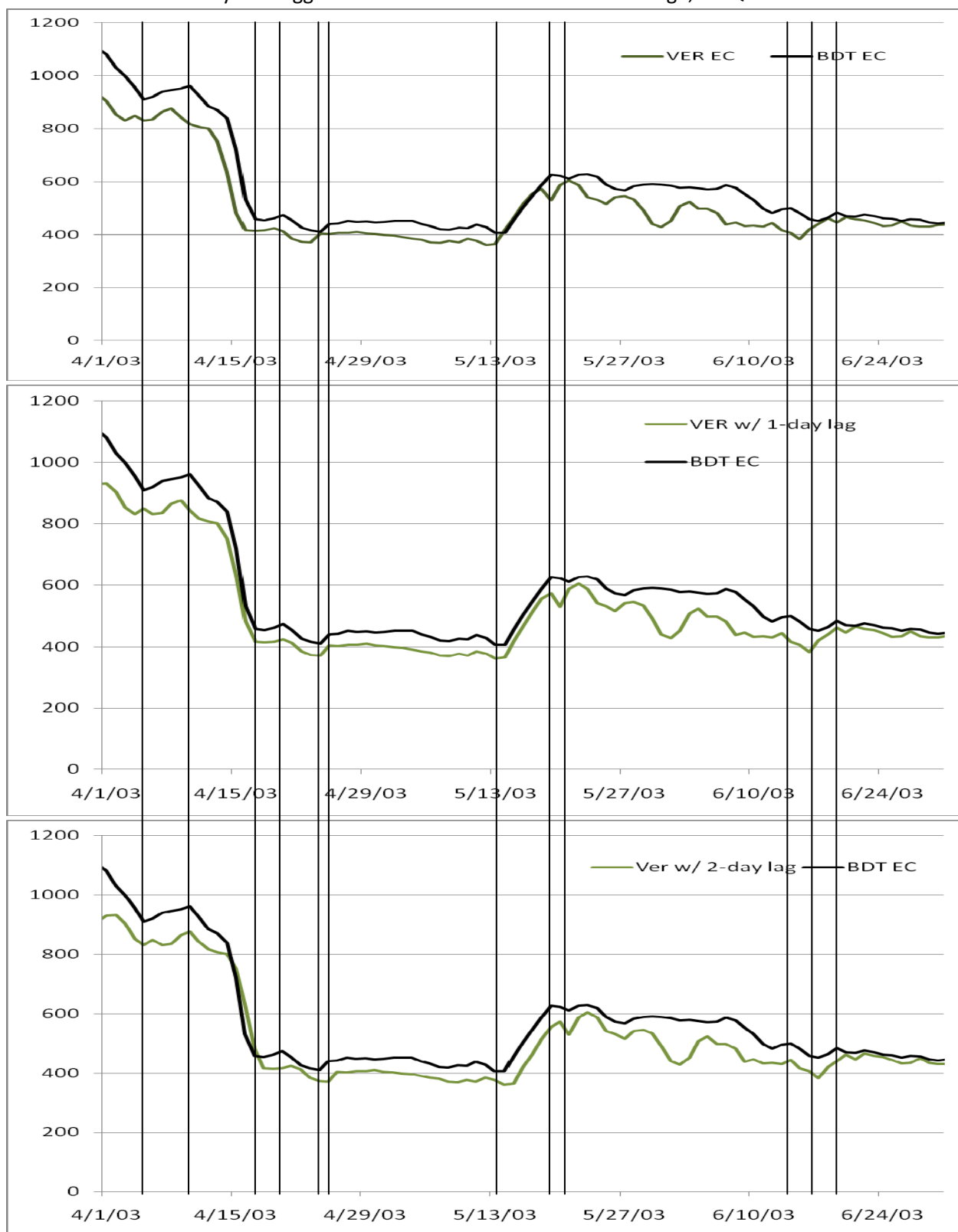
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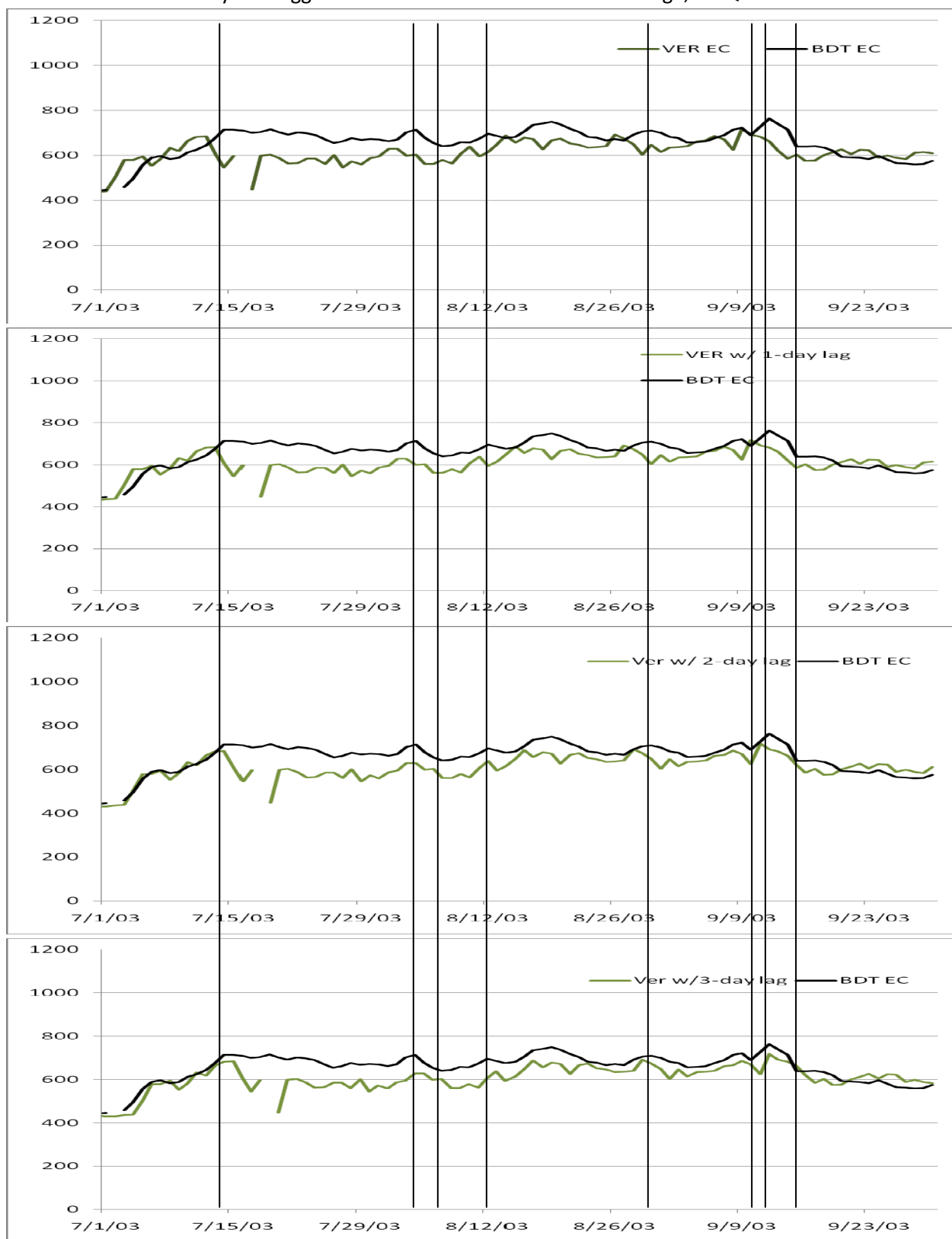
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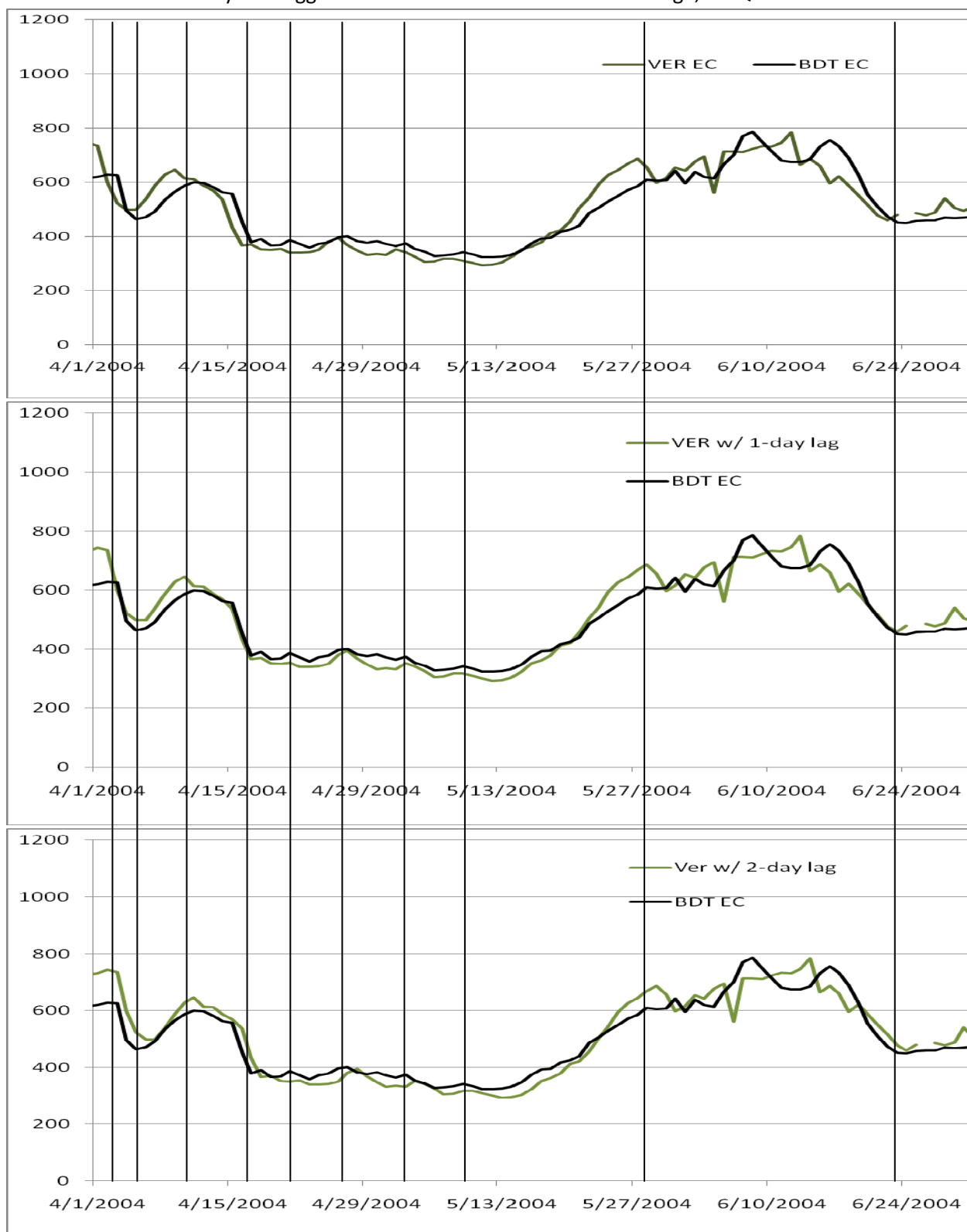
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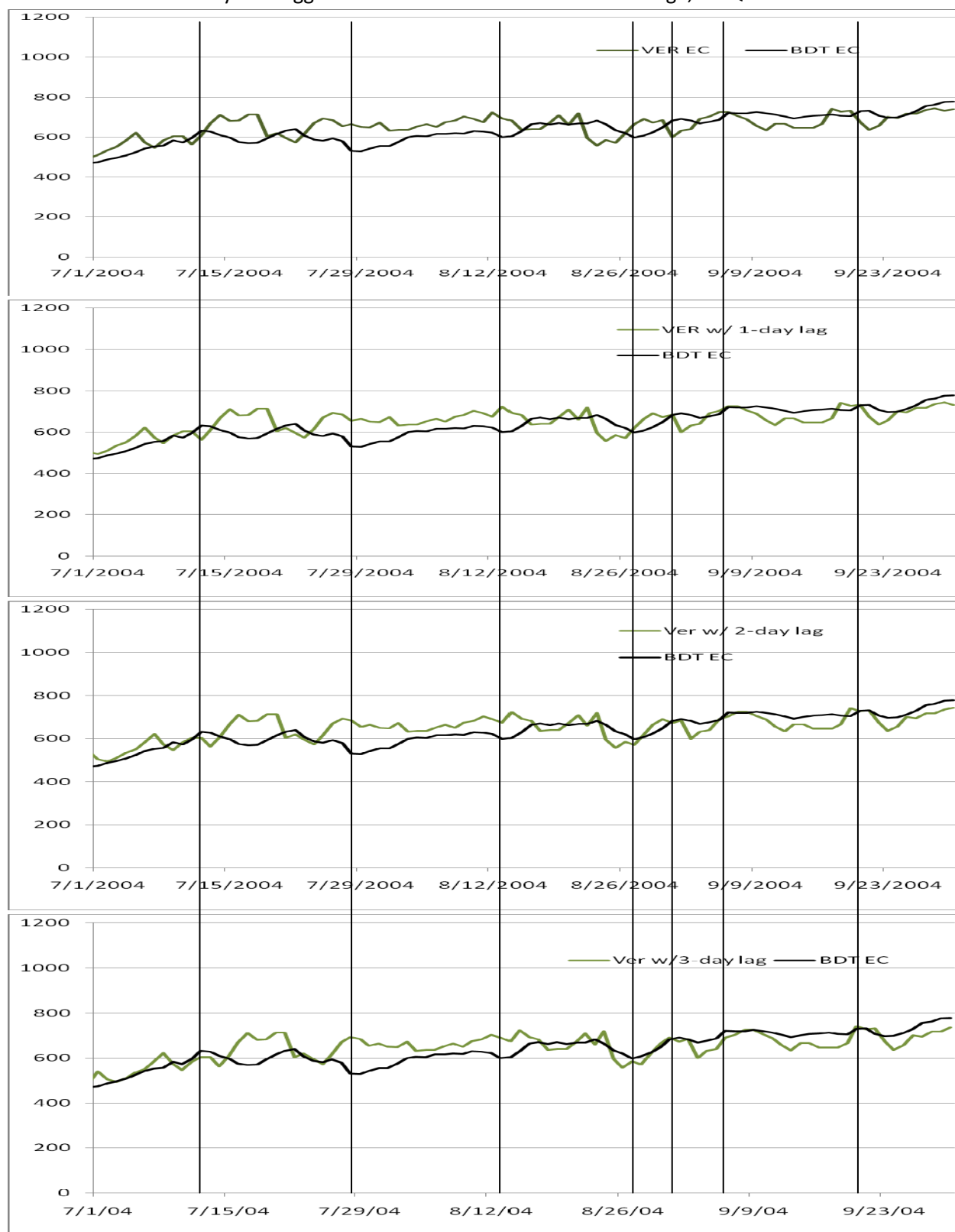
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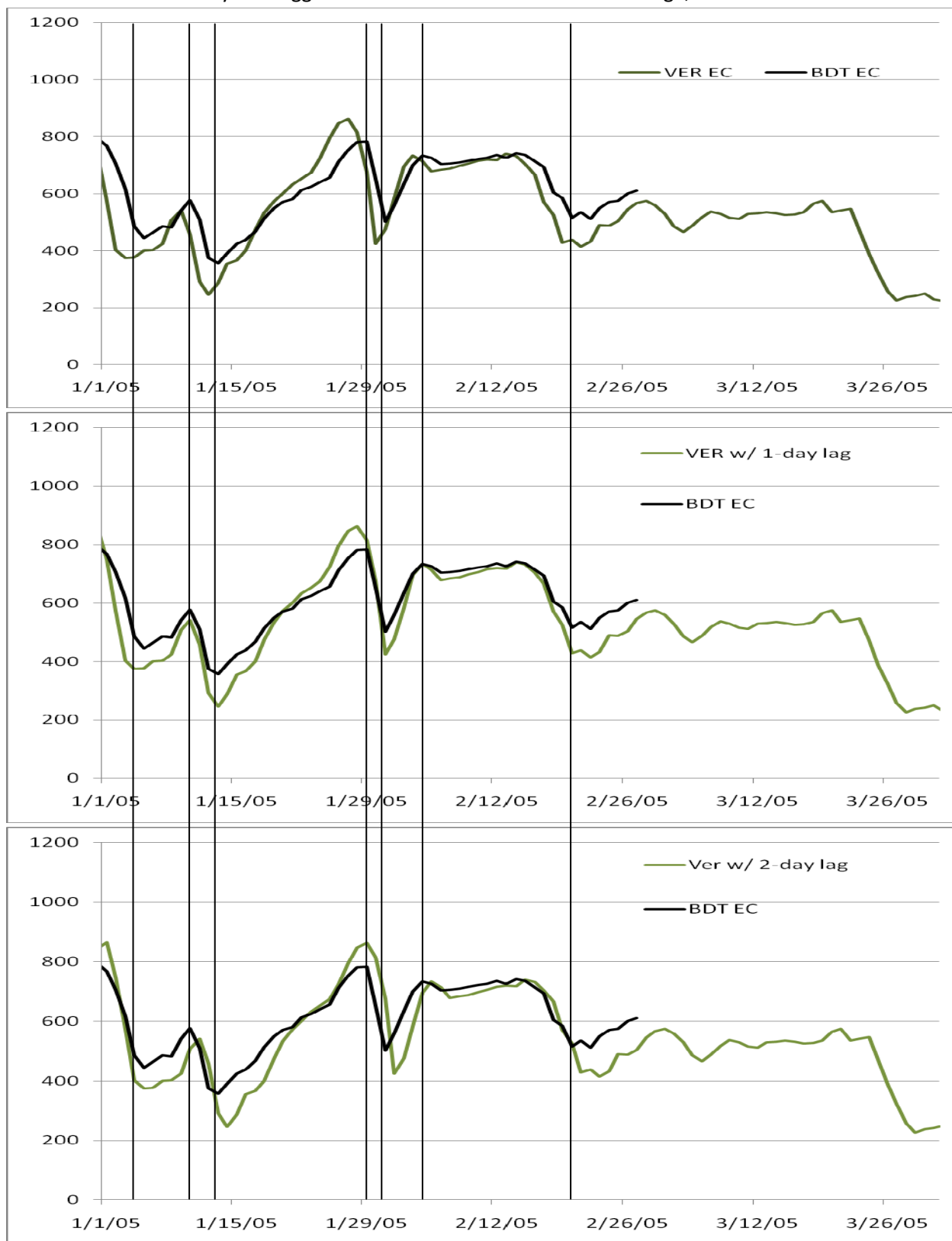
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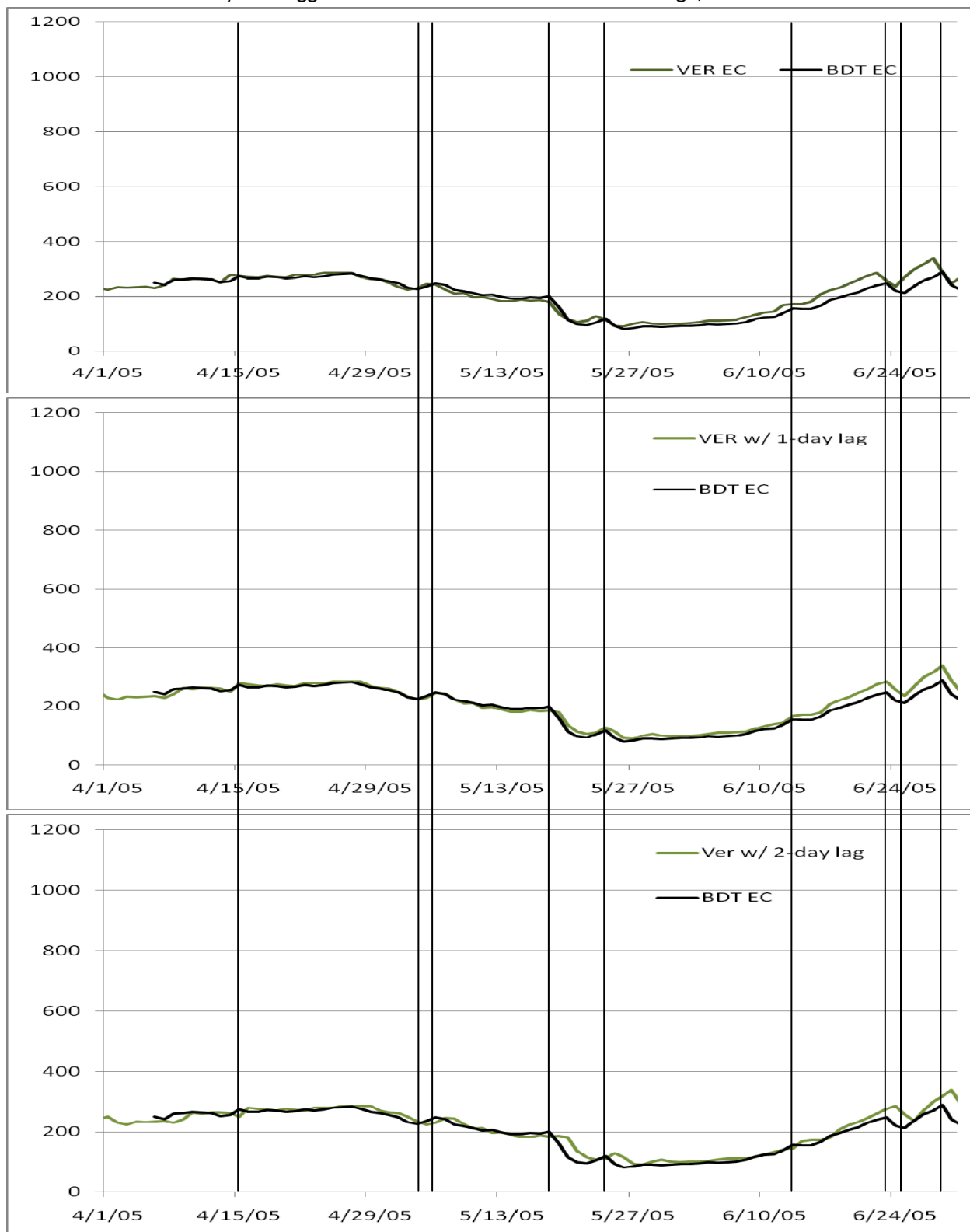
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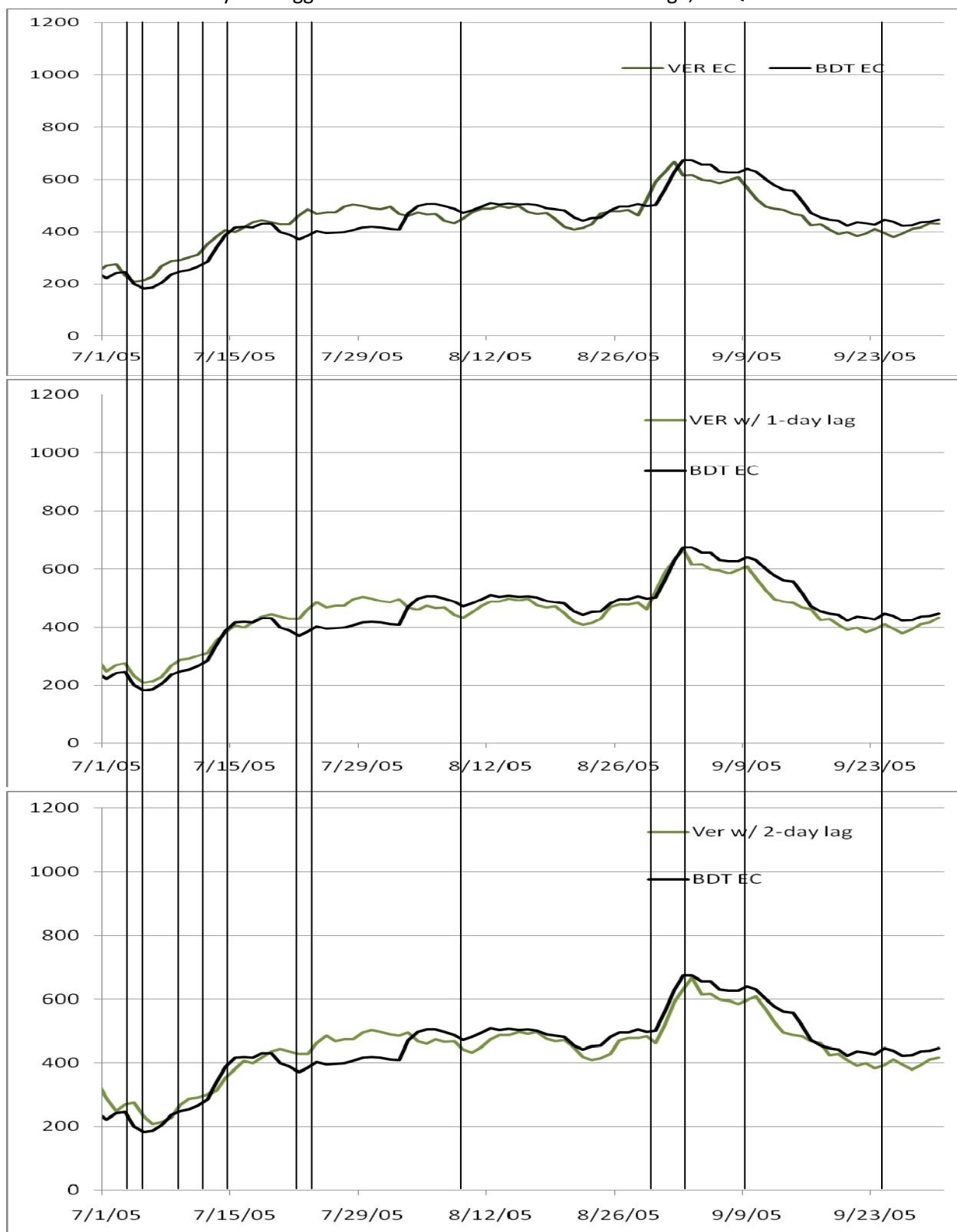
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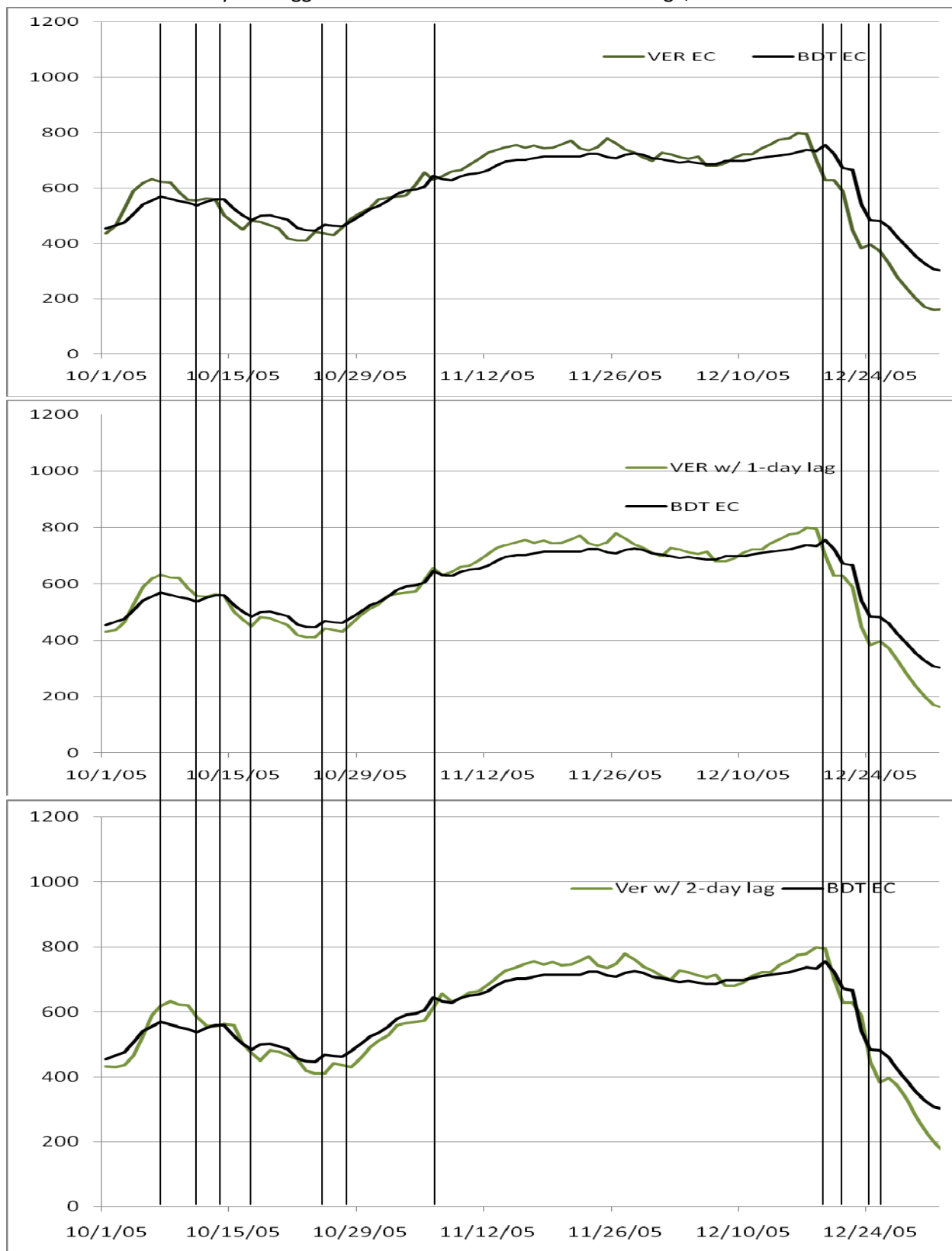
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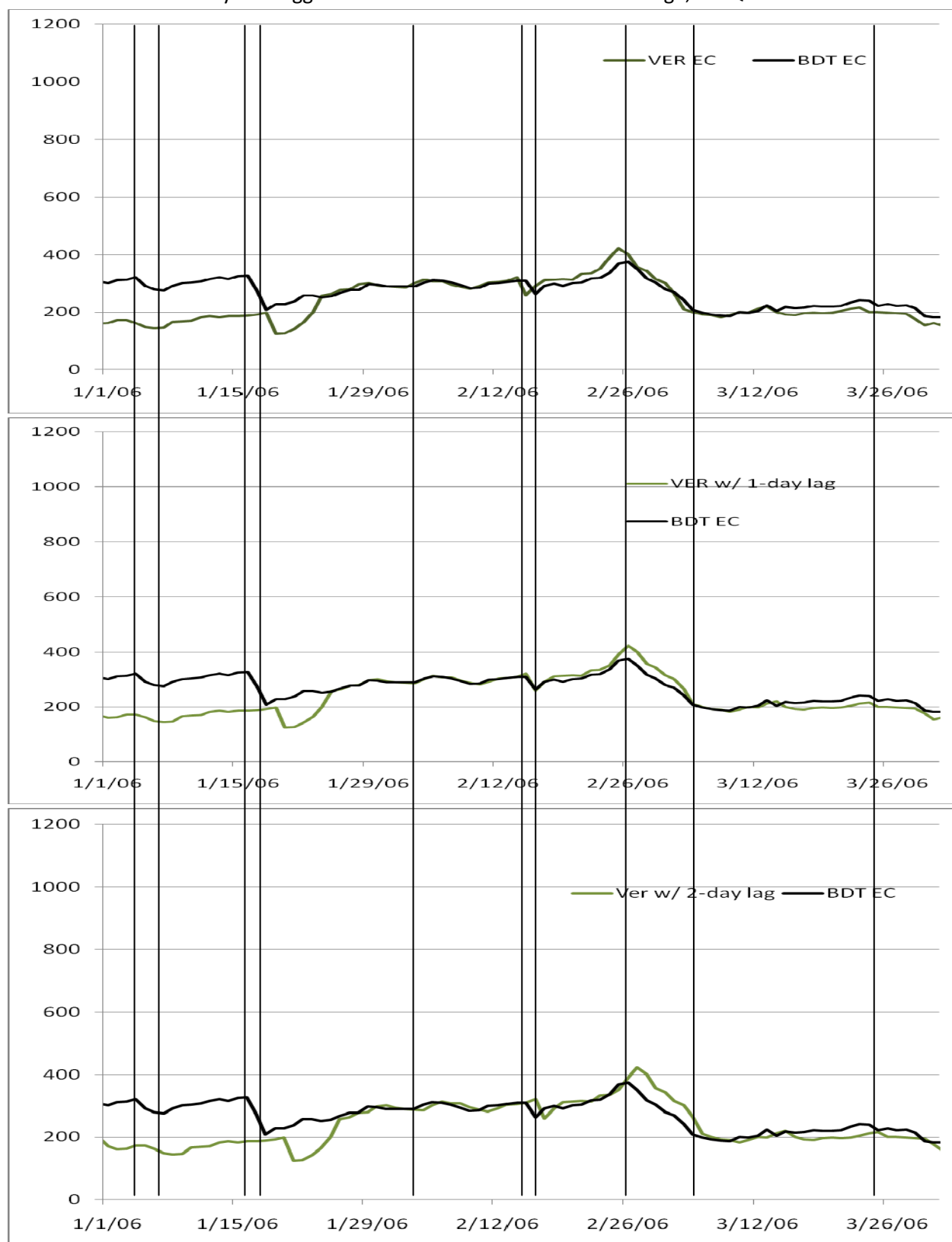
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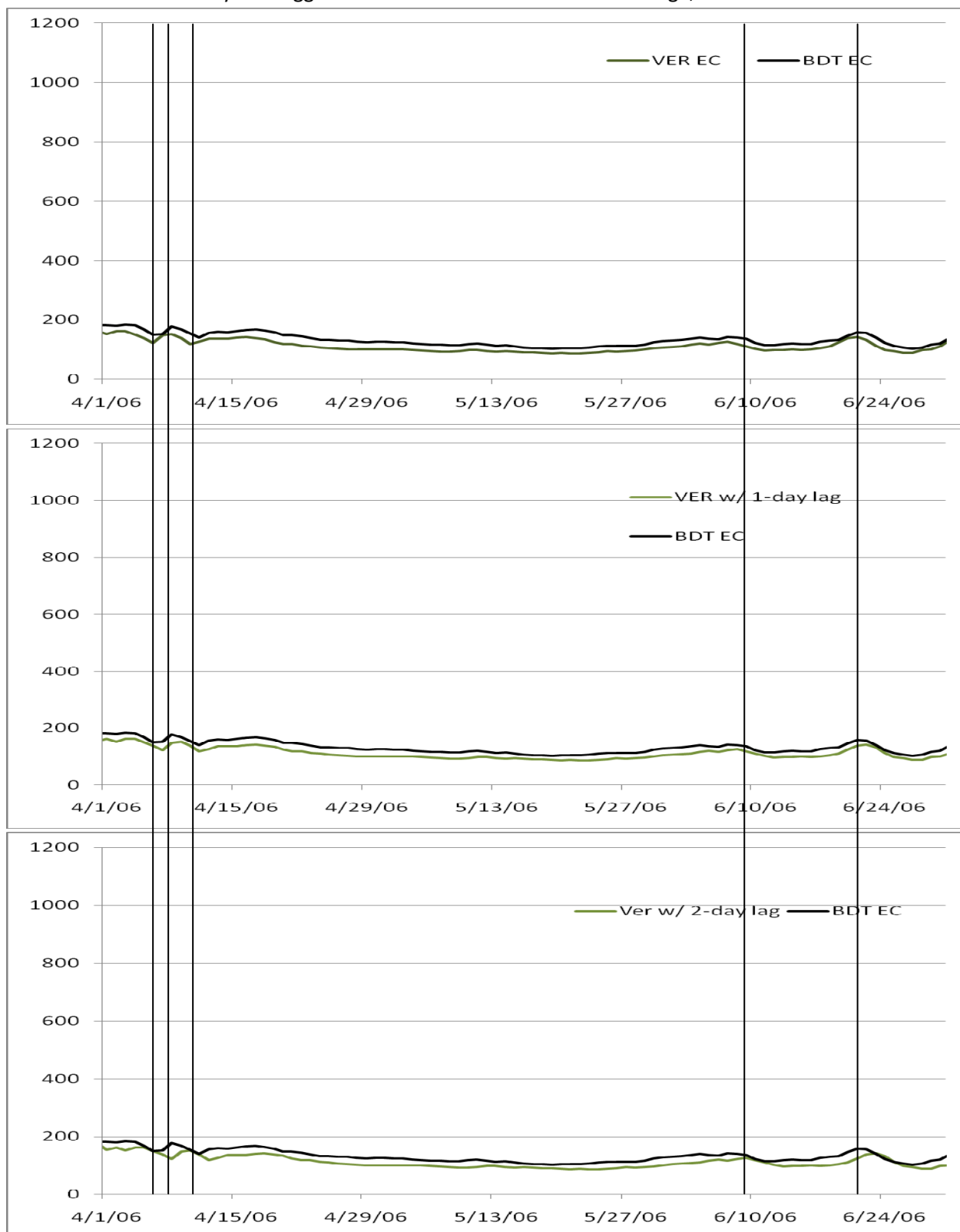
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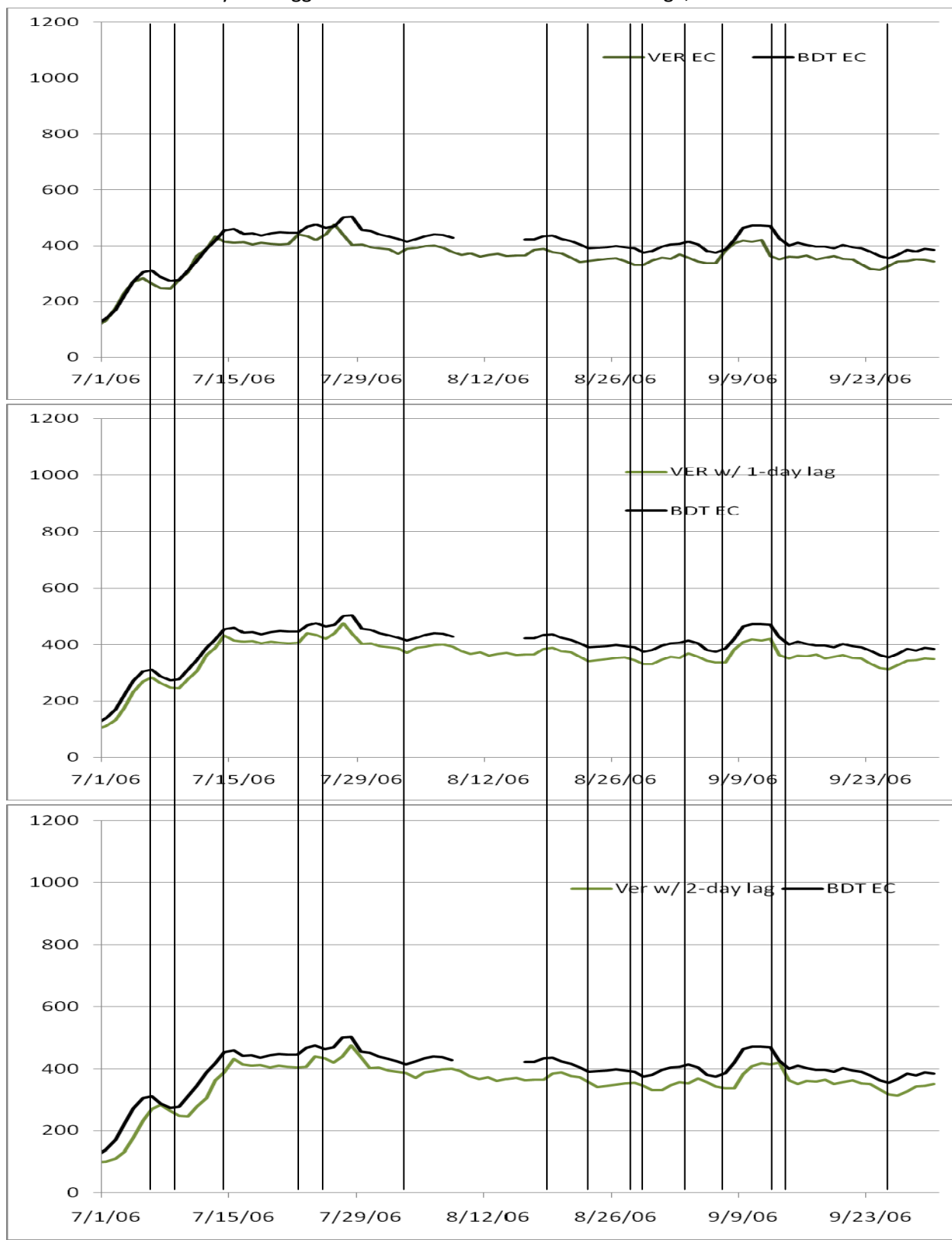
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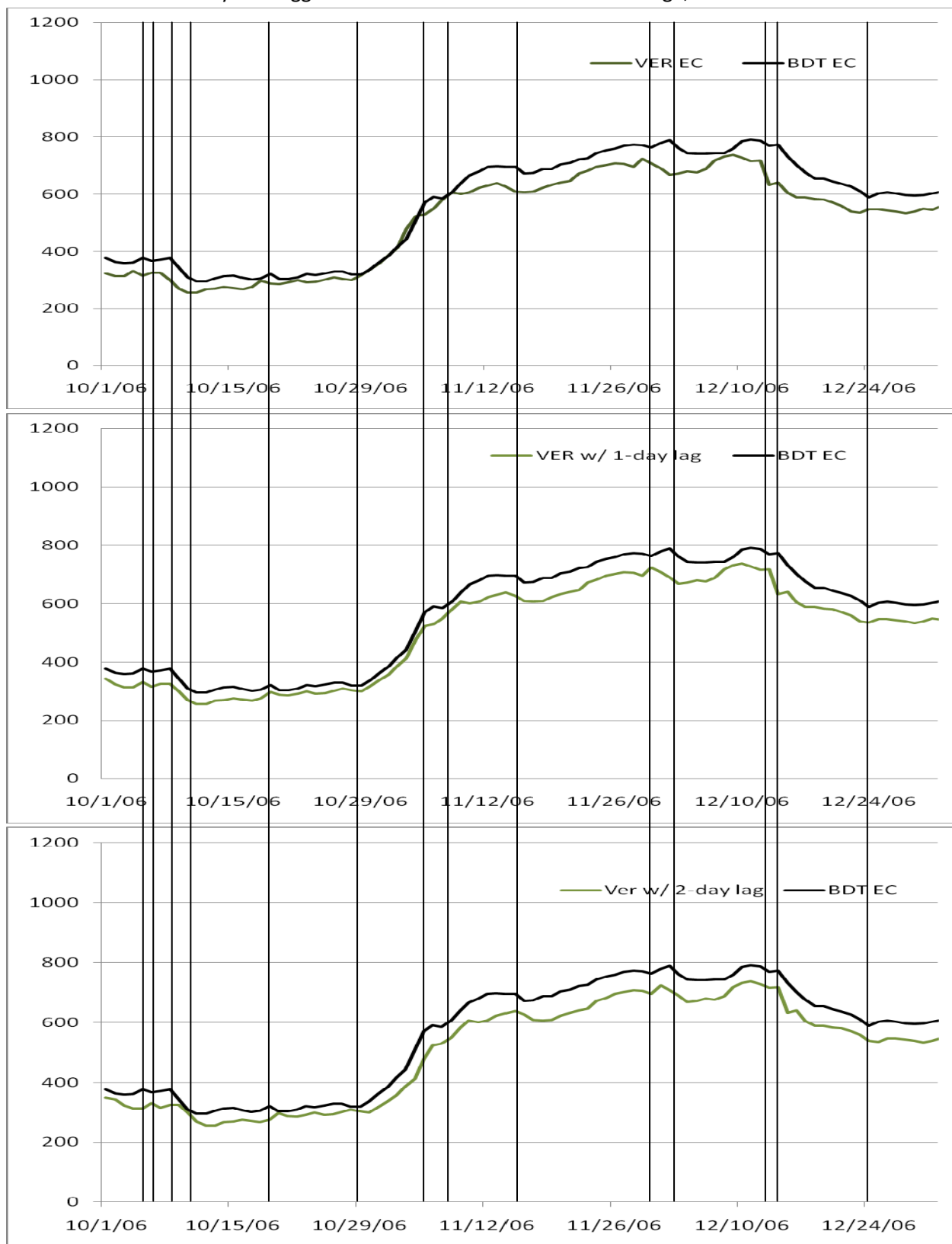
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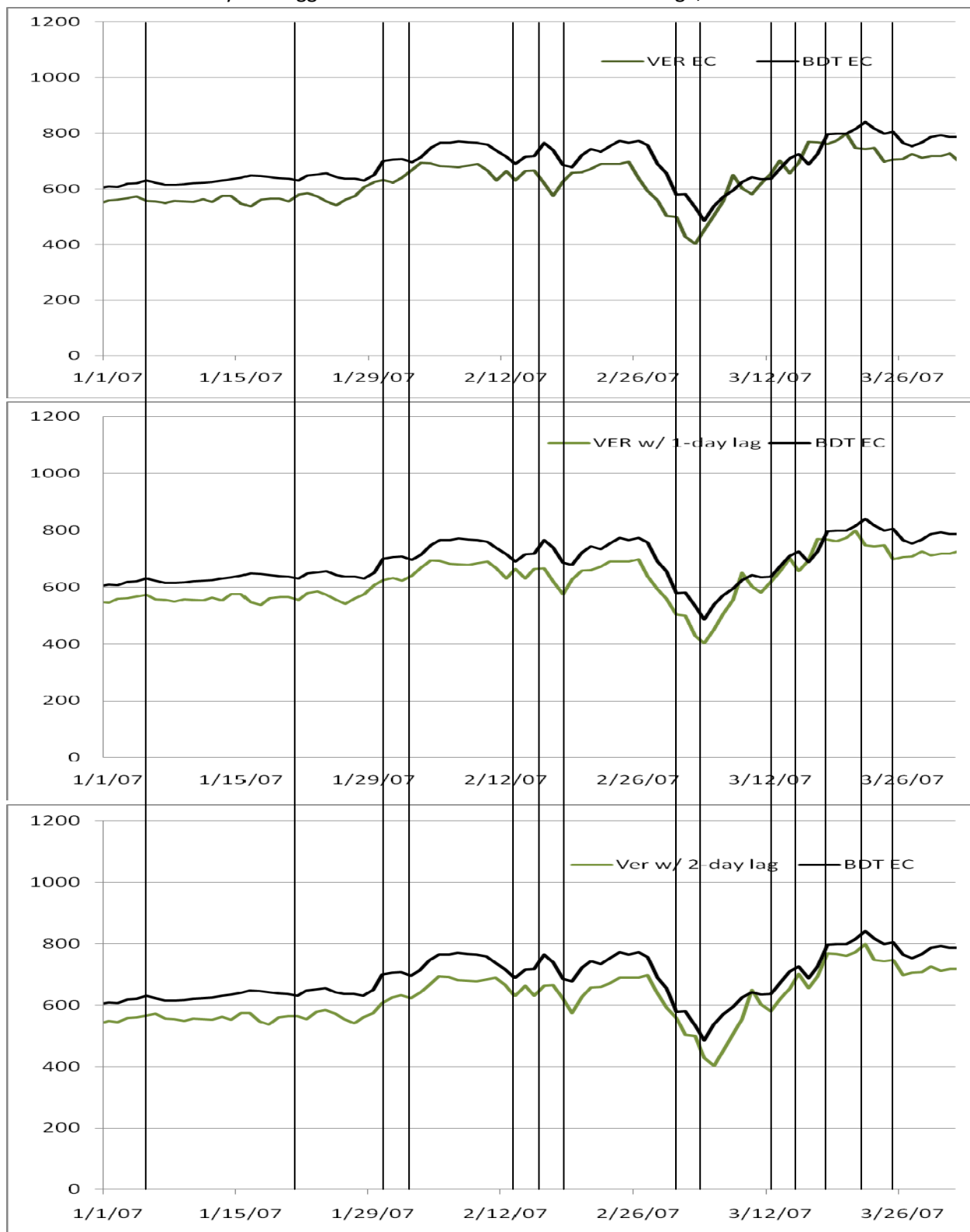
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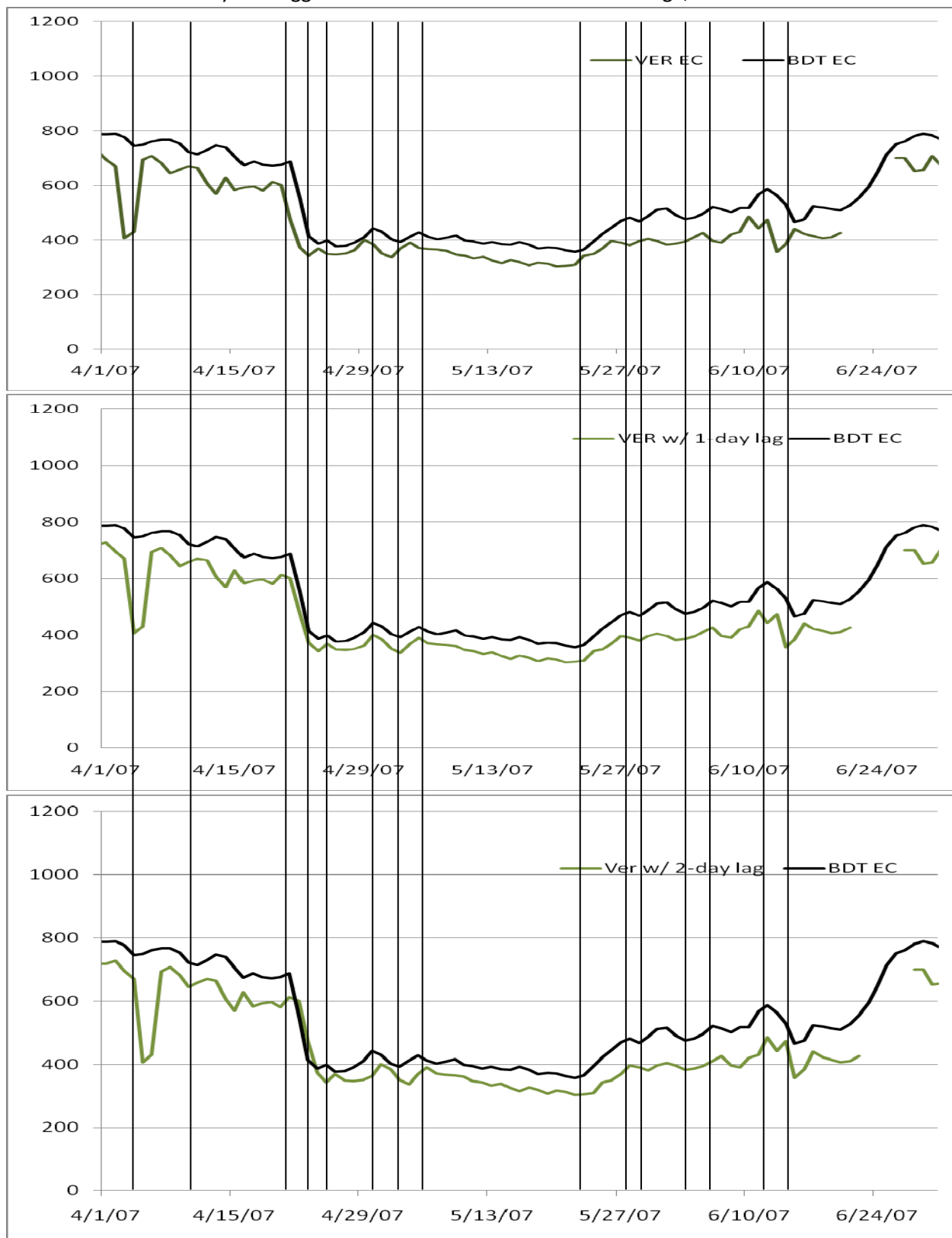
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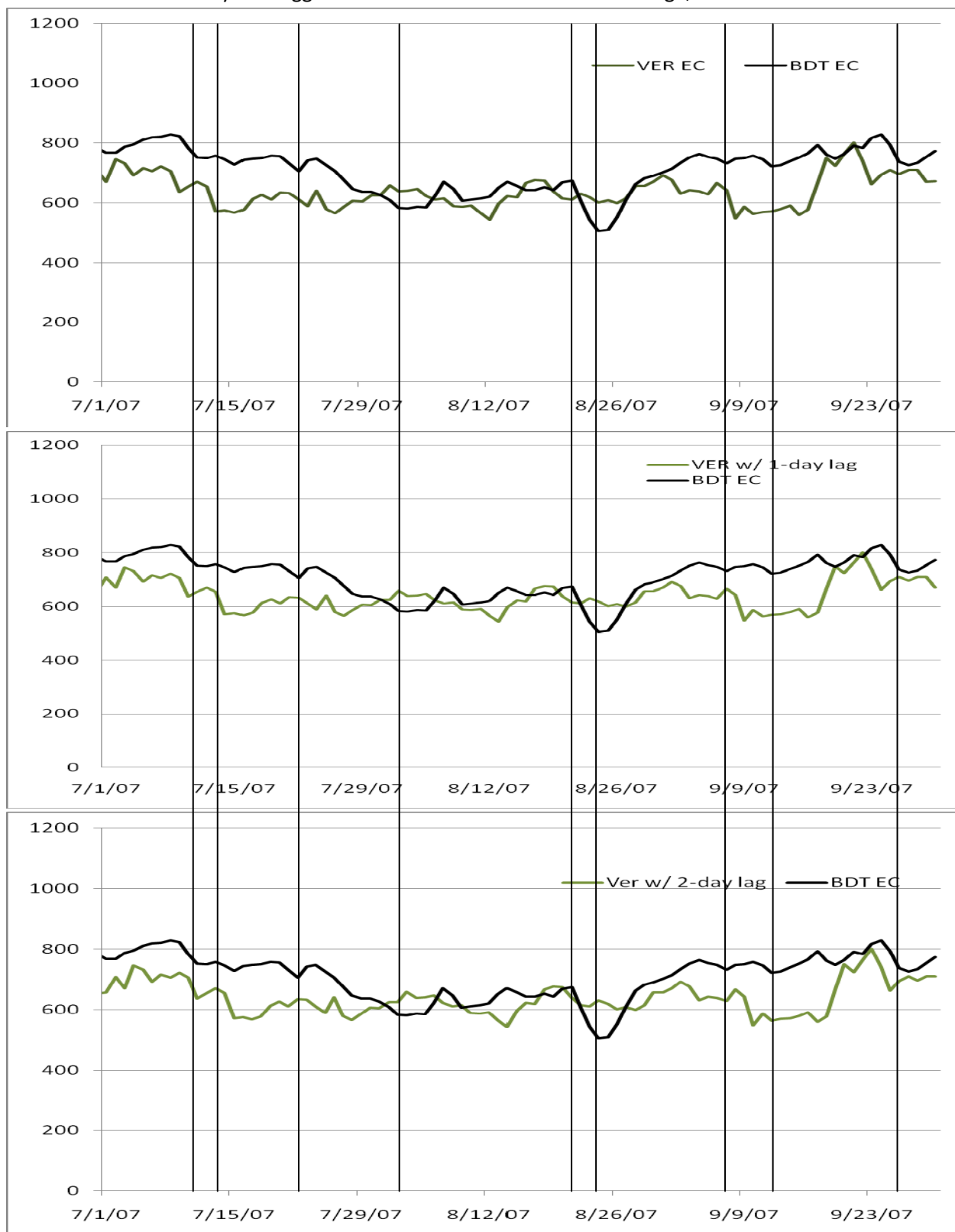
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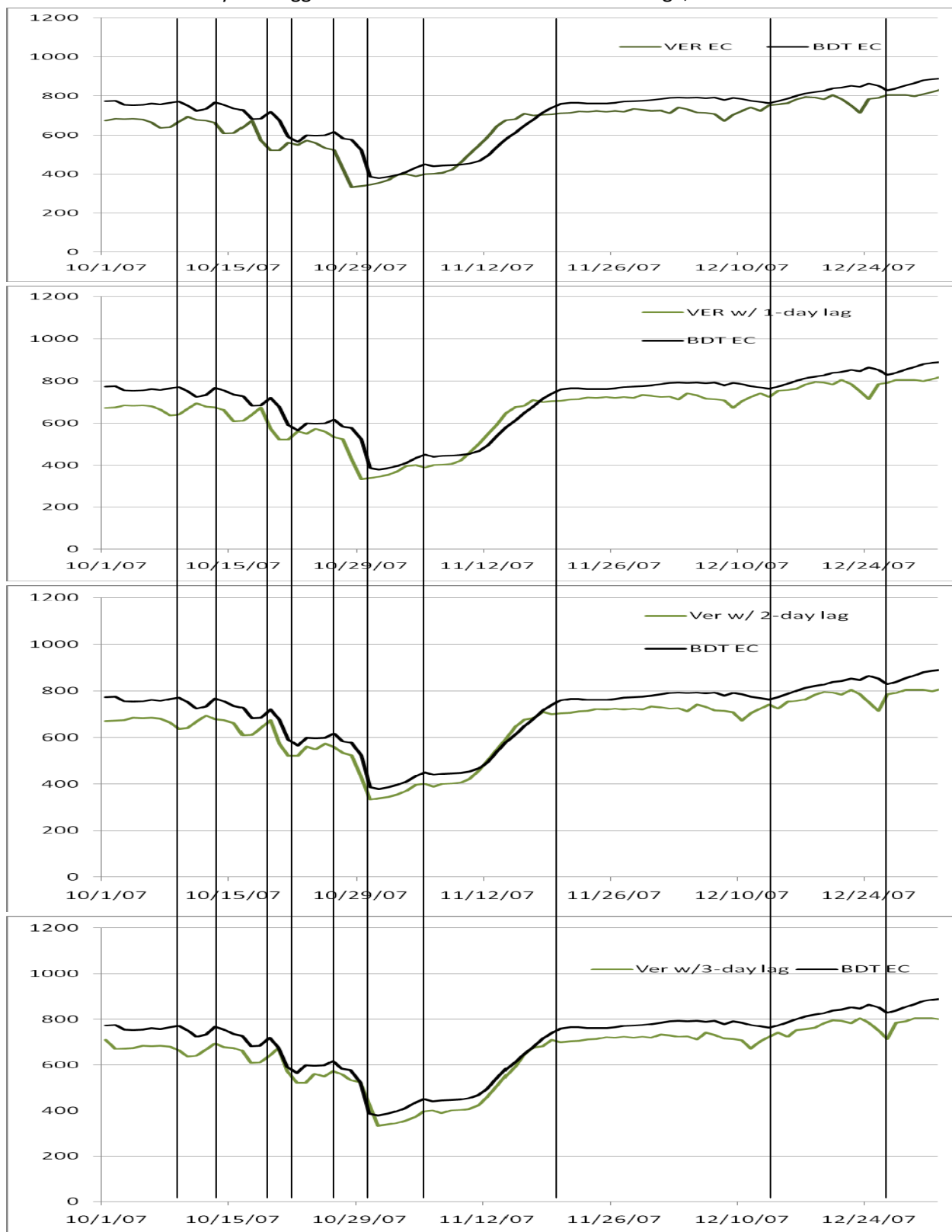
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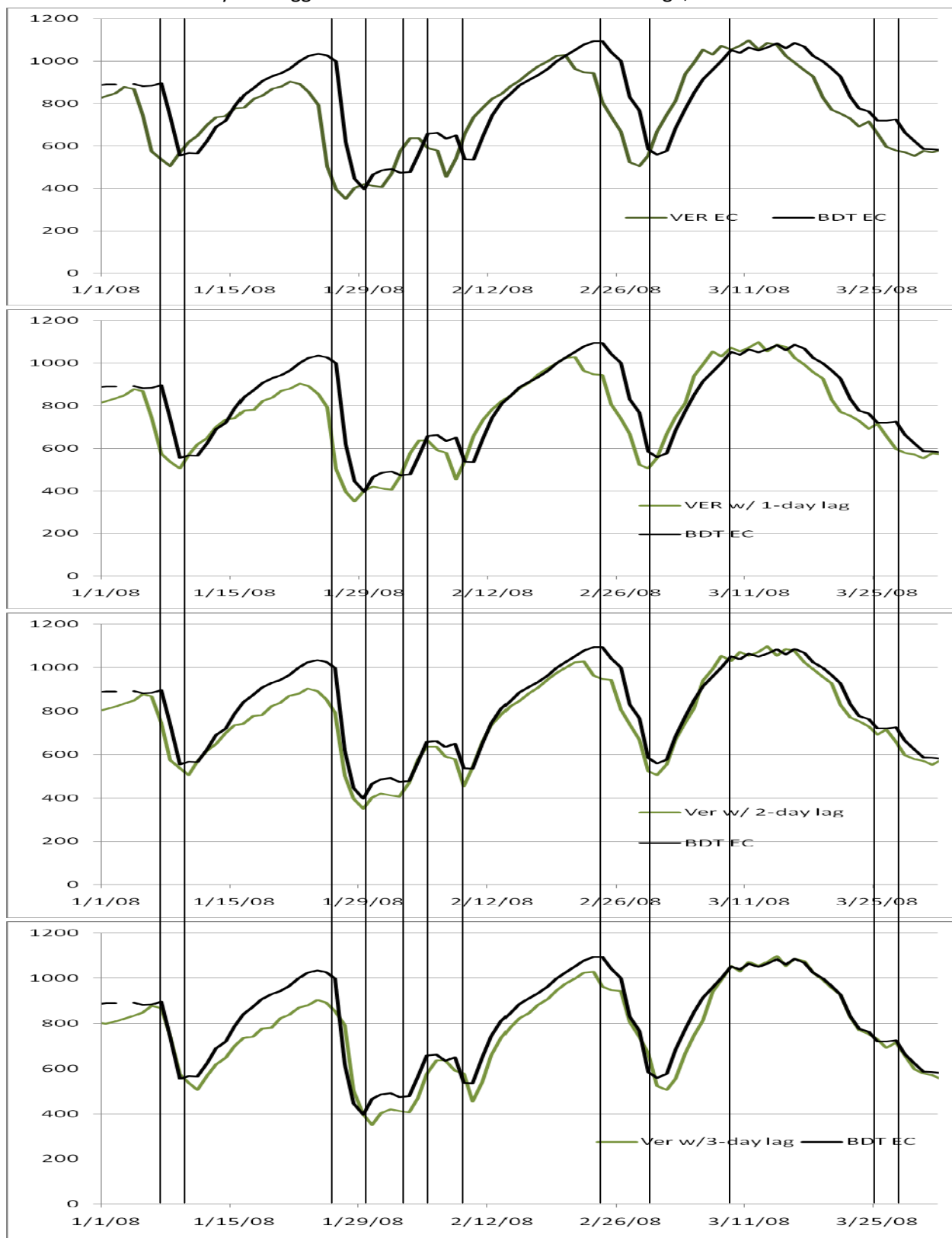
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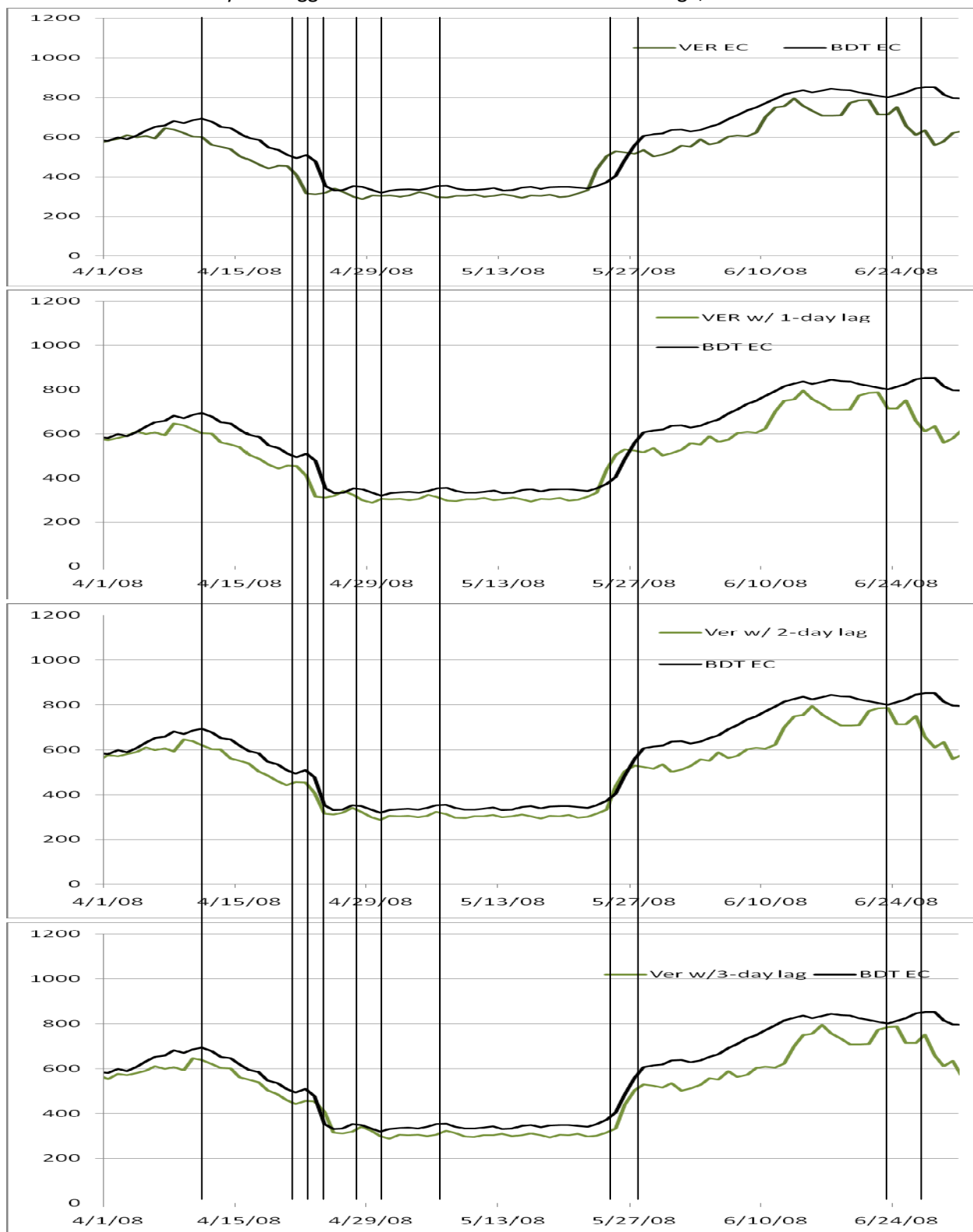
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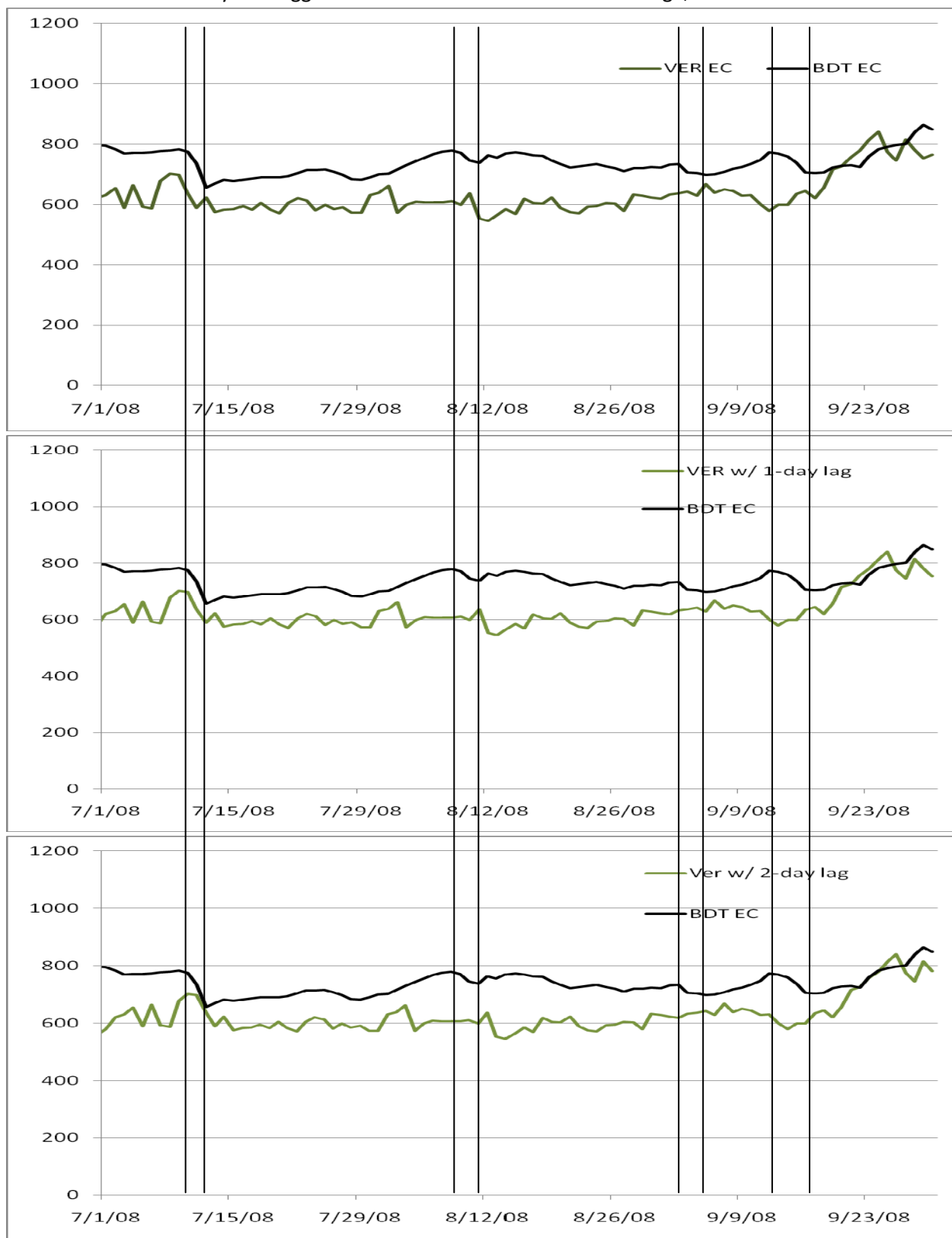
Time Series Plots of daily and lagged EC at Vernalis and EC at Brandt Bridge, 3rd Quarter WY 2007

Time Series Plots of daily and lagged EC at Vernalis and EC at Brandt Bridge, 4th Quarter WY 2007

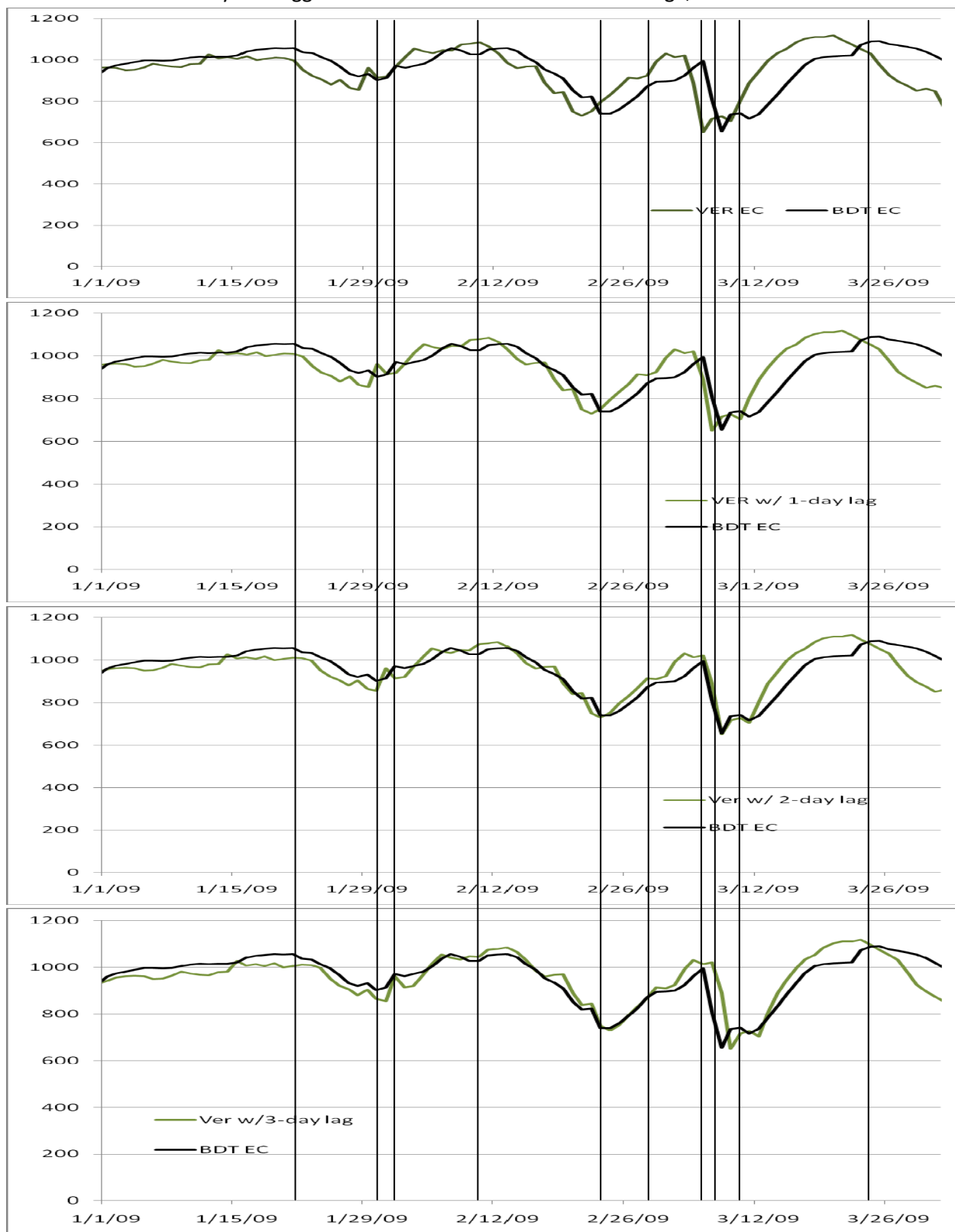
Time Series Plots of daily and lagged EC at Vernalis and EC at Brandt Bridge, 1st Quarter WY 2008

Time Series Plots of daily and lagged EC at Vernalis and EC at Brandt Bridge, 2nd Quarter WY 2008

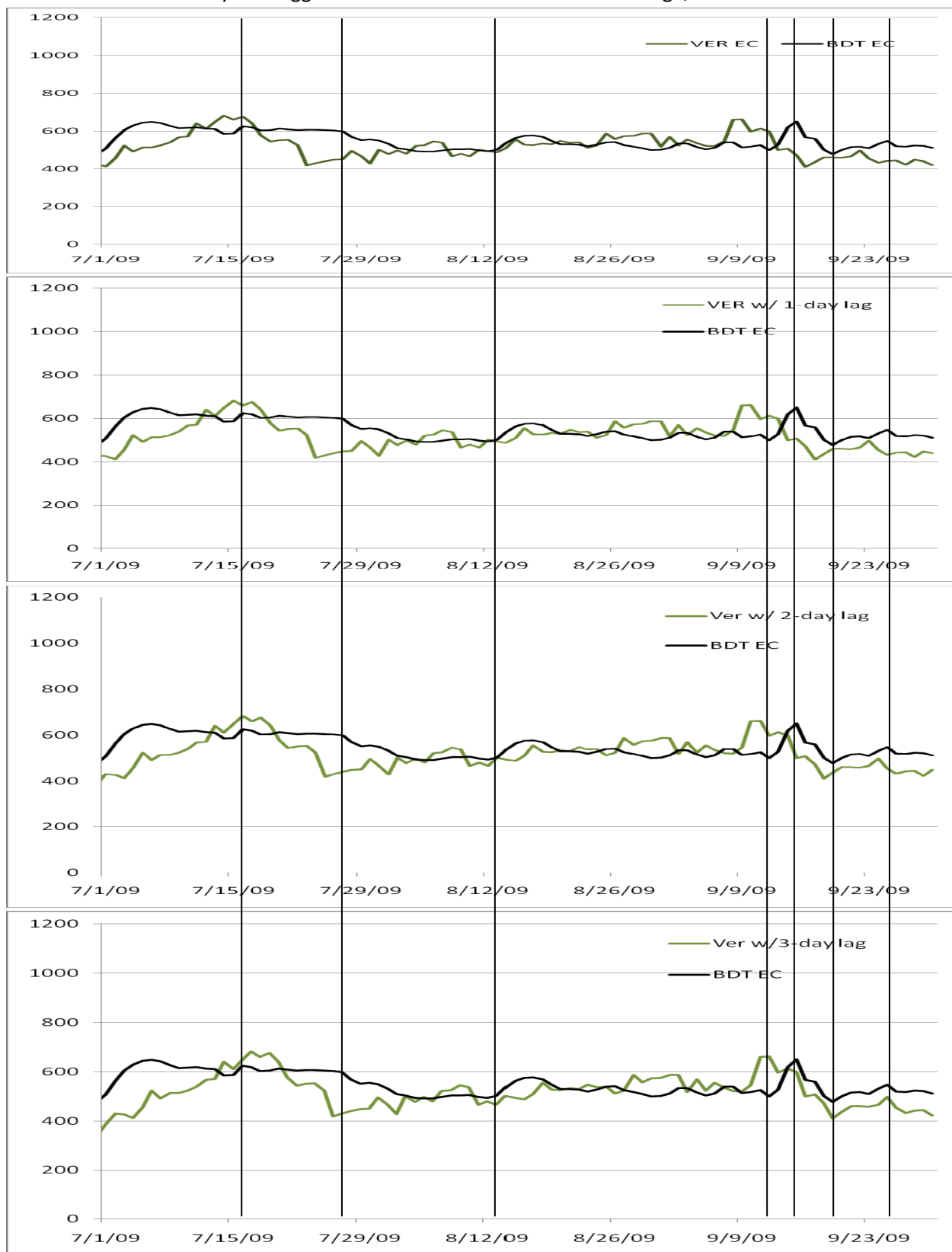
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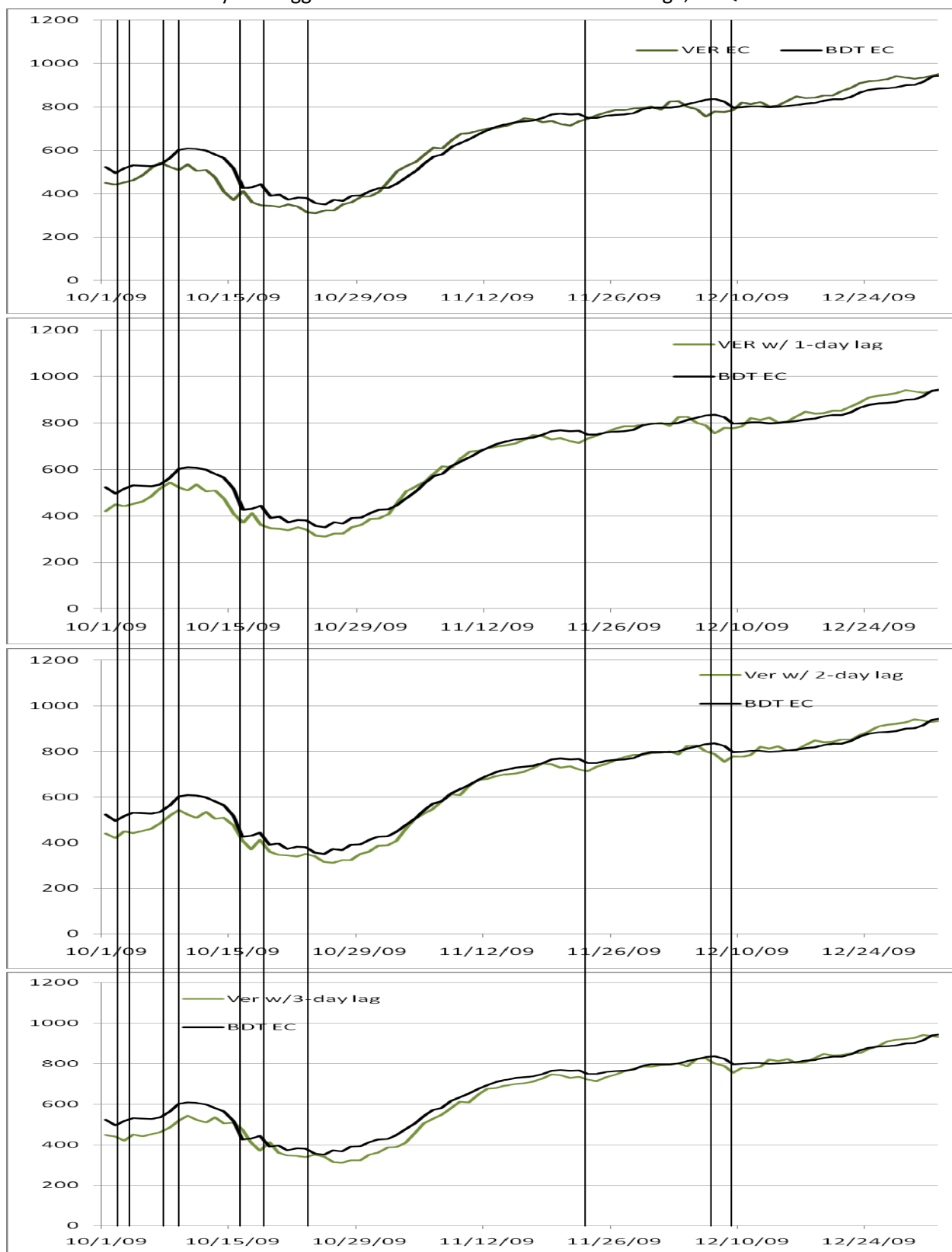
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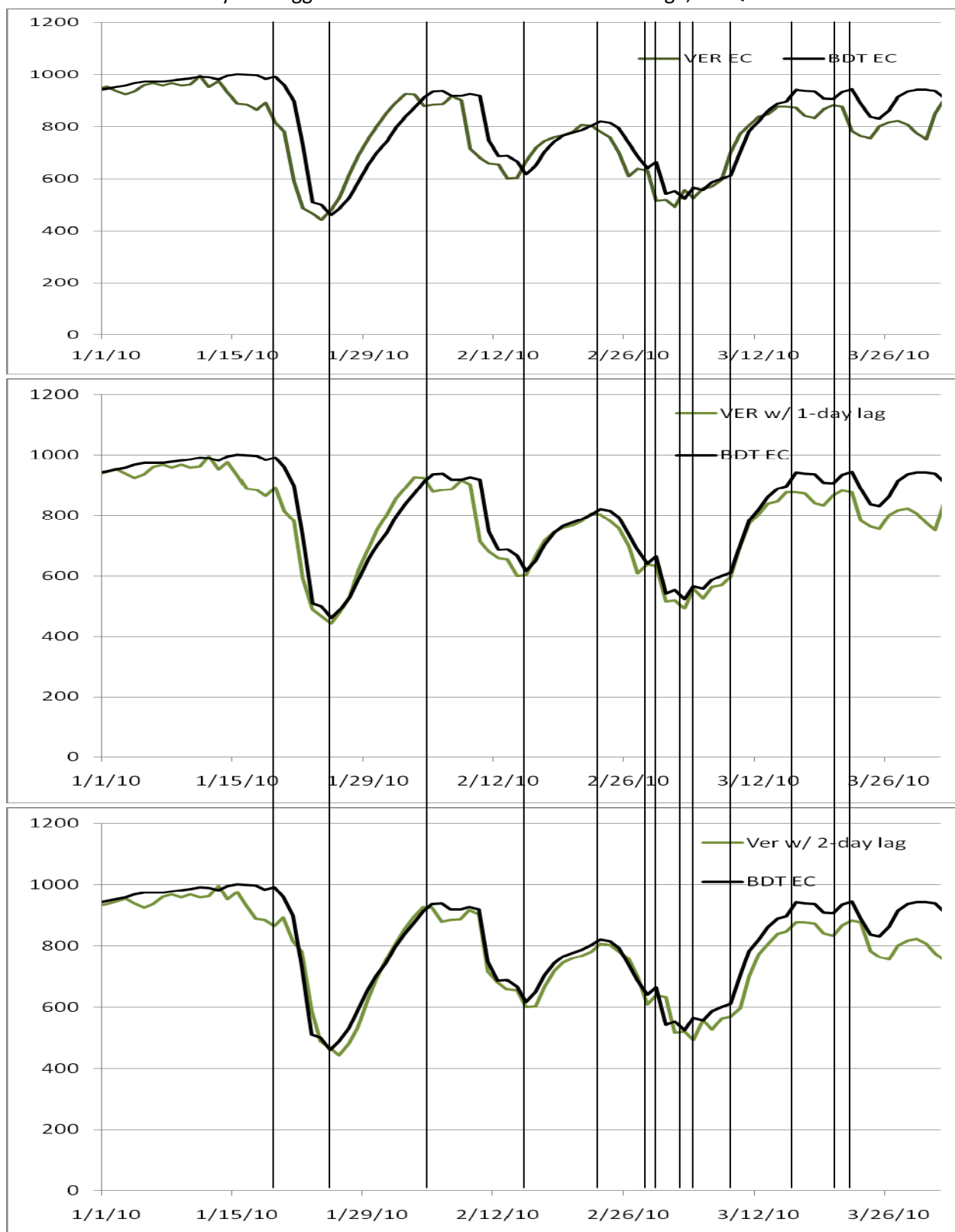
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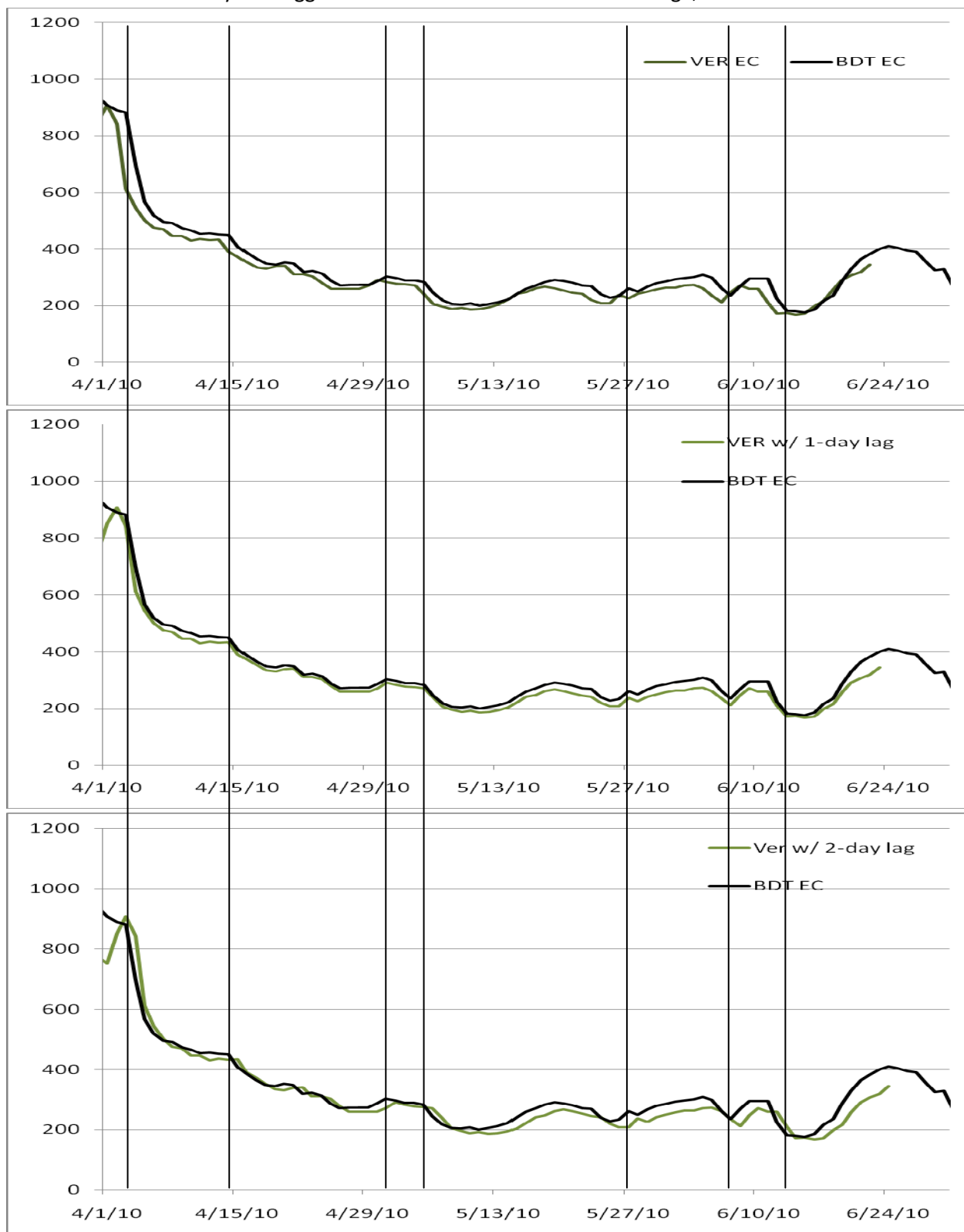
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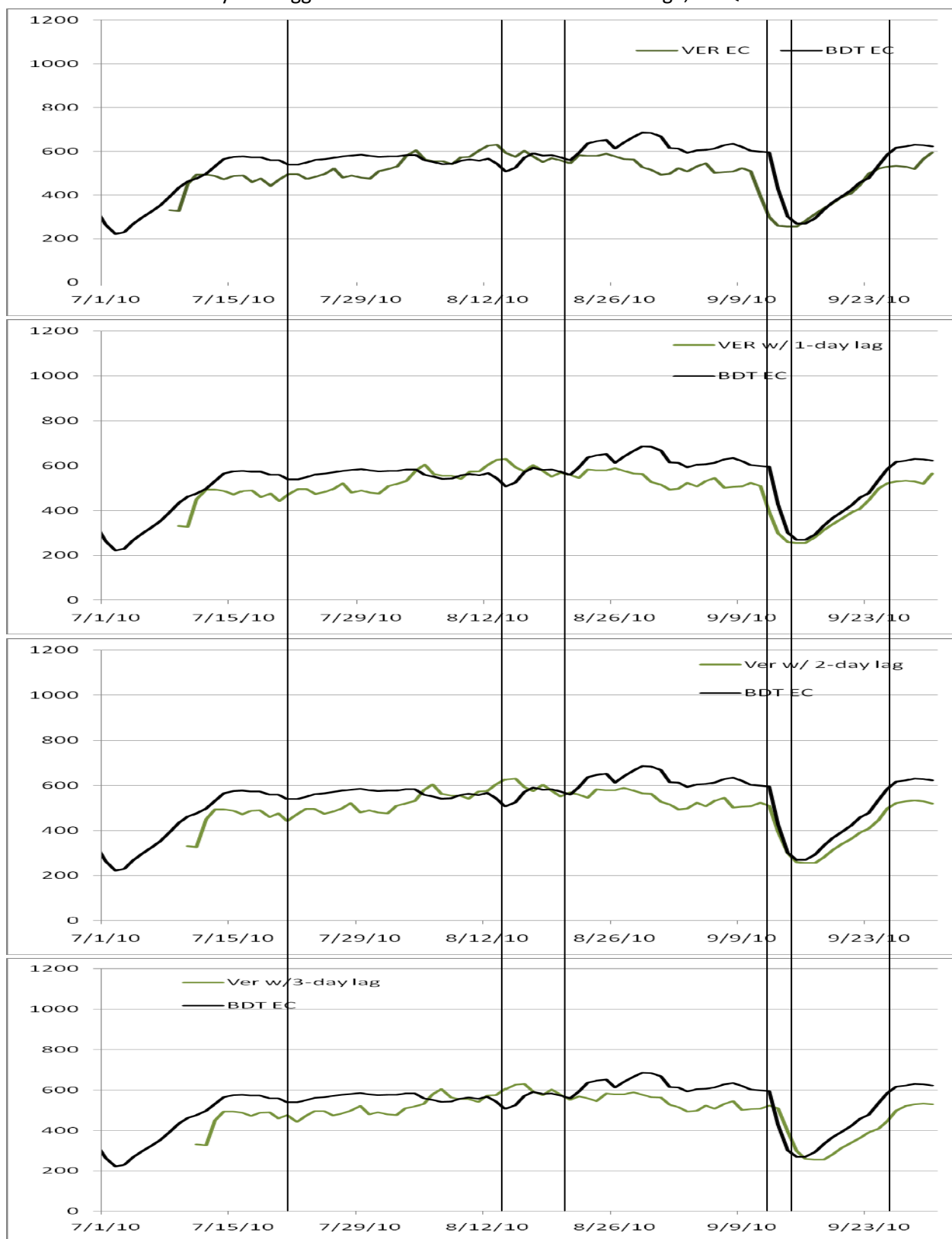
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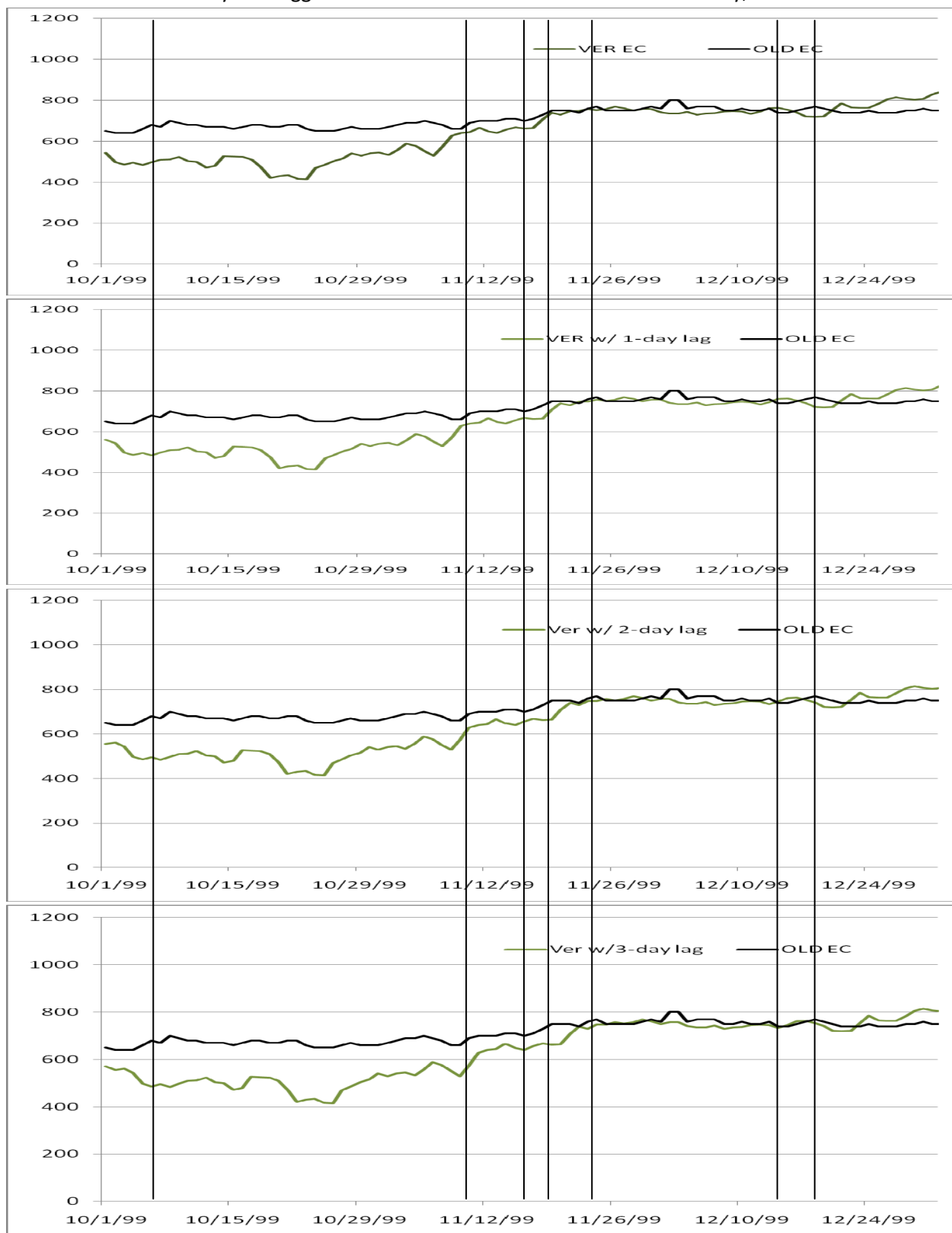
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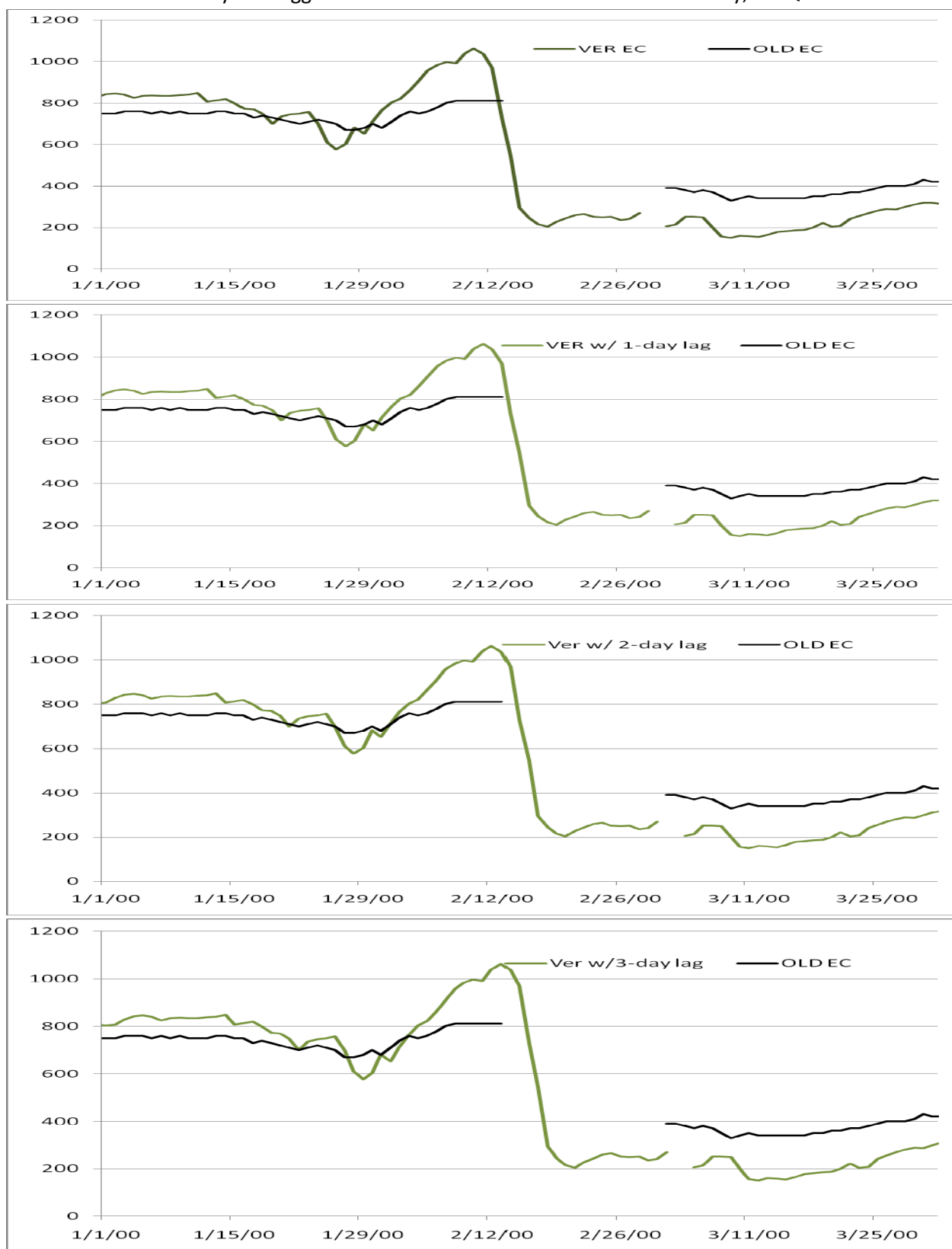
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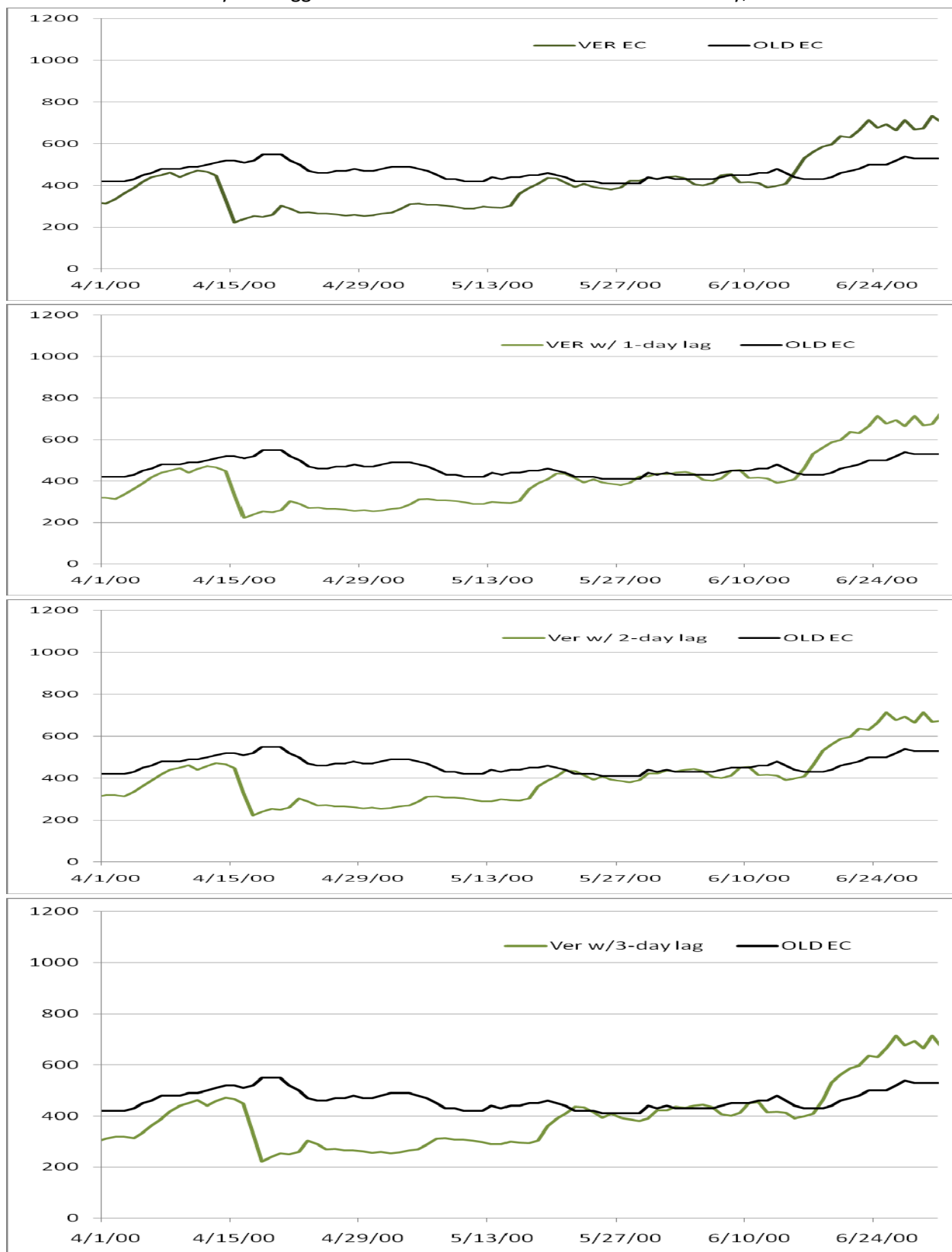
Time Series Plots of daily and lagged EC at Vernalis and EC at Brandt Bridge, 2nd Quarter WY 2010

Time Series Plots of daily and lagged EC at Vernalis and EC at Brandt Bridge, 3rd Quarter WY 2010

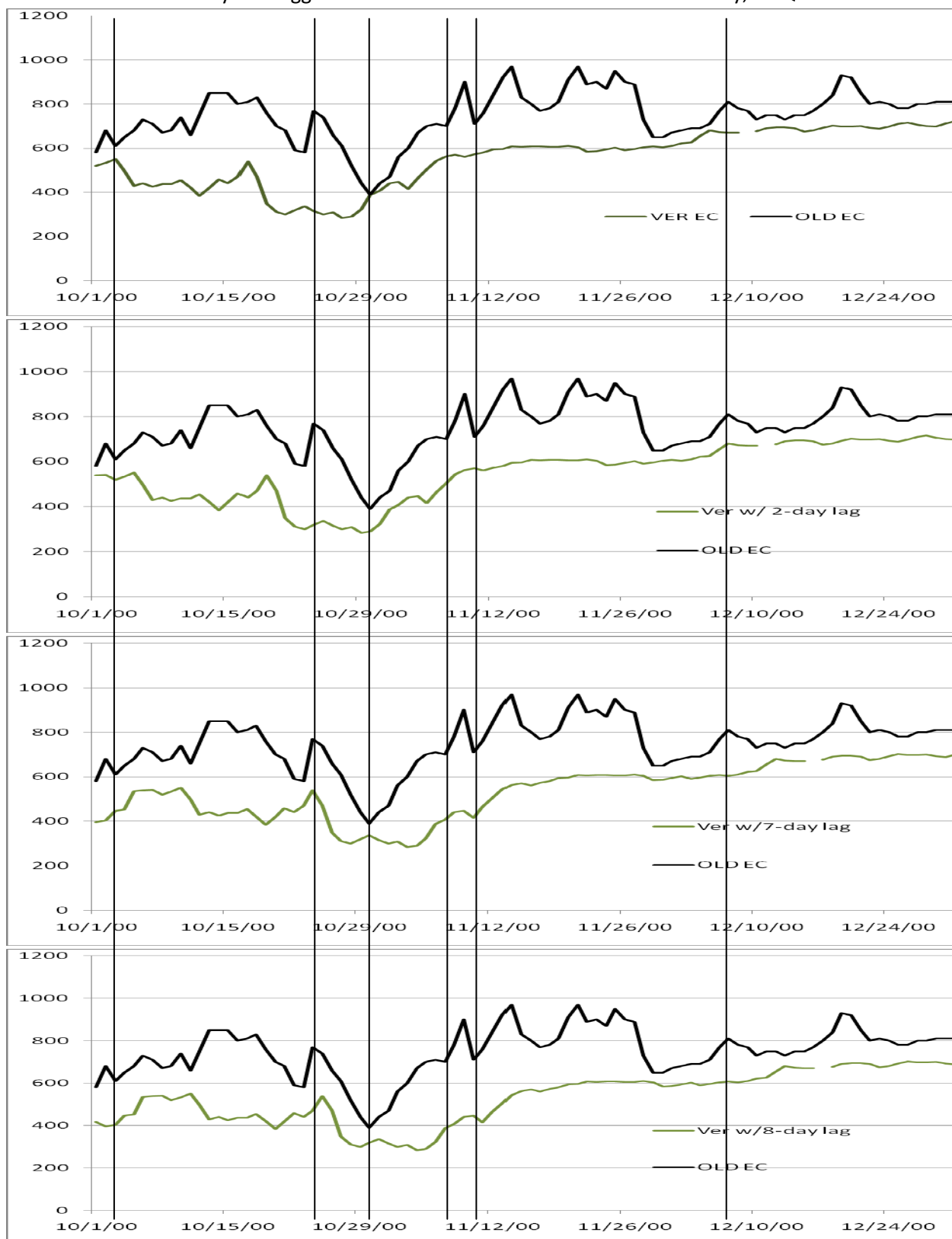
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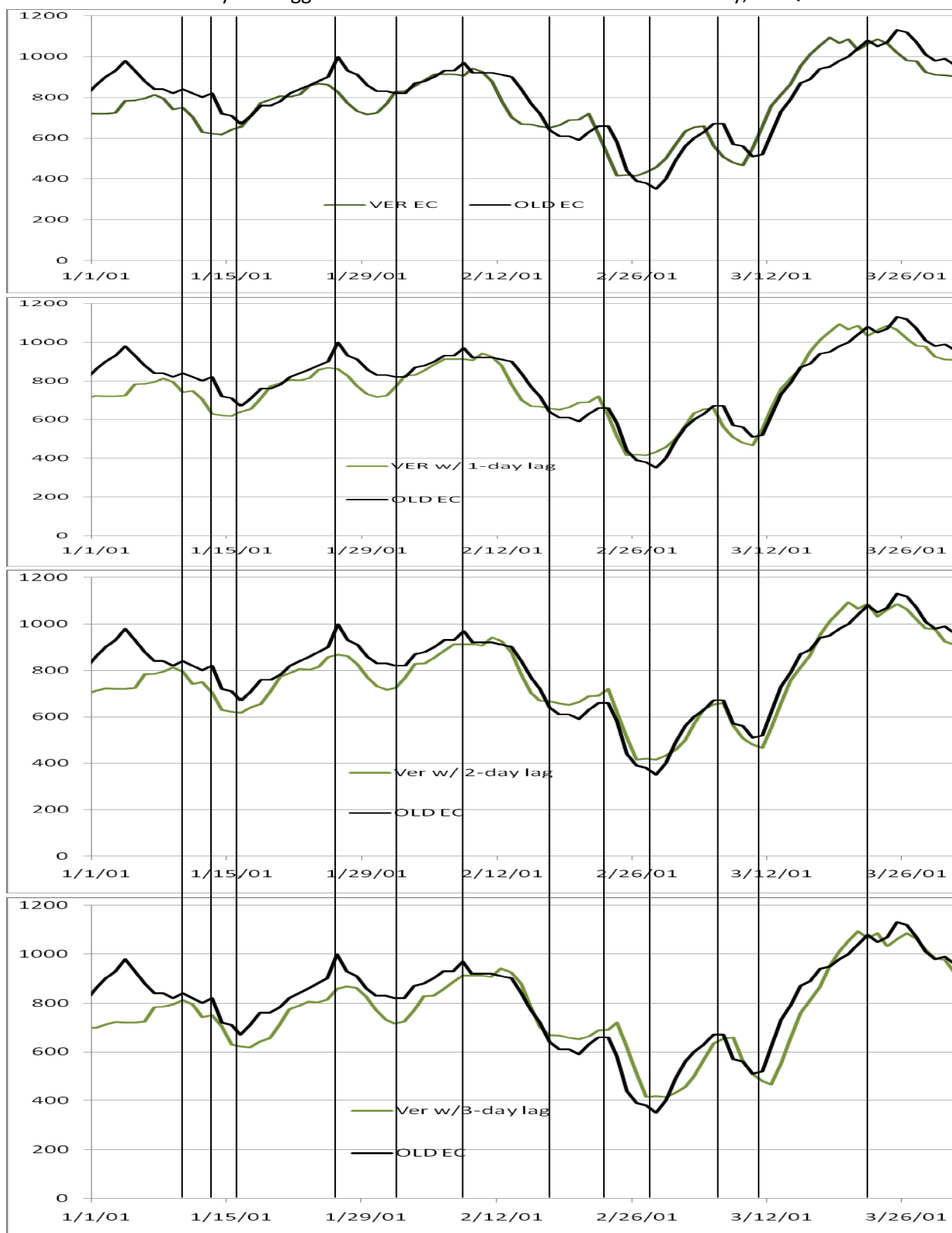
Time Series Plots of daily and lagged EC at Vernalis and EC at Old River near Tracy, 1st Quarter WY 2000

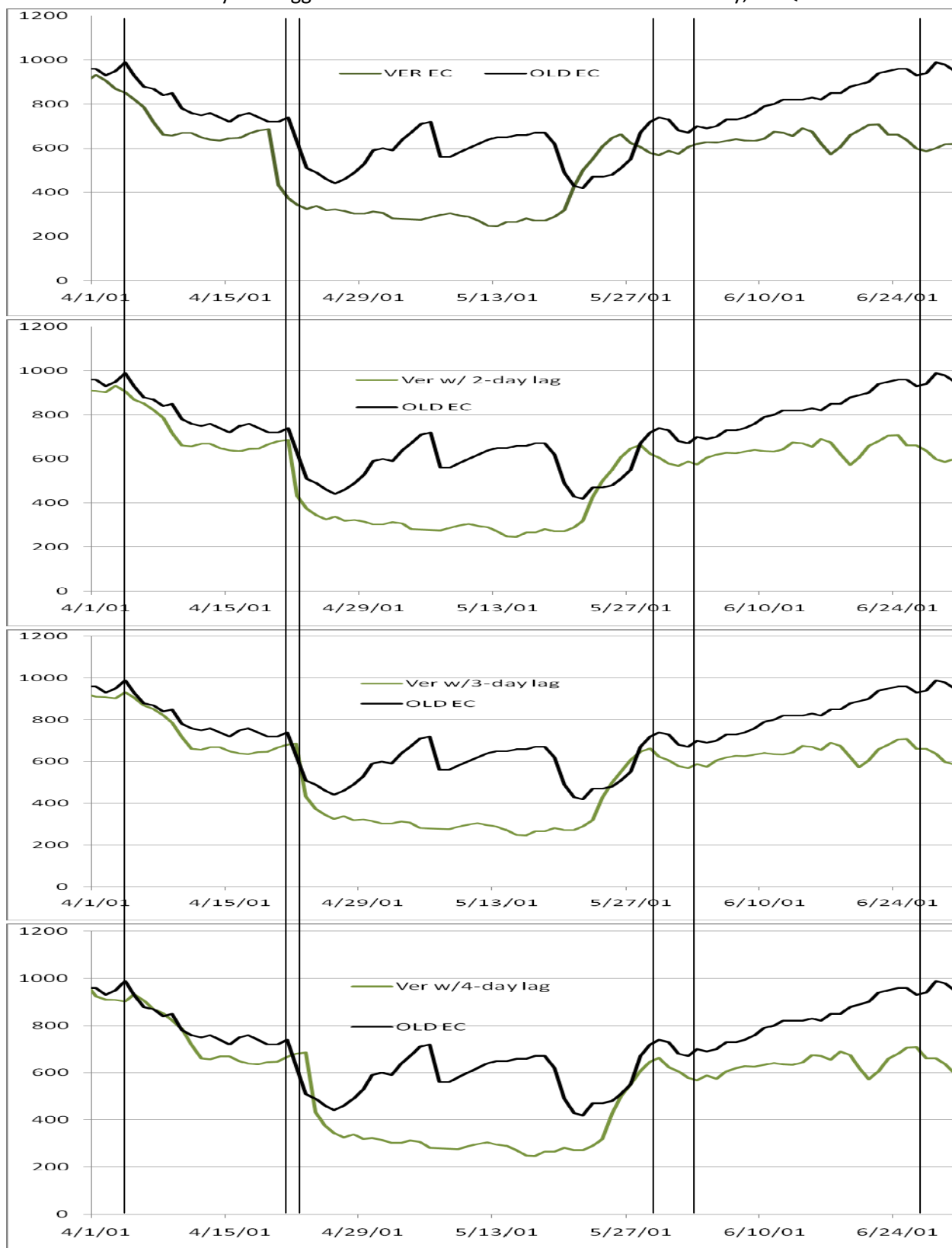
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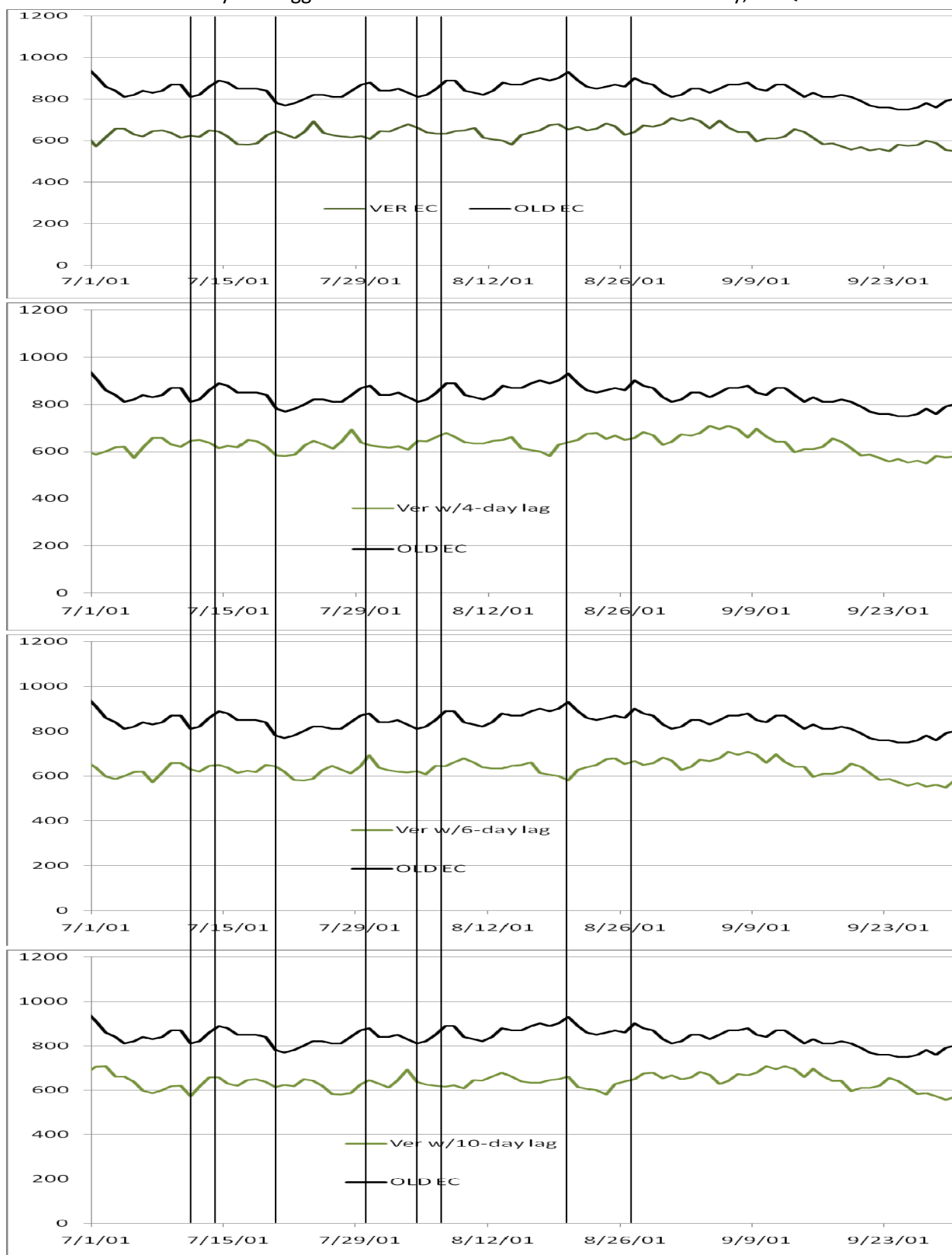
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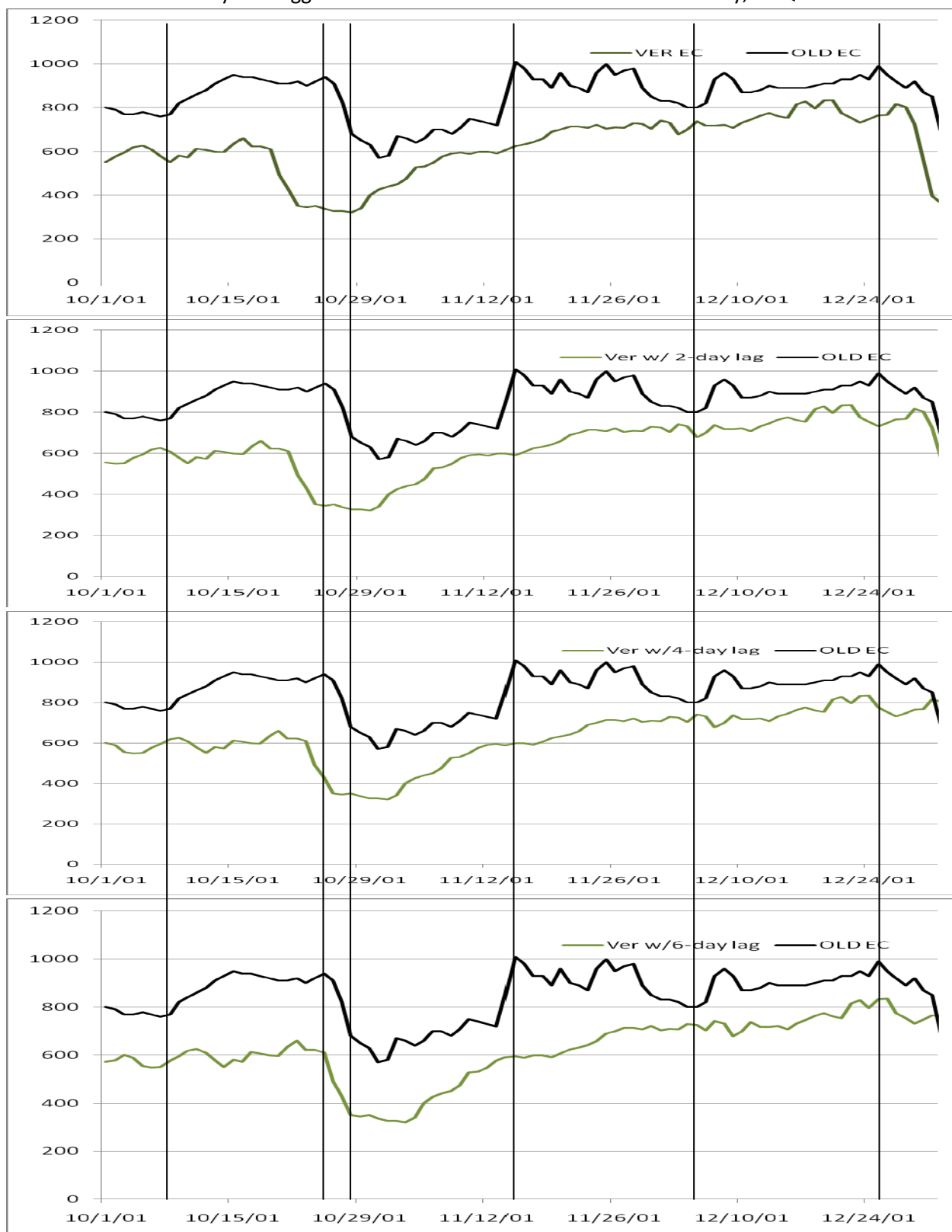
Time Series Plots of daily and lagged EC at Vernalis and EC at Old River near Tracy, 4th Quarter WY 2000

Time Series Plots of daily and lagged EC at Vernalis and EC at Old River near Tracy, 1st Quarter WY 2001

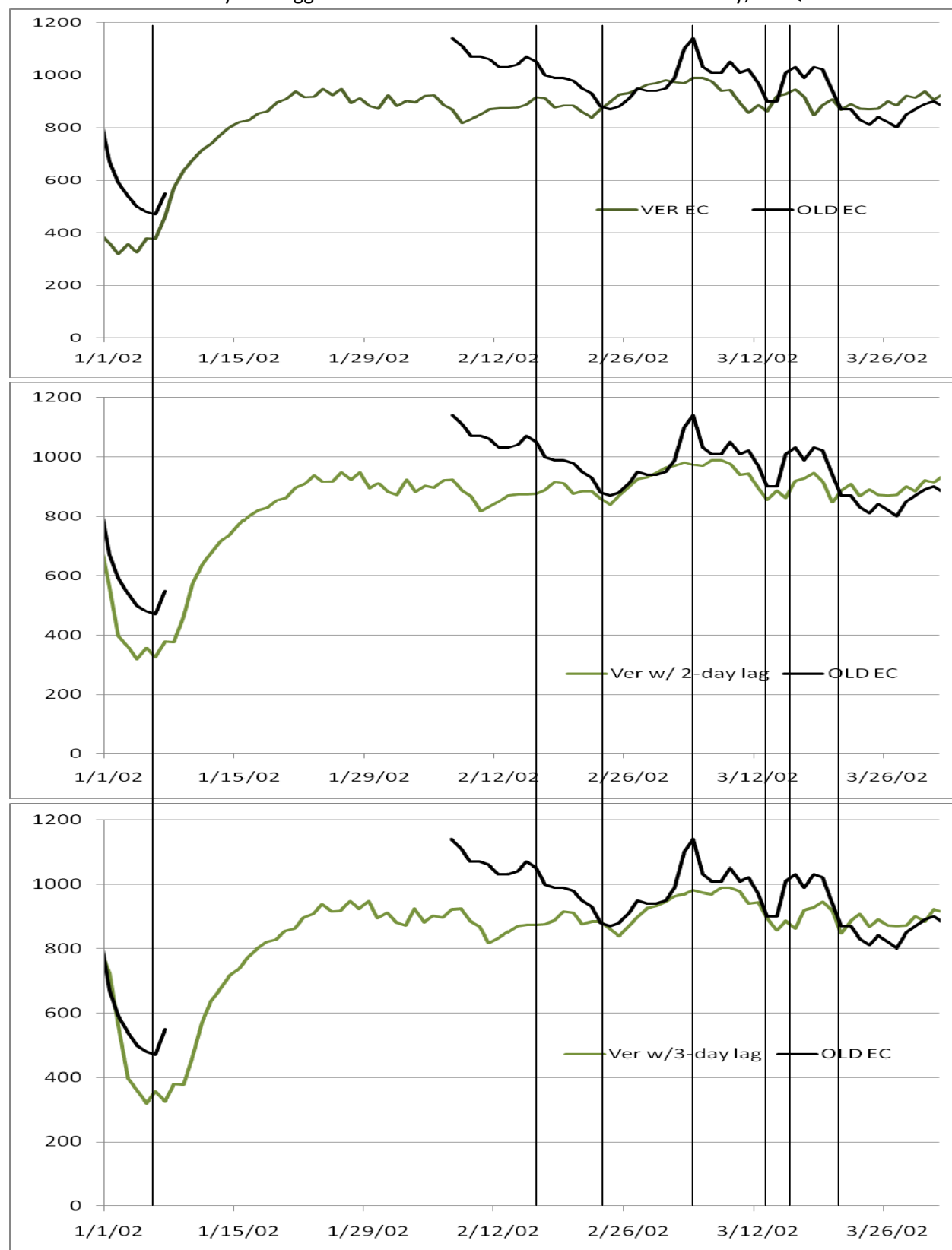
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Time Series Plots of daily and lagged EC at Vernalis and EC at Old River near Tracy, 3rd Quarter WY 2001

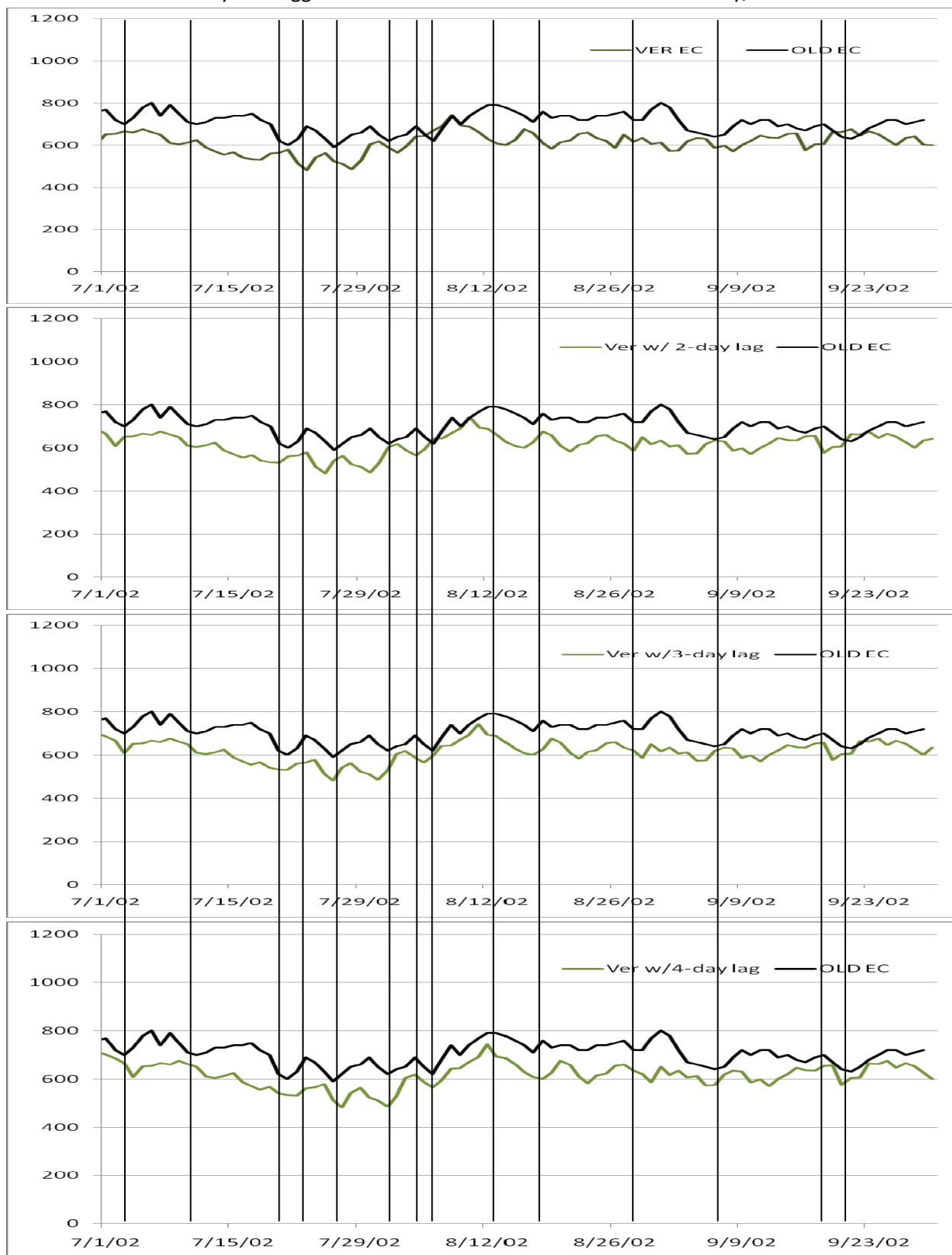
Time Series Plots of daily and lagged EC at Vernalis and EC at Old River near Tracy, 4th Quarter WY 2001

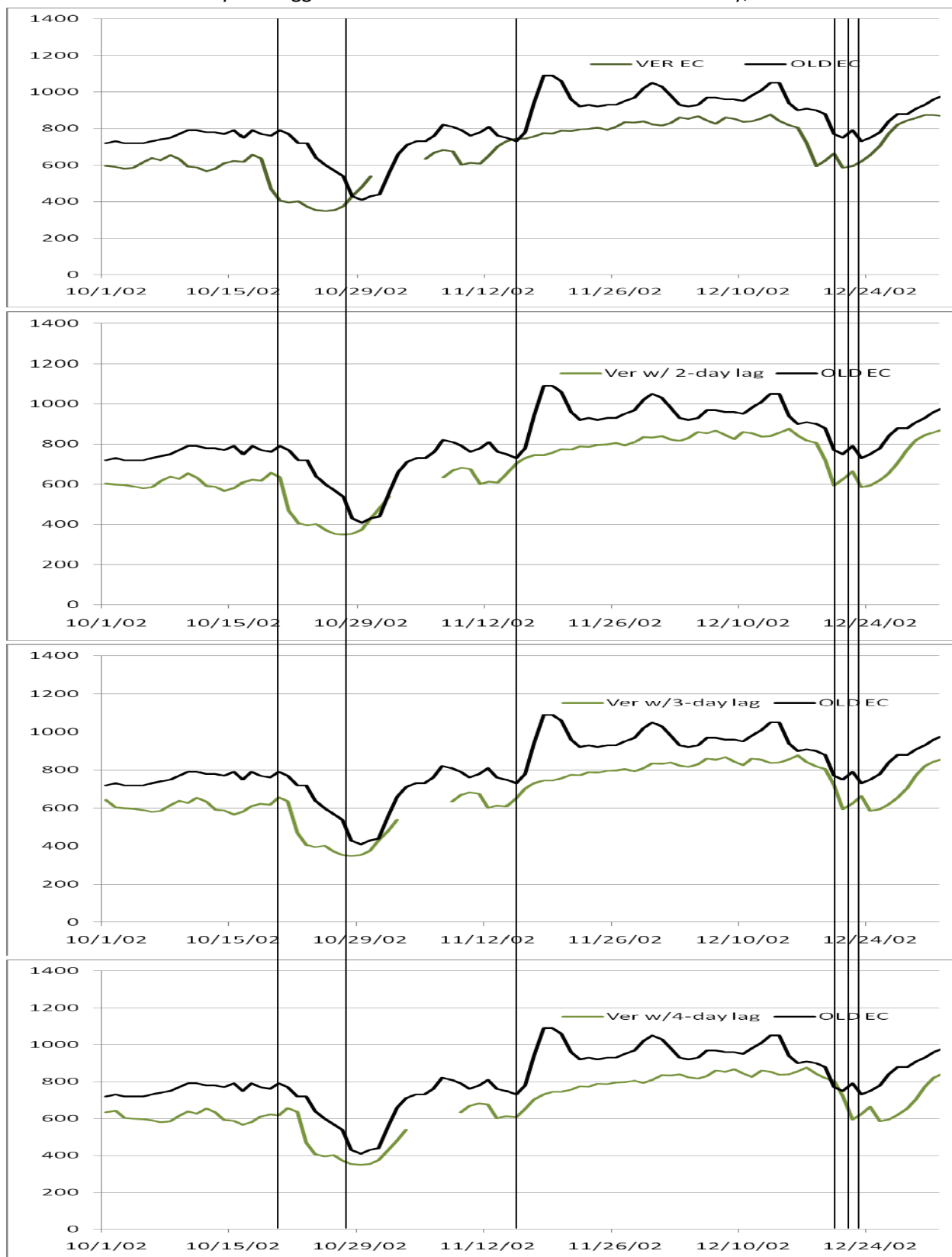
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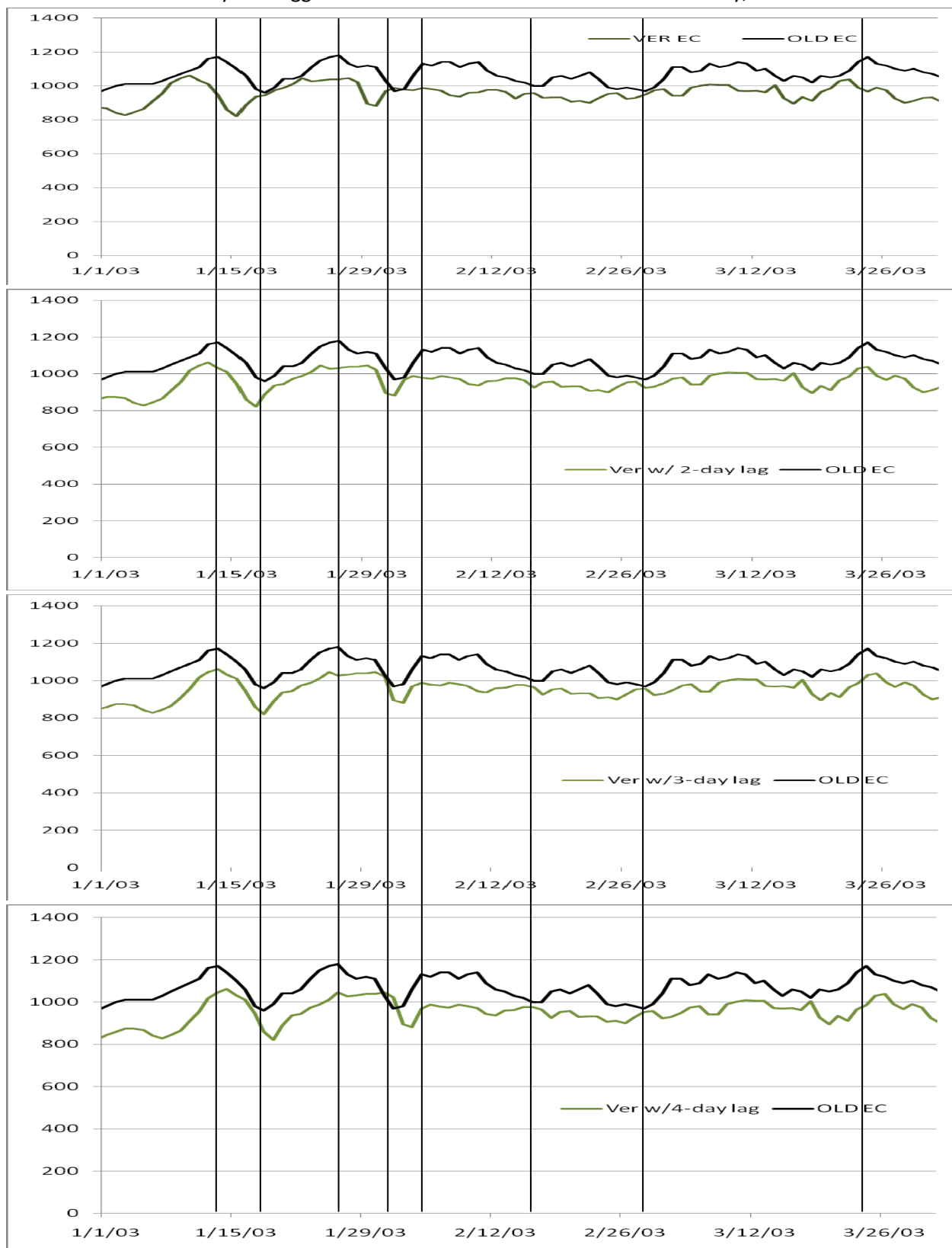
April 2011

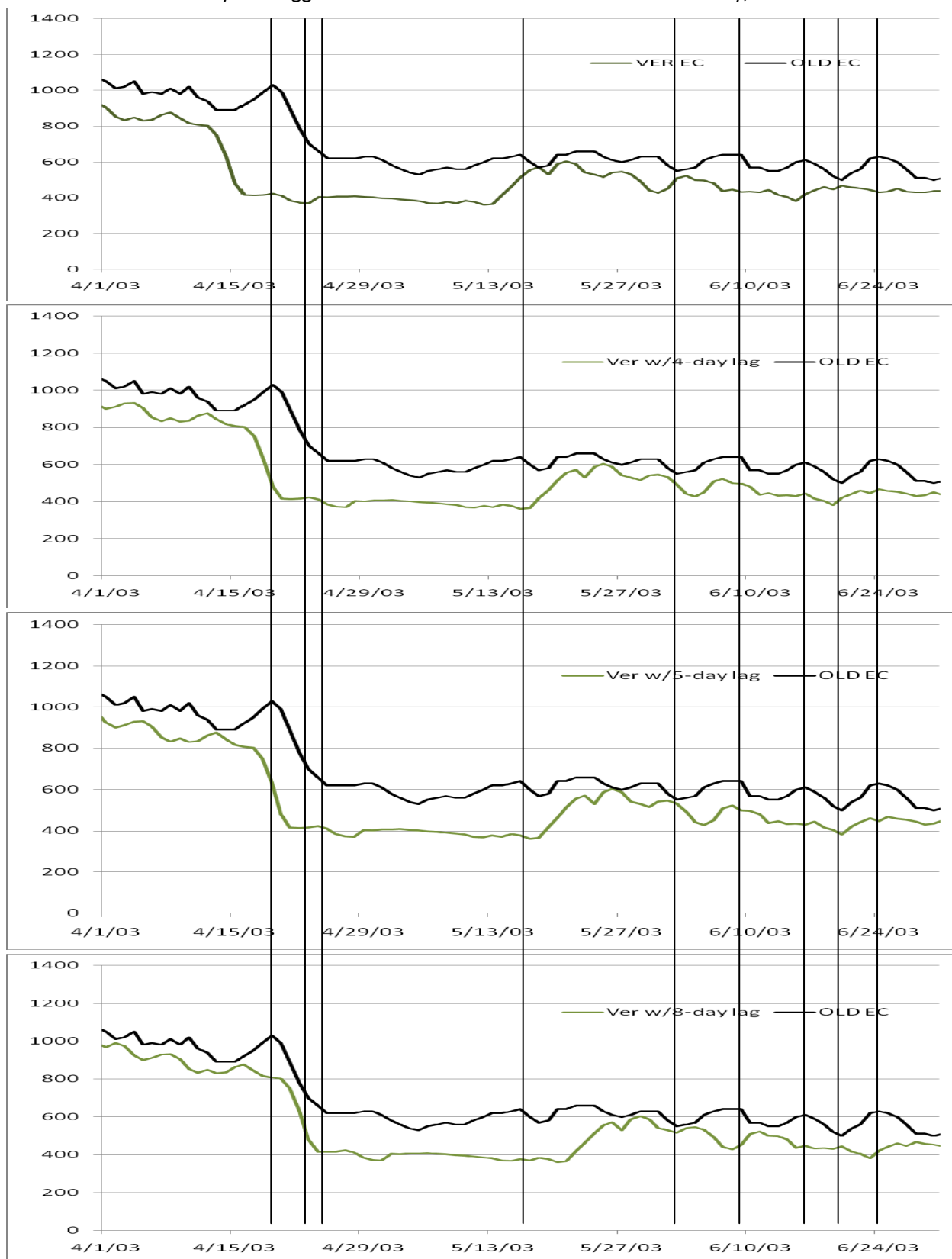
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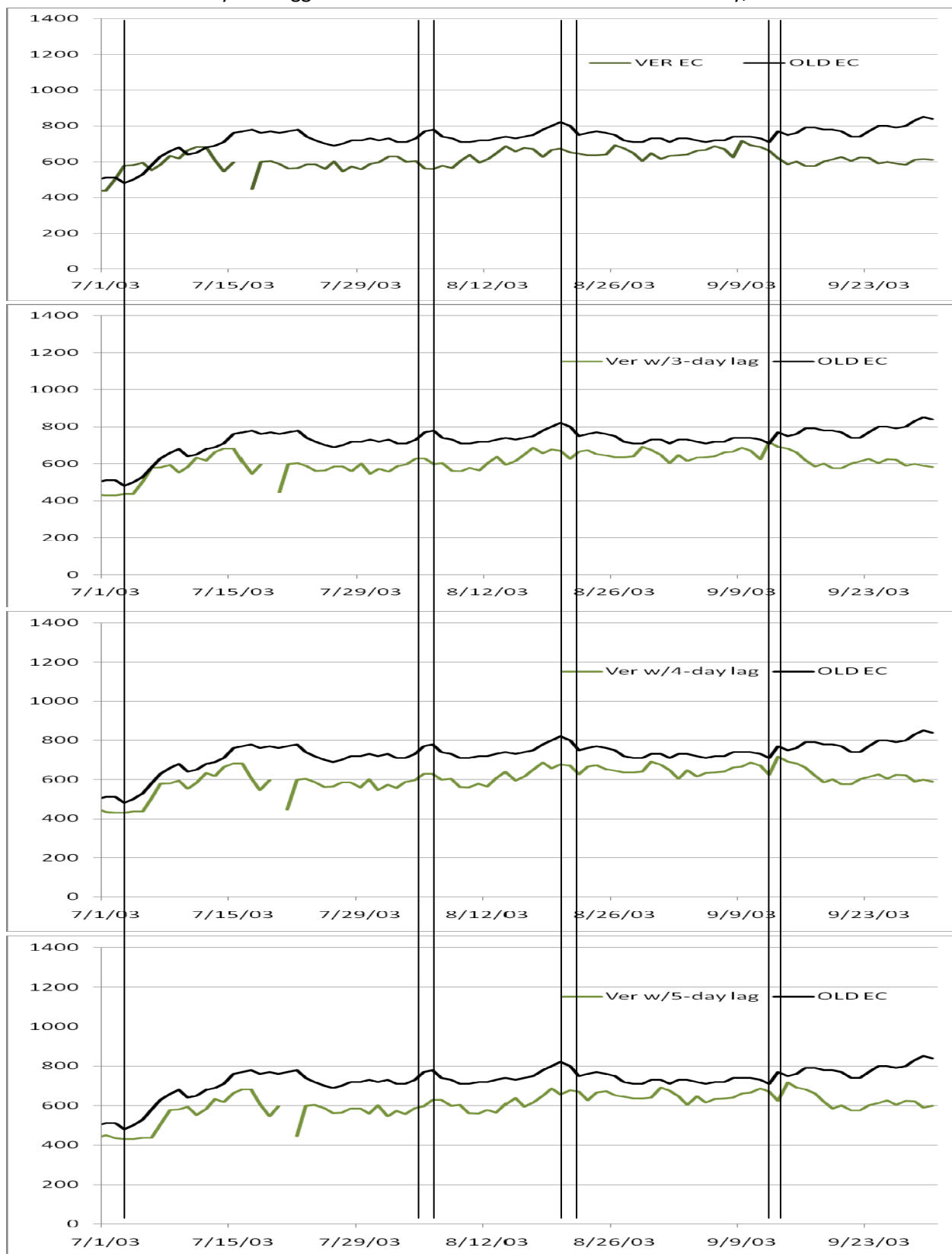
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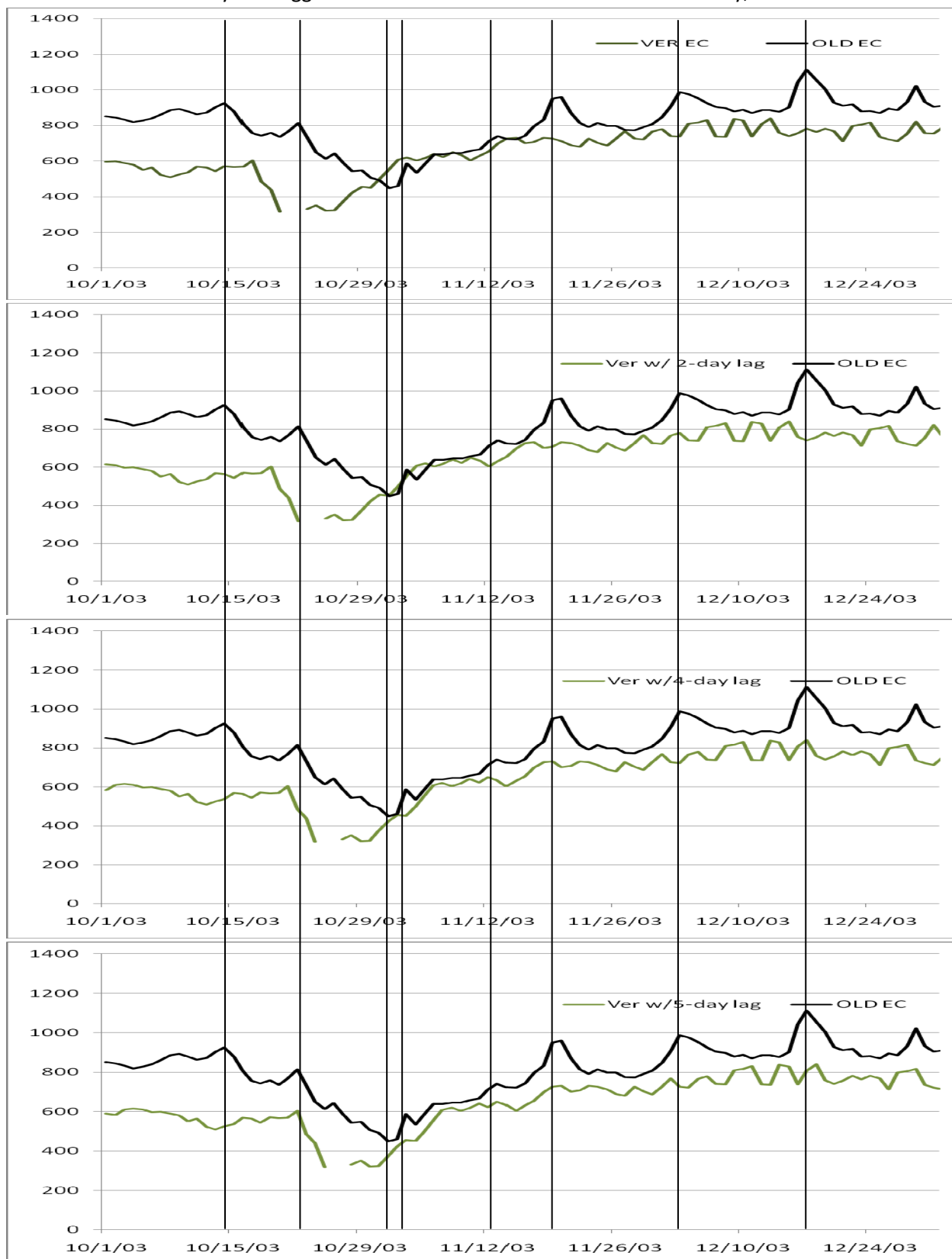
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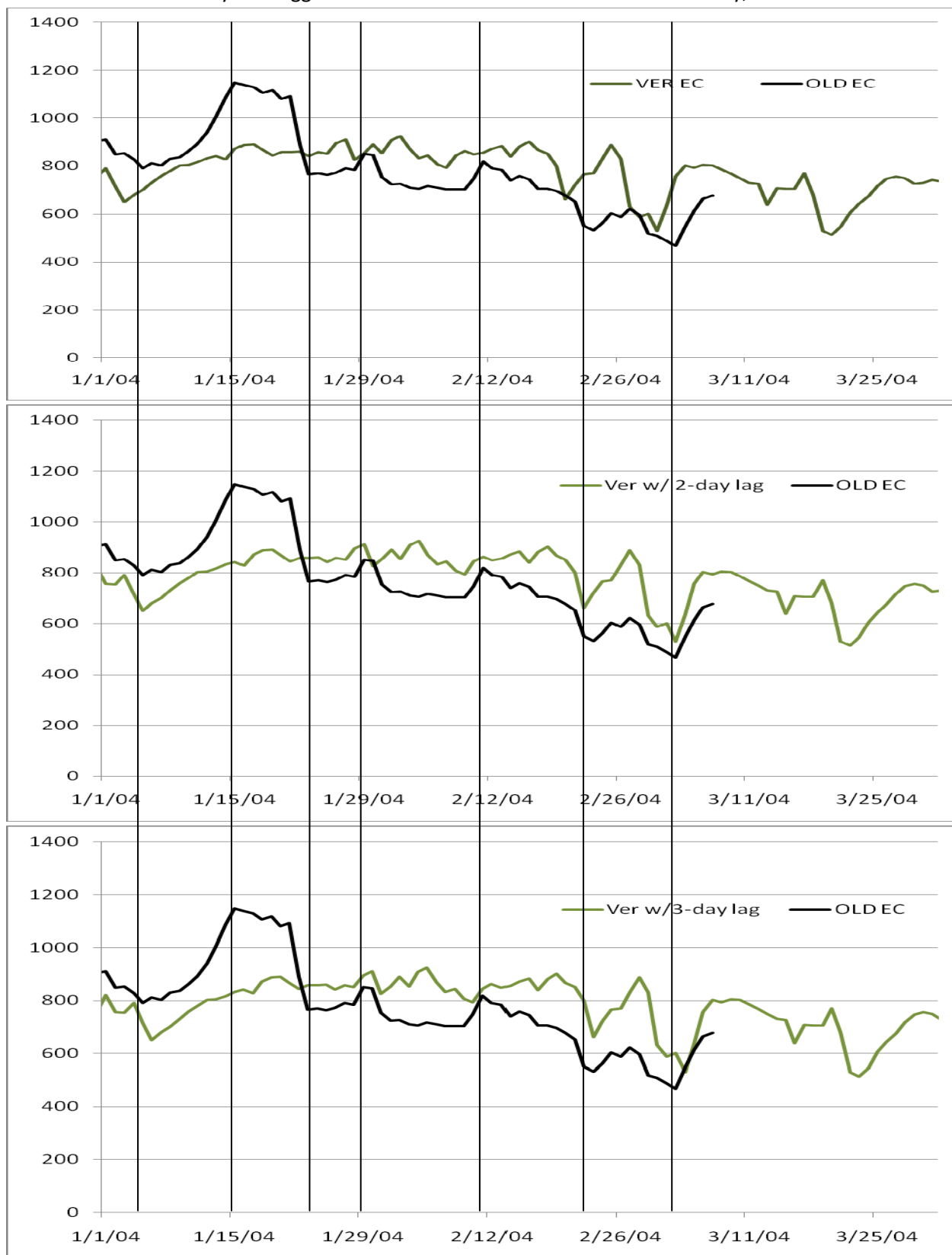
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Time Series Plots of daily and lagged EC at Vernalis and EC at Old River near Tracy, 2nd Quarter WY 2003

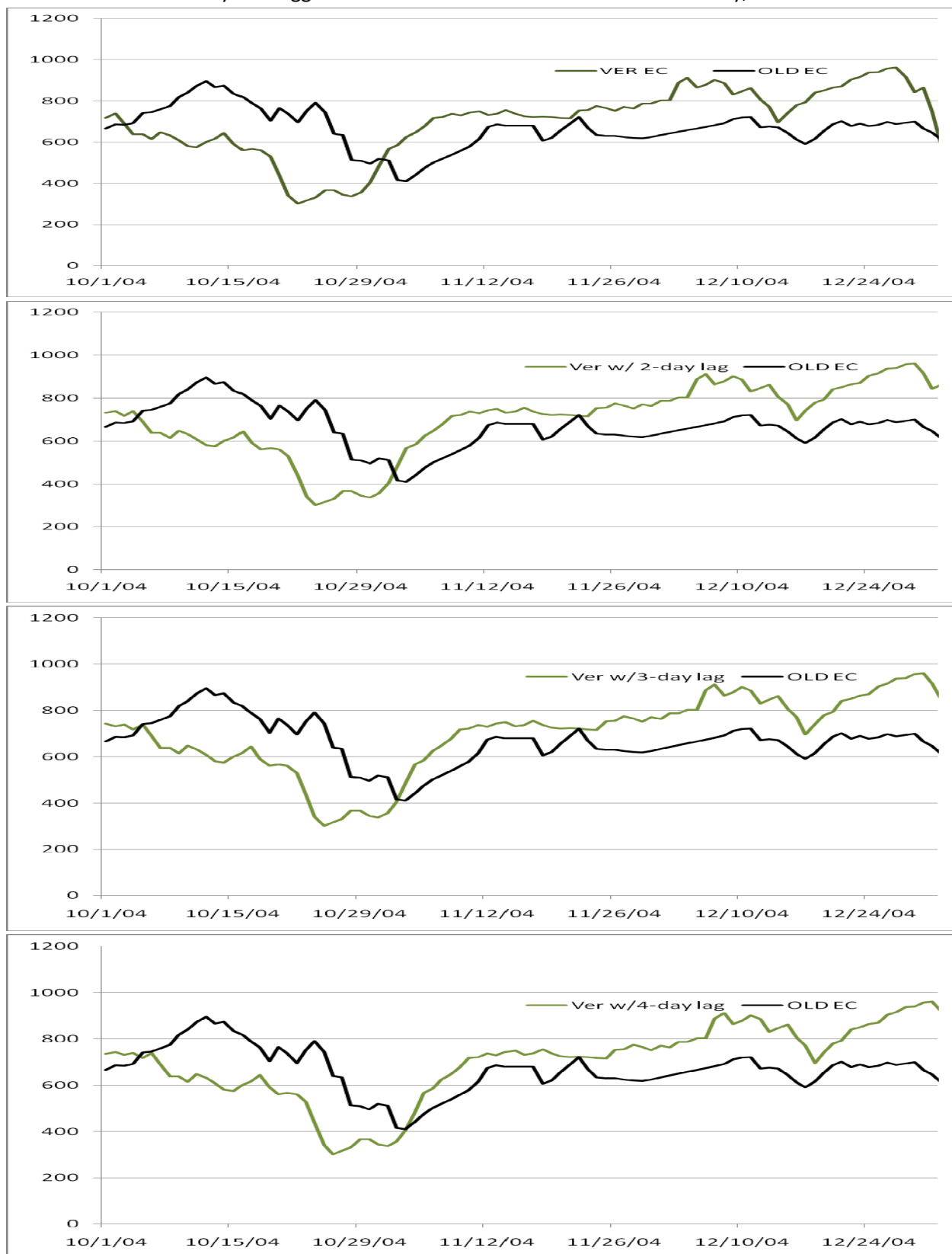
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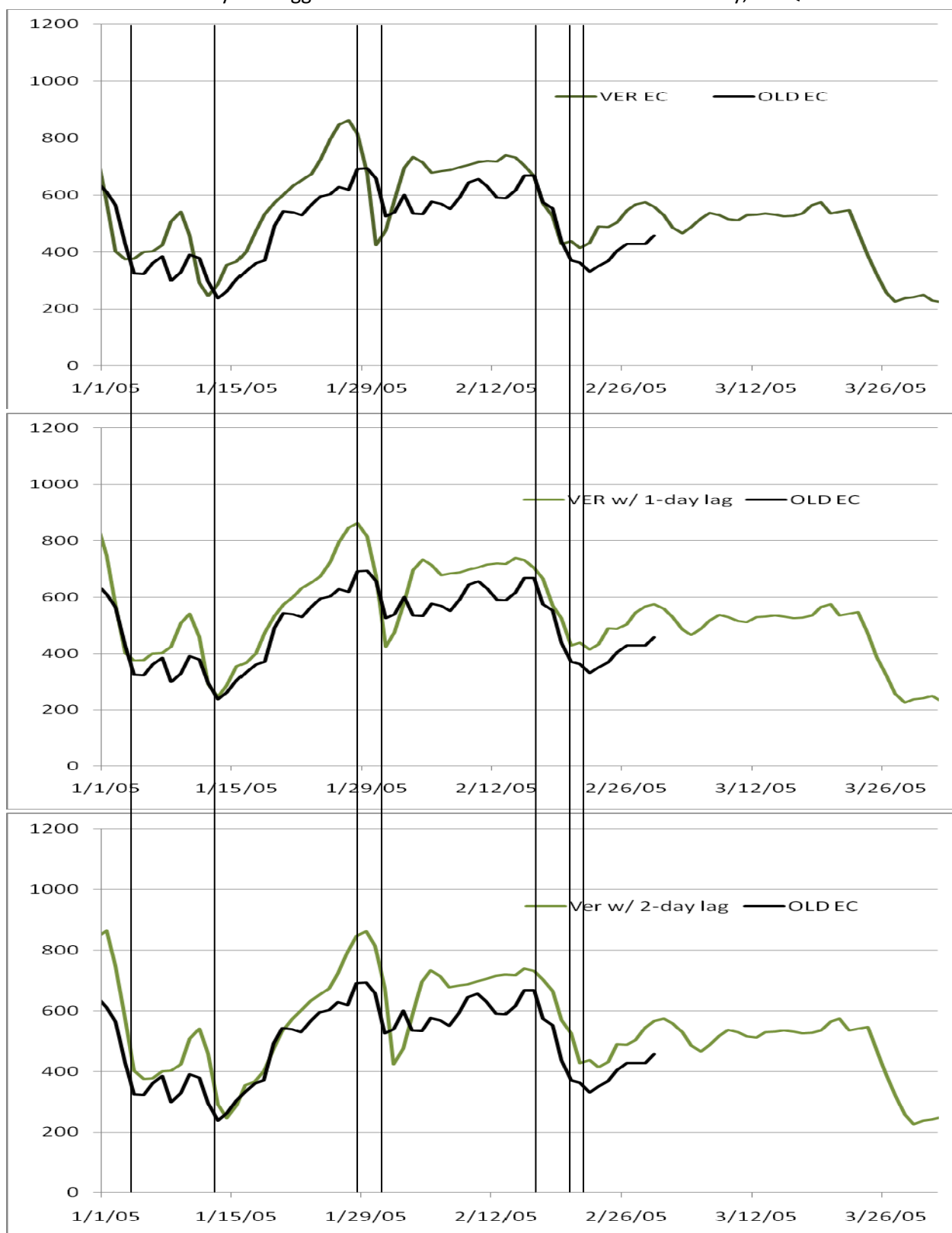
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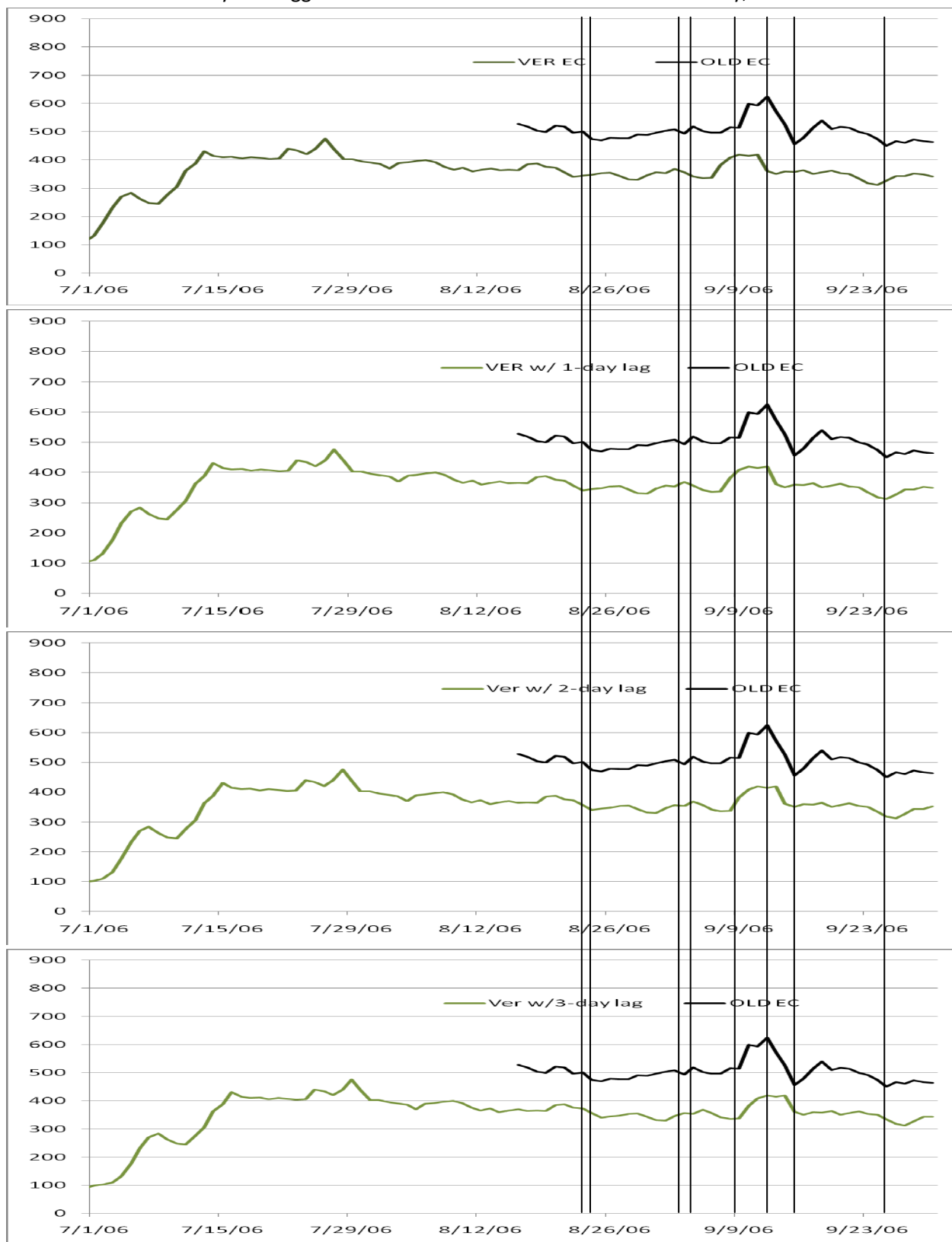
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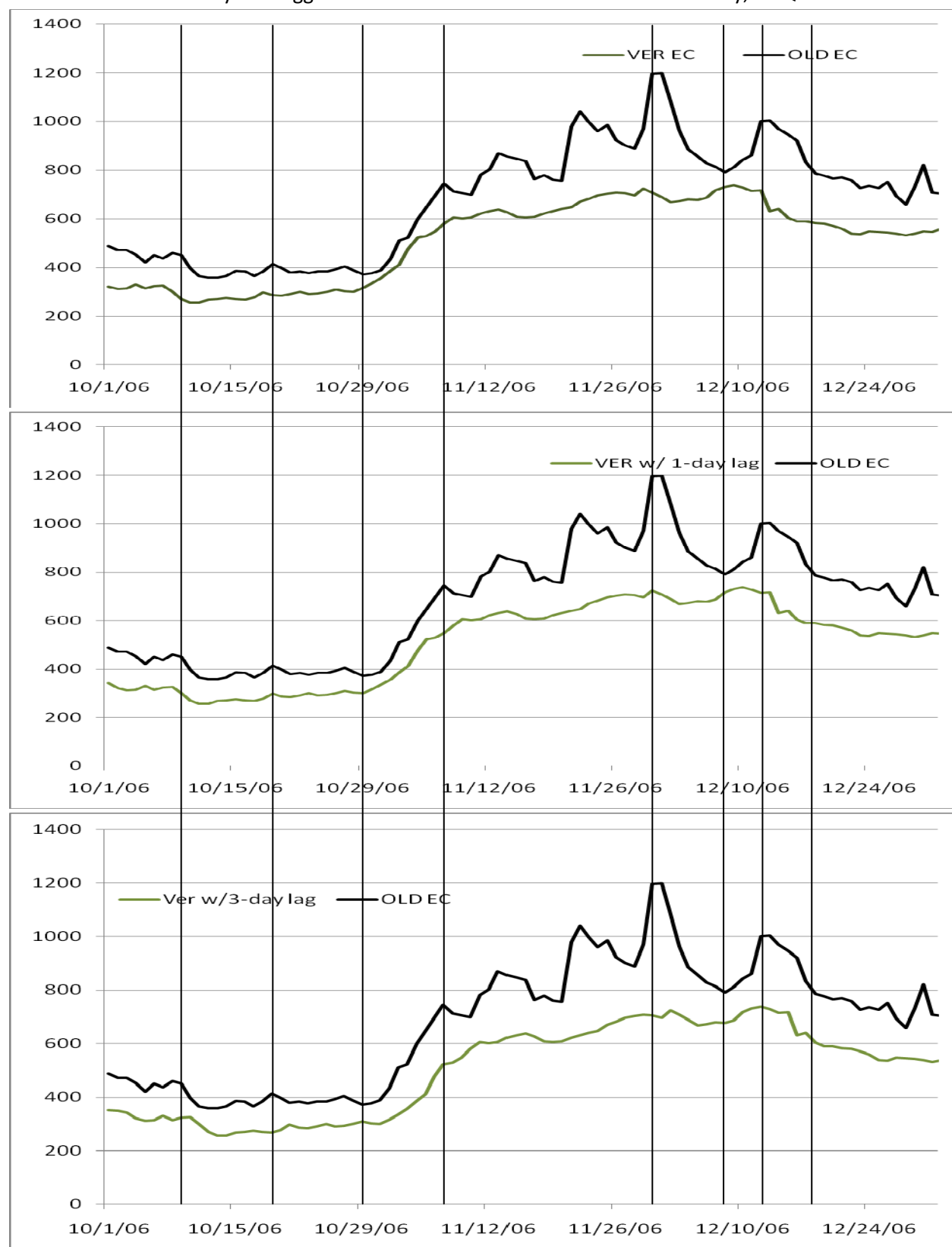
Time Series Plots of daily and lagged EC at Vernalis and EC at Old River near Tracy, 2nd Quarter WY 2004

Time Series Plots of daily and lagged EC at Vernalis and EC at Old River near Tracy, 1st Quarter WY 2005

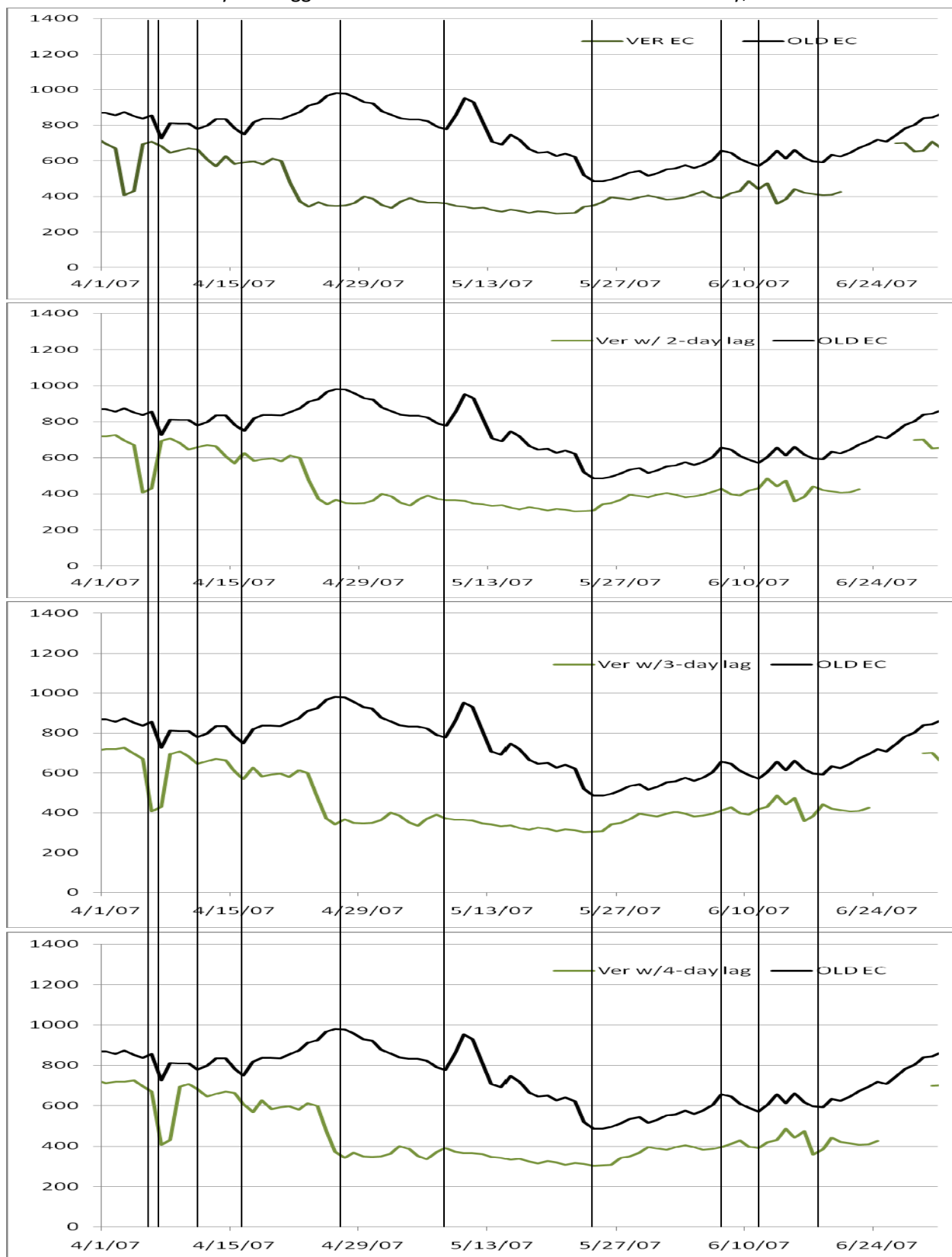


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Time Series Plots of daily and lagged EC at Vernalis and EC at Old River near Tracy, 4th Quarter WY 2006

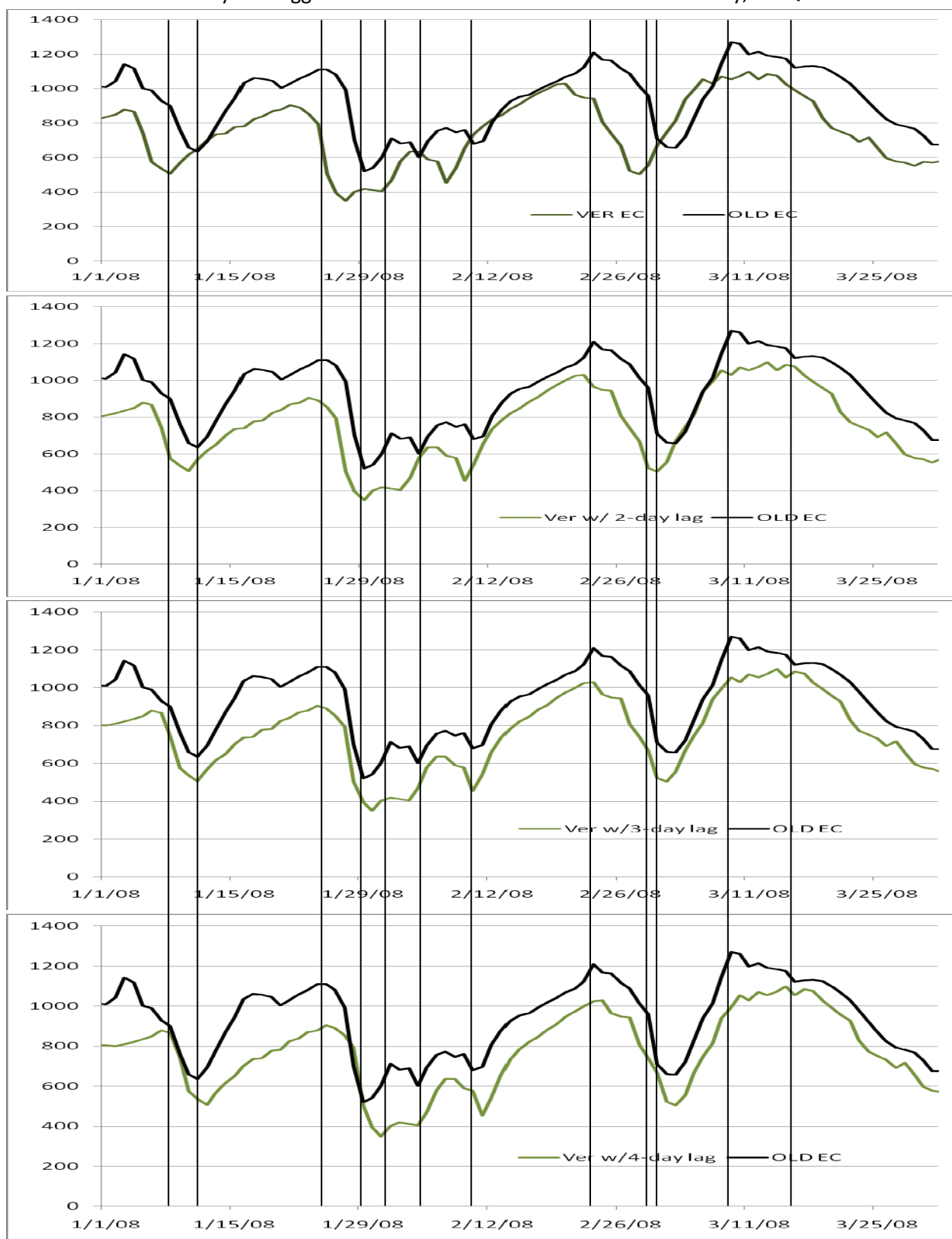
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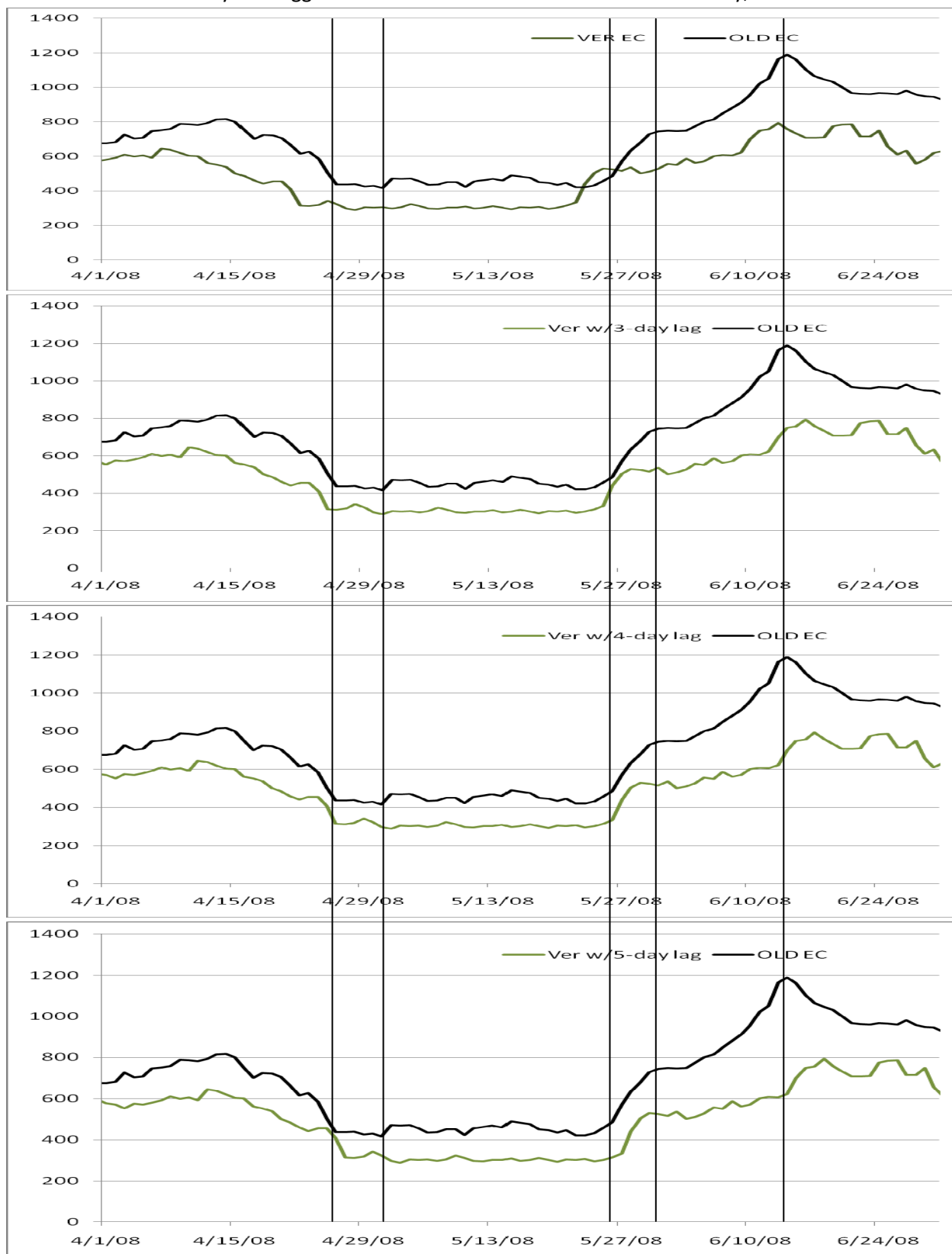
Time Series Plots of daily and lagged EC at Vernalis and EC at Old River near Tracy, 2nd Quarter WY 2007

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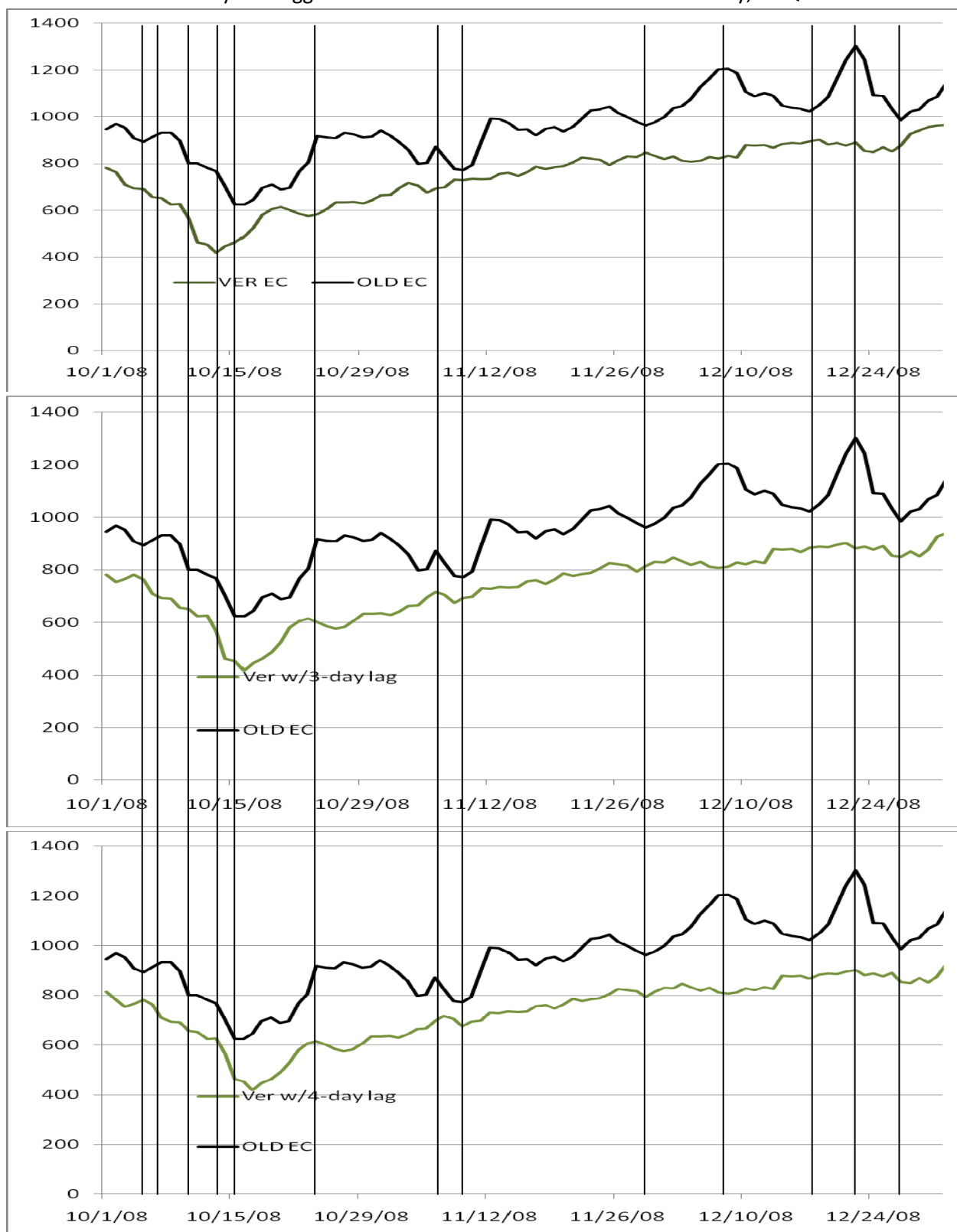
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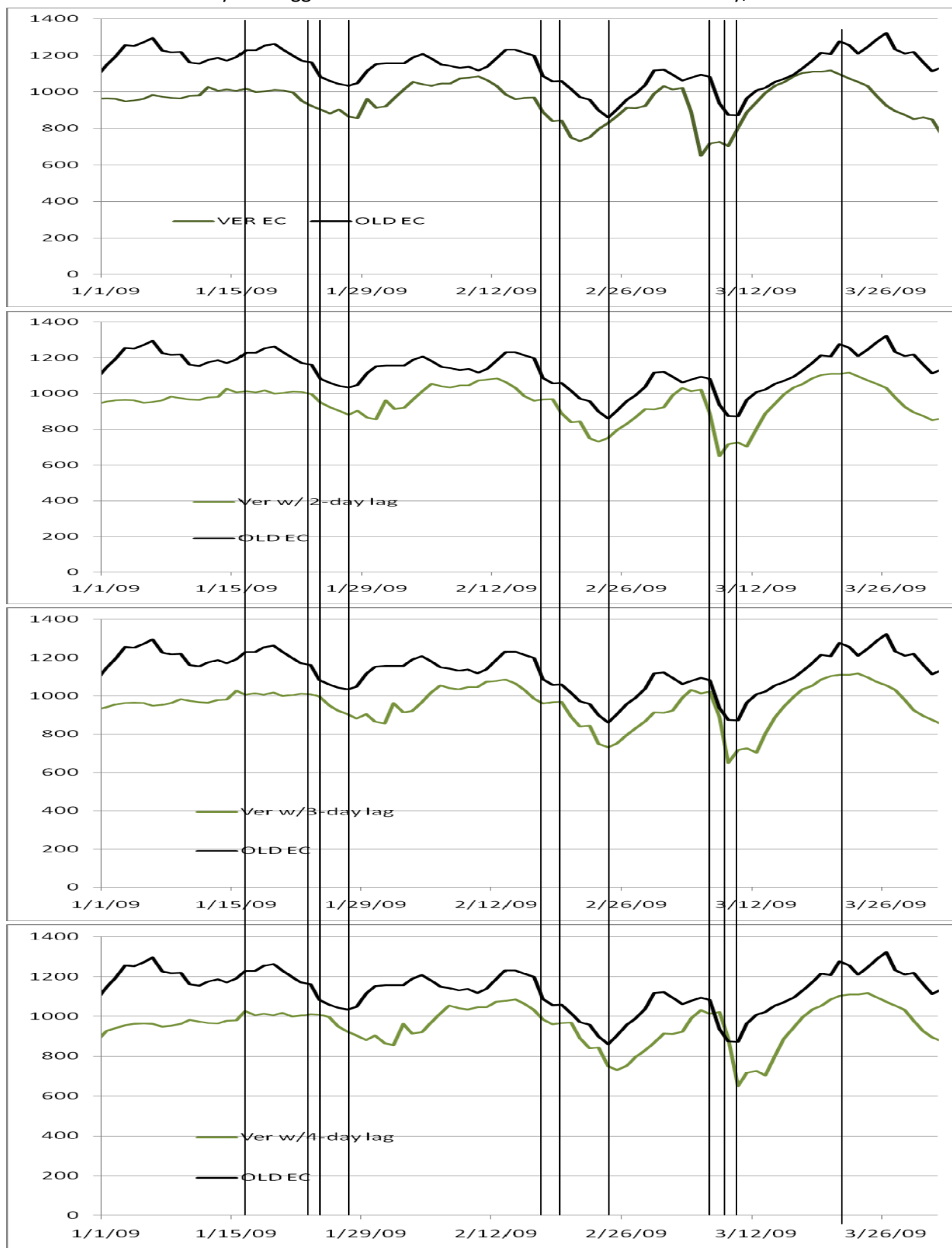
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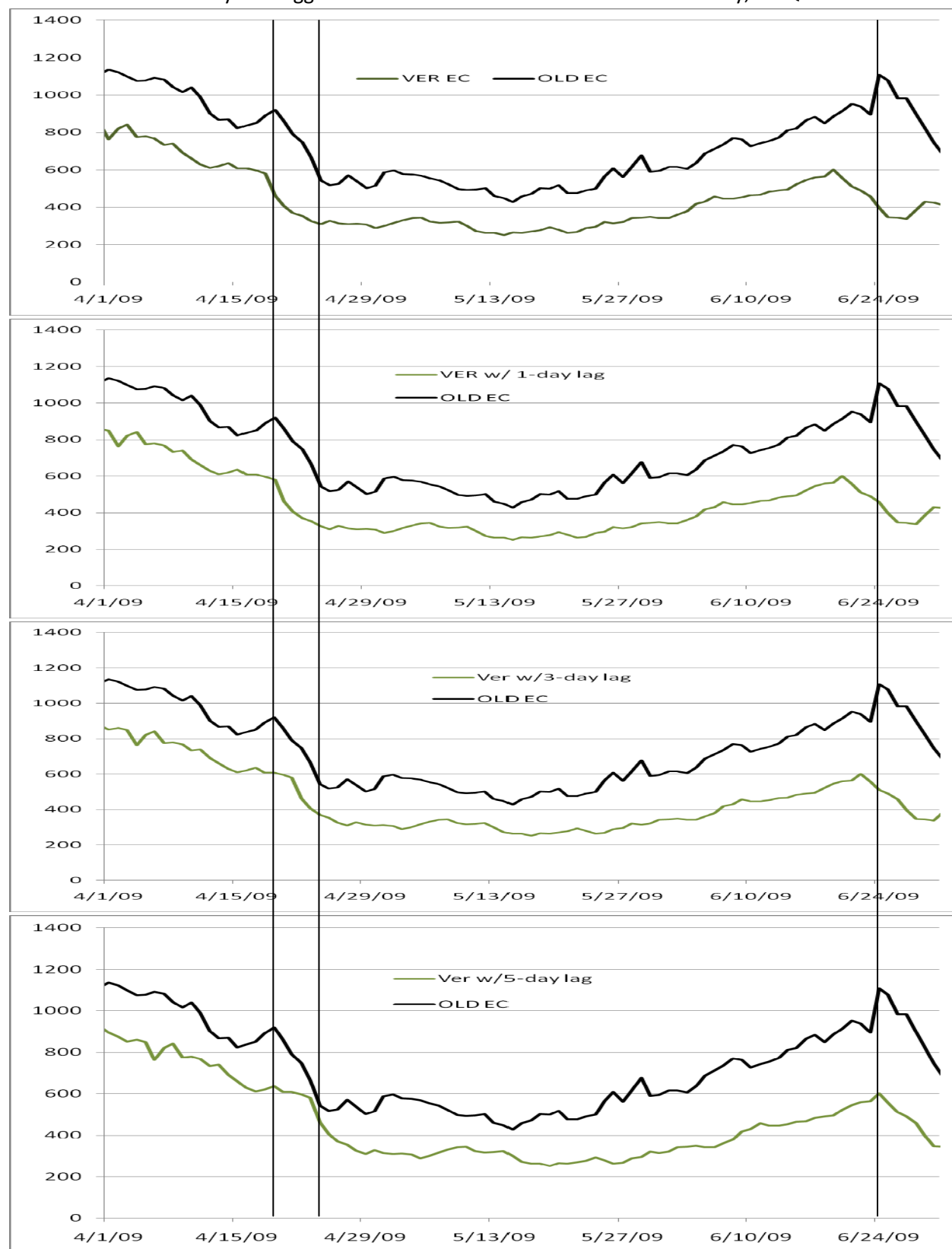
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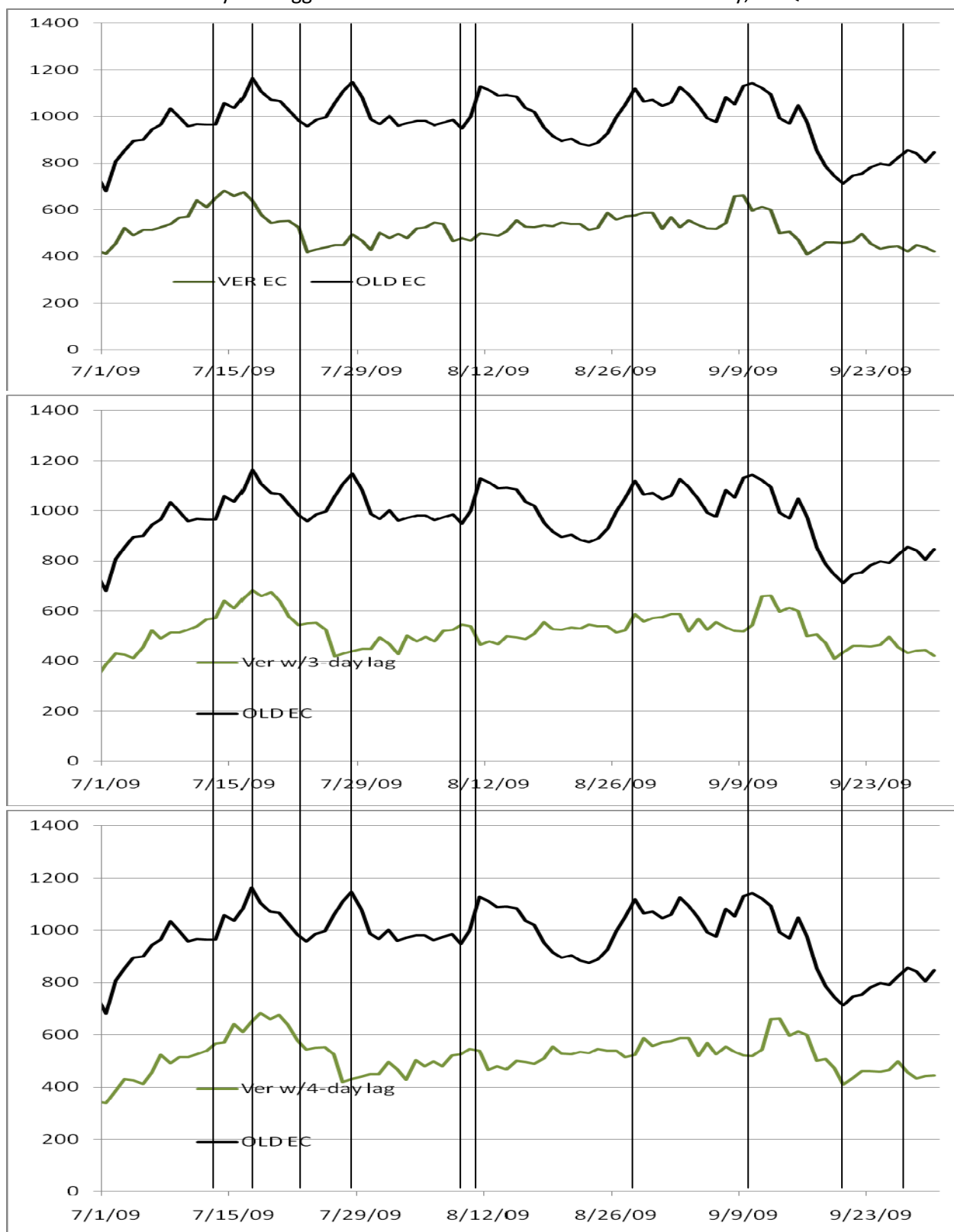
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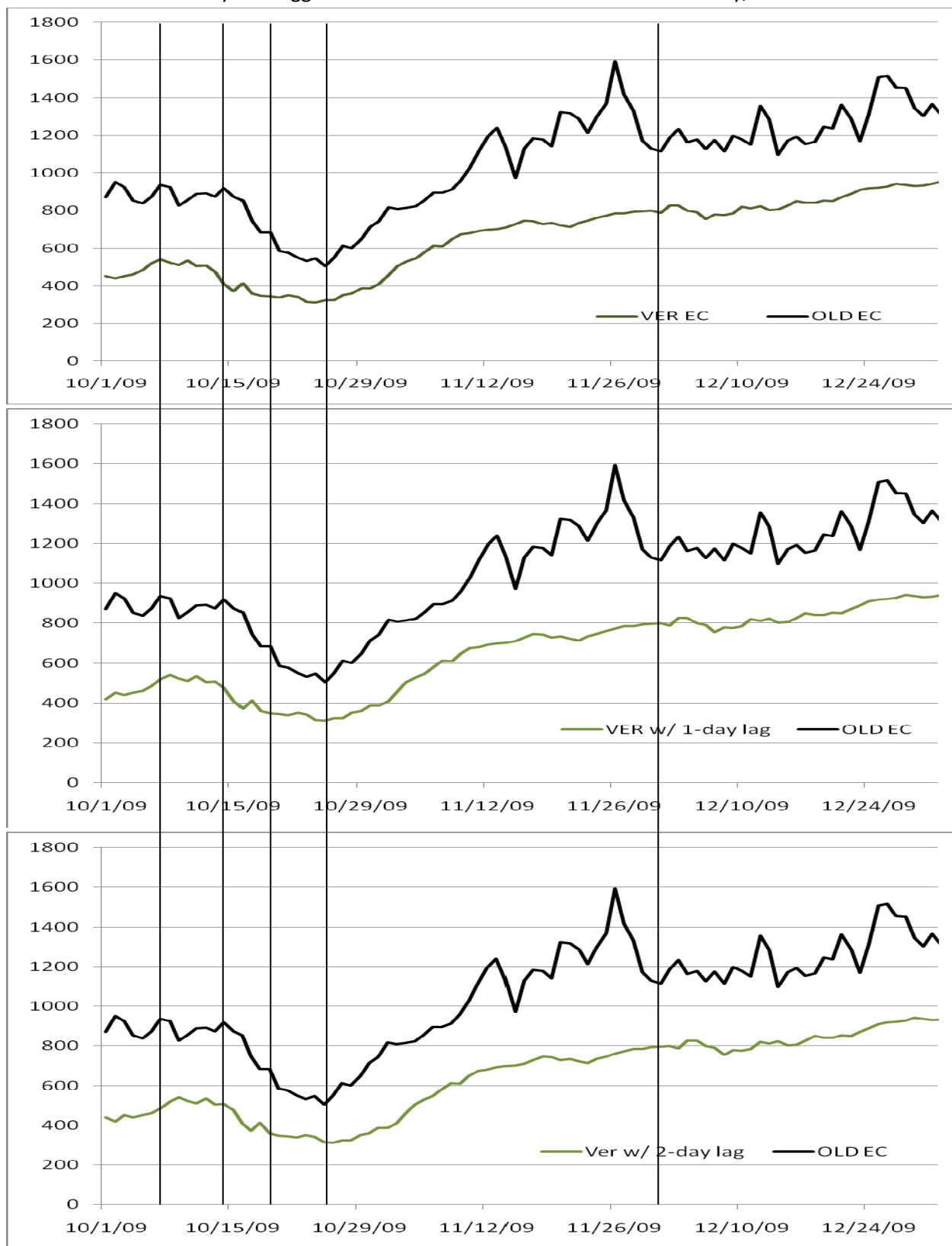
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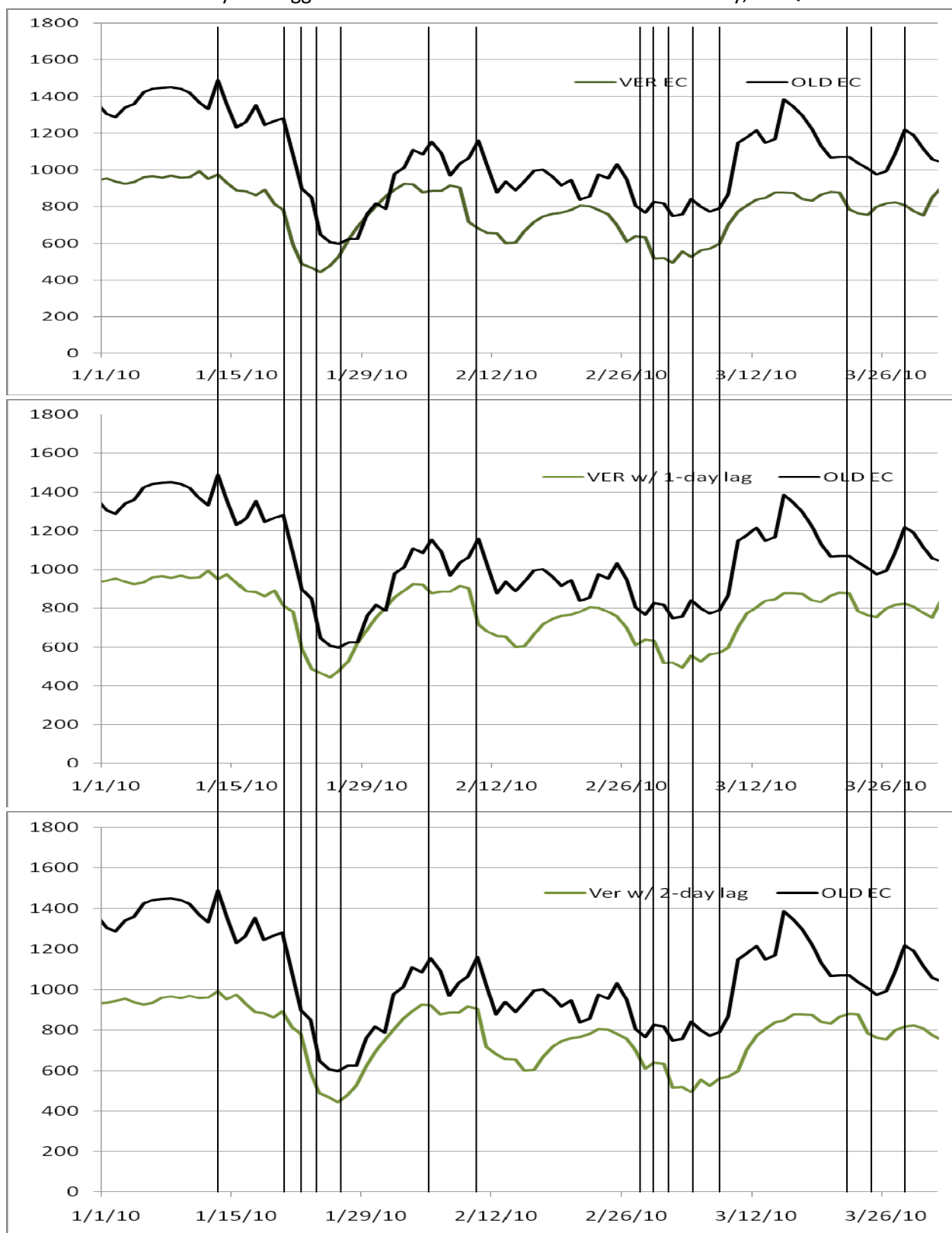
Time Series Plots of daily and lagged EC at Vernalis and EC at Old River near Tracy, 1st Quarter WY 2009

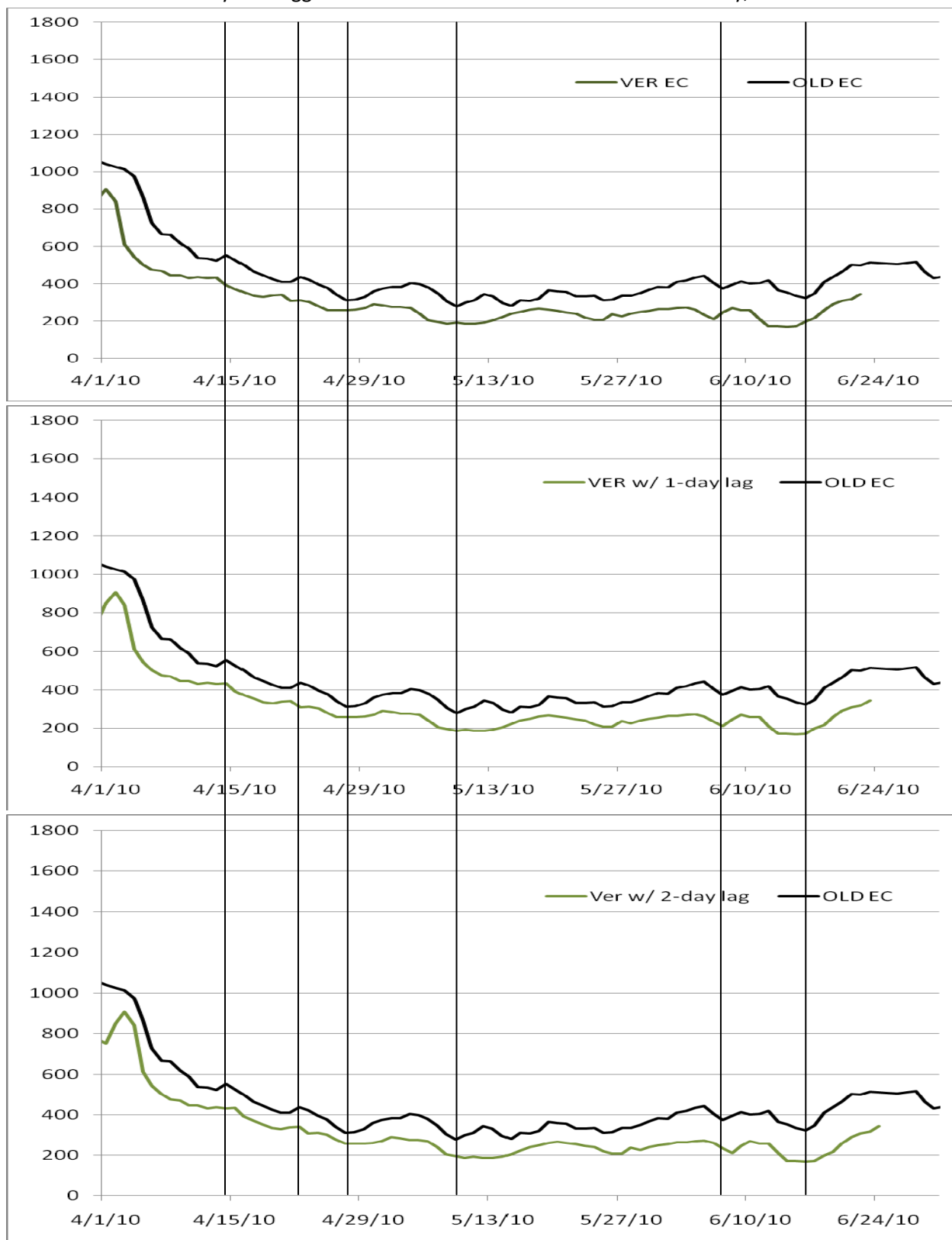
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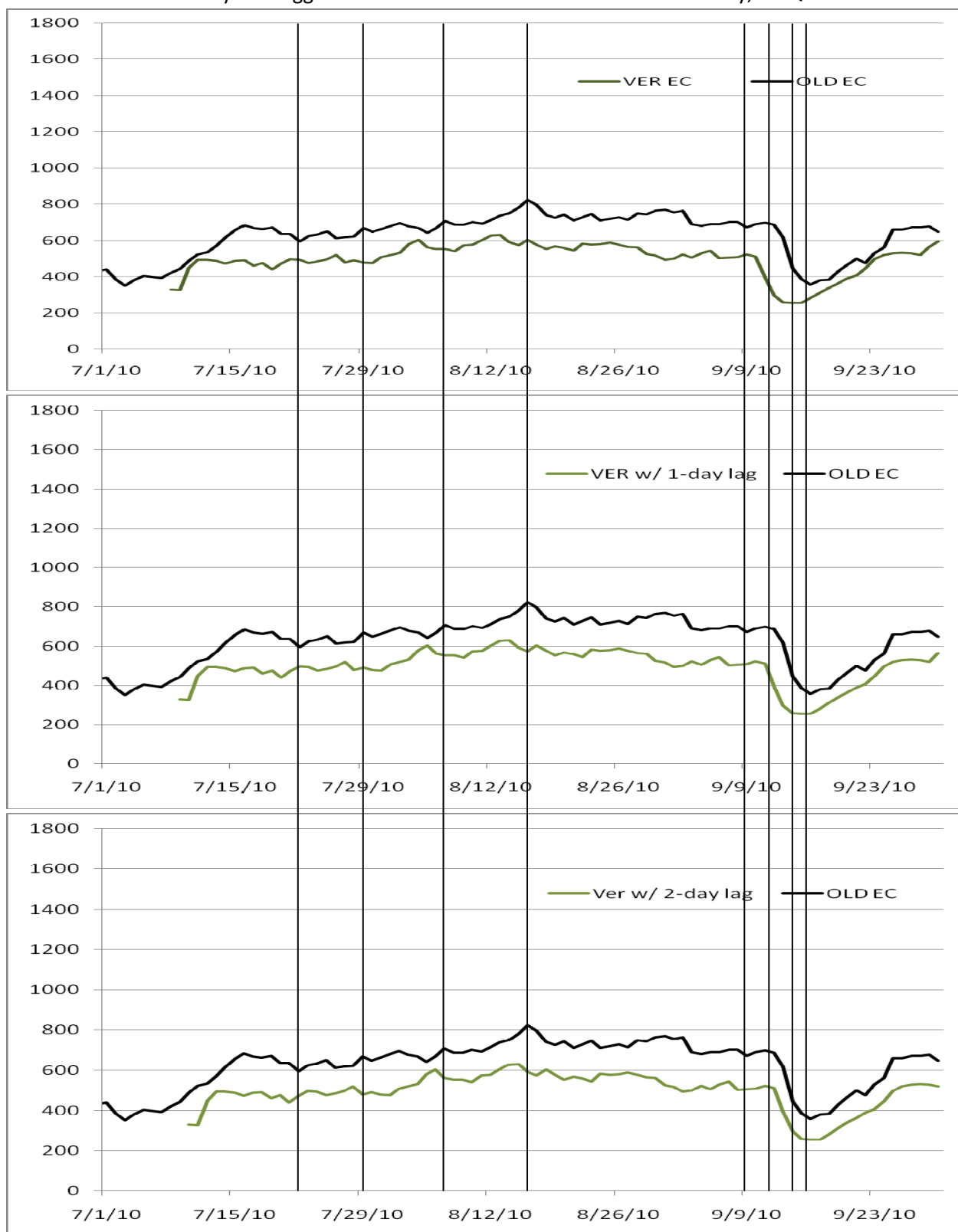
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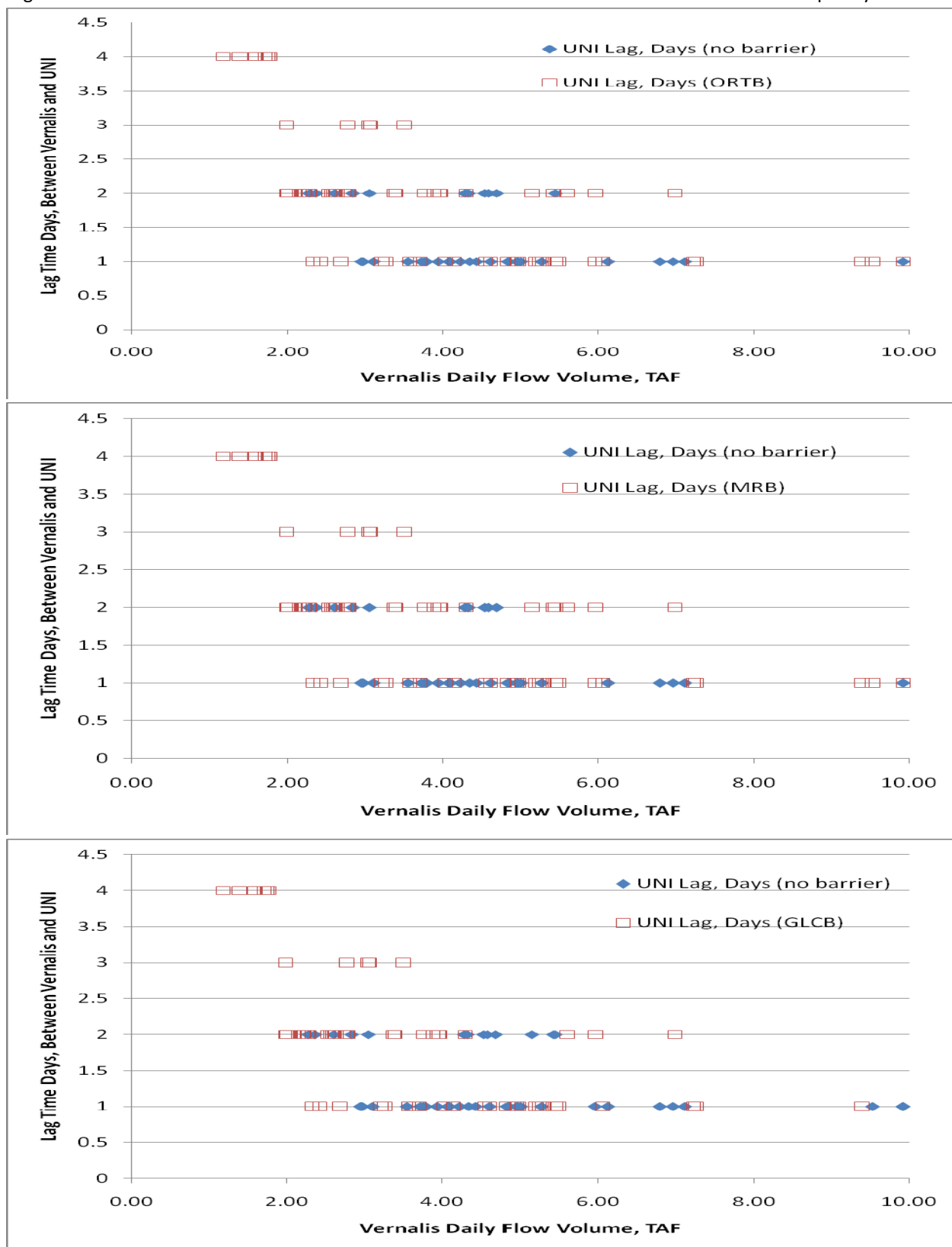
Time Series Plots of daily and lagged EC at Vernalis and EC at Old River near Tracy, 1st Quarter WY 2010

Time Series Plots of daily and lagged EC at Vernalis and EC at Old River near Tracy, 2nd Quarter WY 2010

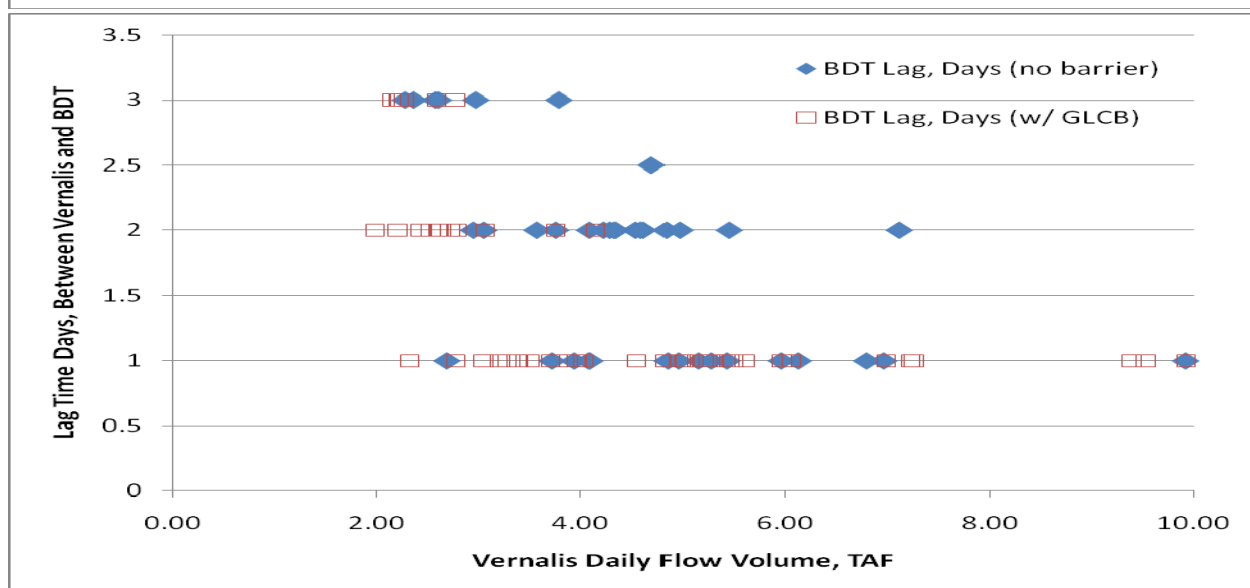
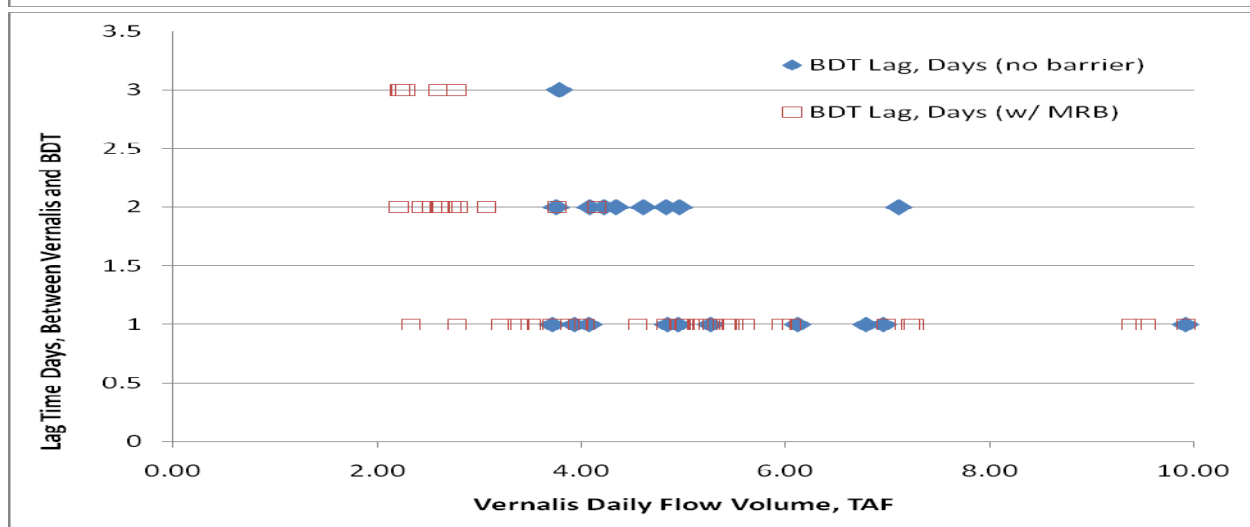
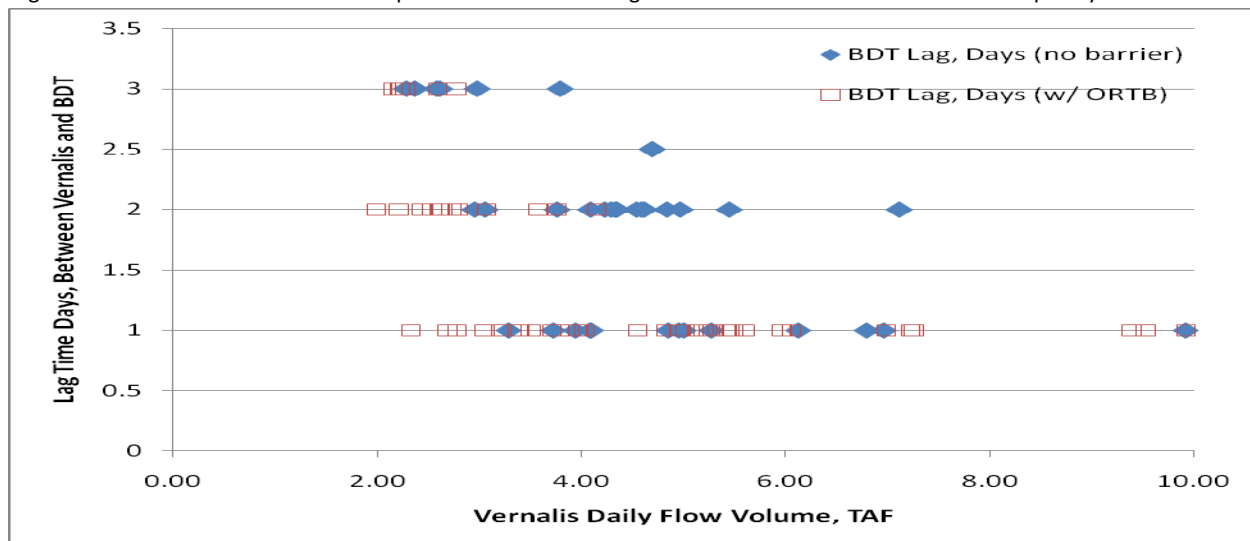
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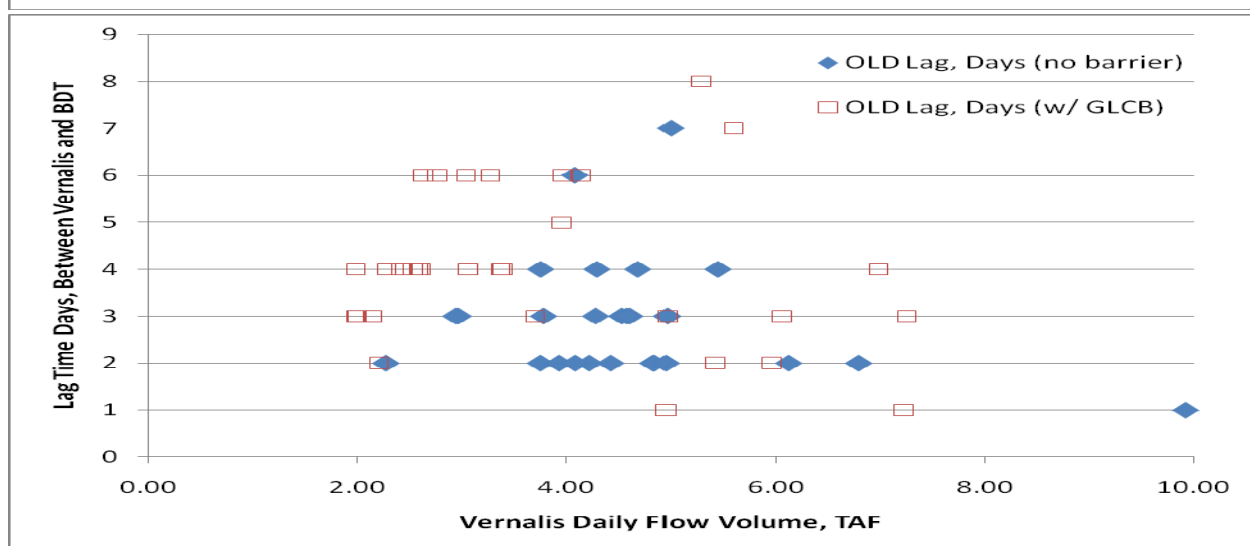
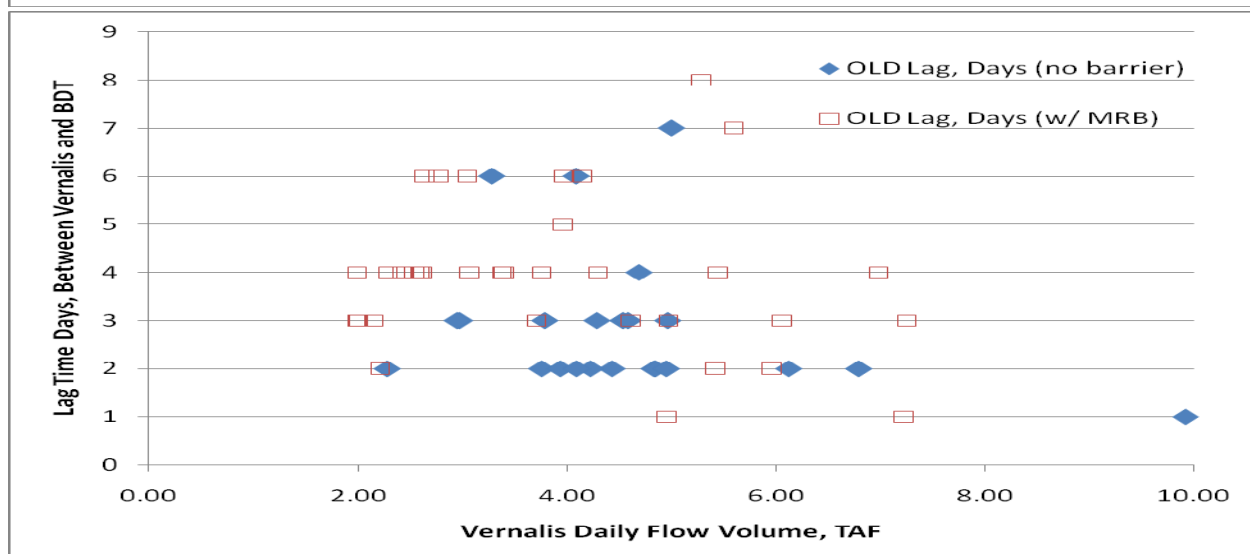
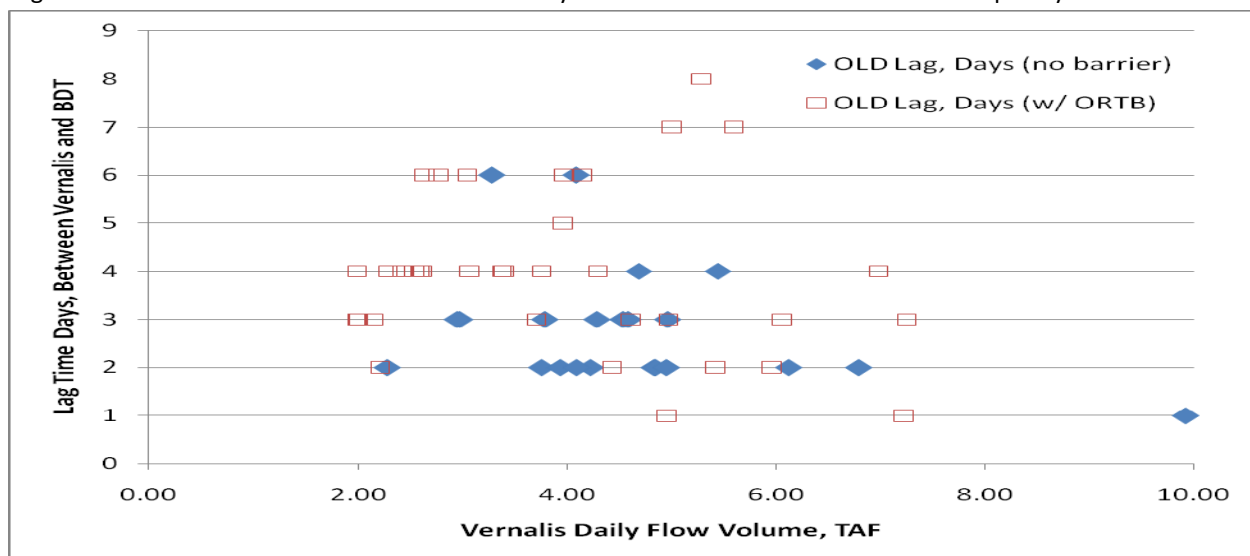
Lag Time between Vernalis and Old River near Middle River as a function of Vernalis Flow and Temporary Barriers



Lag Time between Vernalis and San Joaquin River at Brandt Bridge as a function of Vernalis Flow and Temporary Barriers



Lag Time between Vernalis and Old River near Tracy as a function of Vernalis Flow and Temporary Barriers



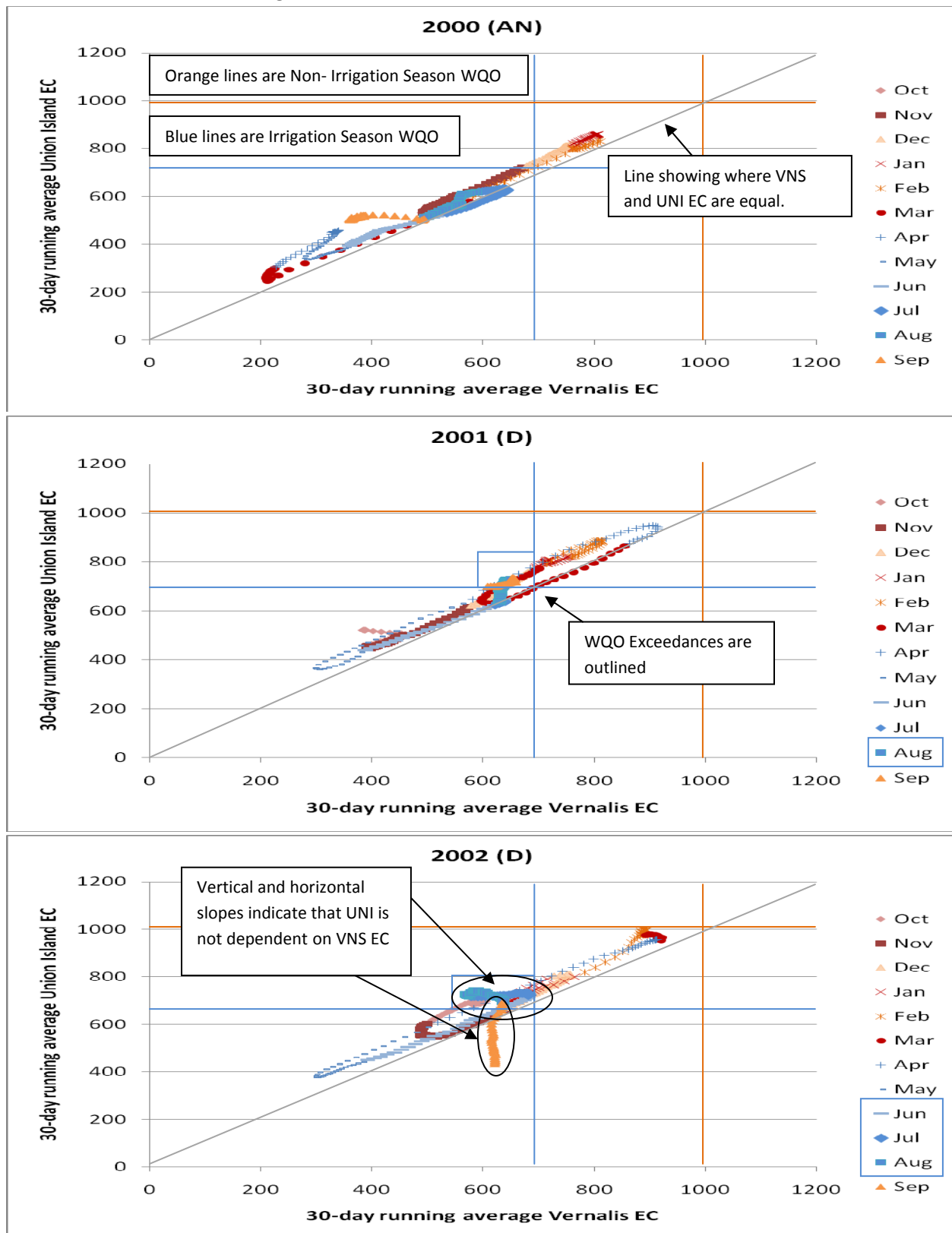
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Appendix E

Annual/Monthly Scatter Plots of Daily South Delta Salinity Data

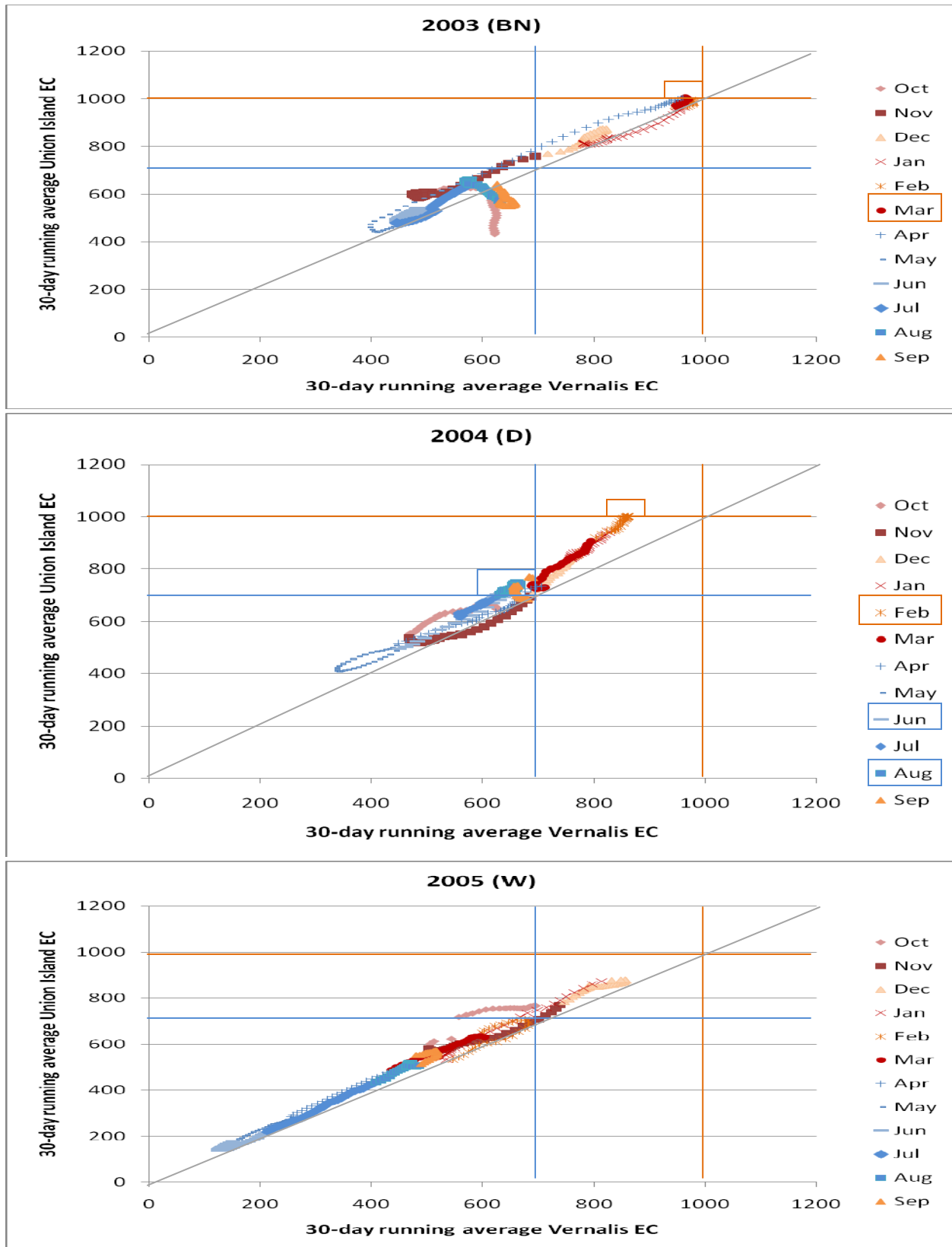
April 2011

Old River near Middle River Figures

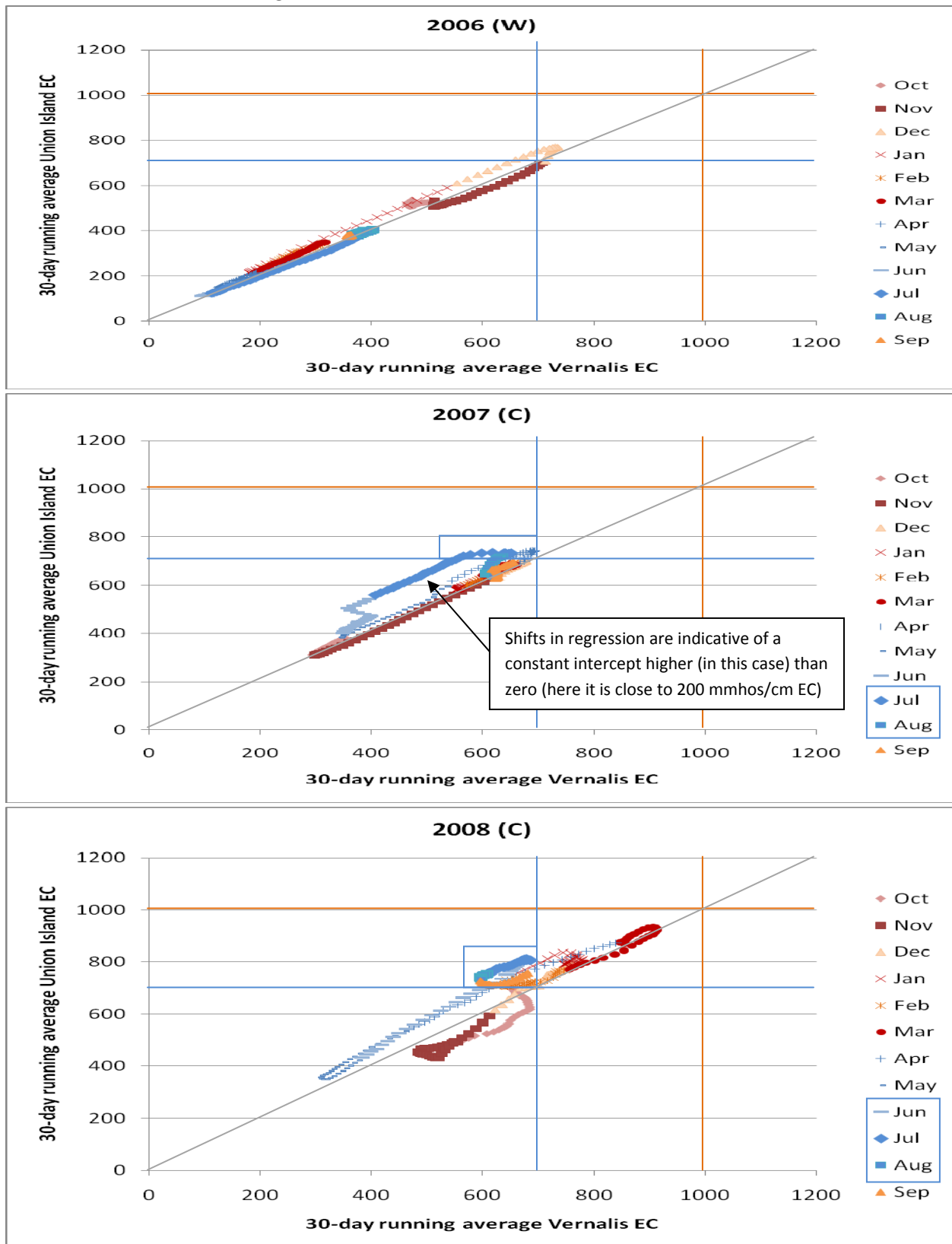


April 2011

Old River near Middle River Figures

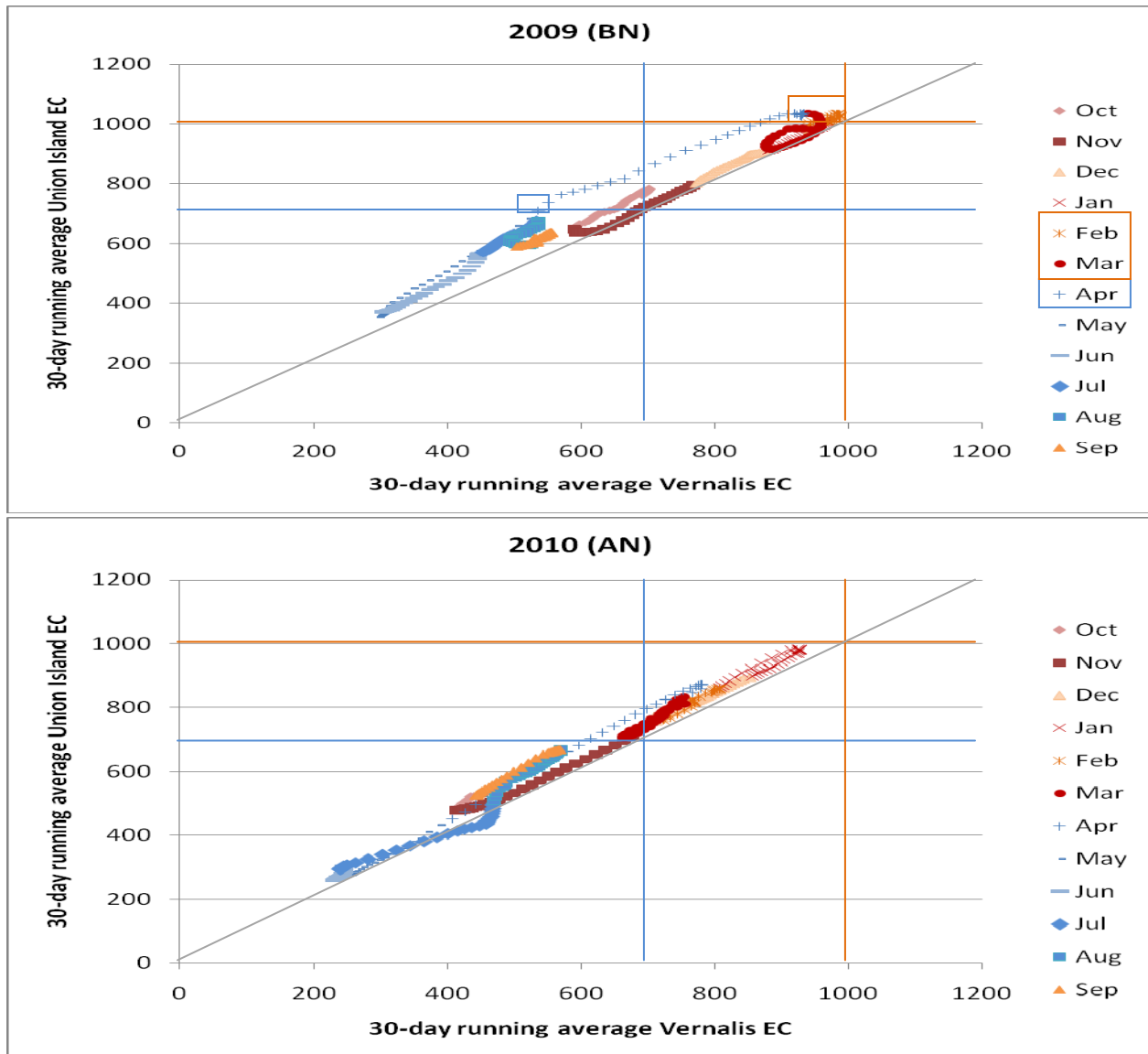


Old River near Middle River Figures



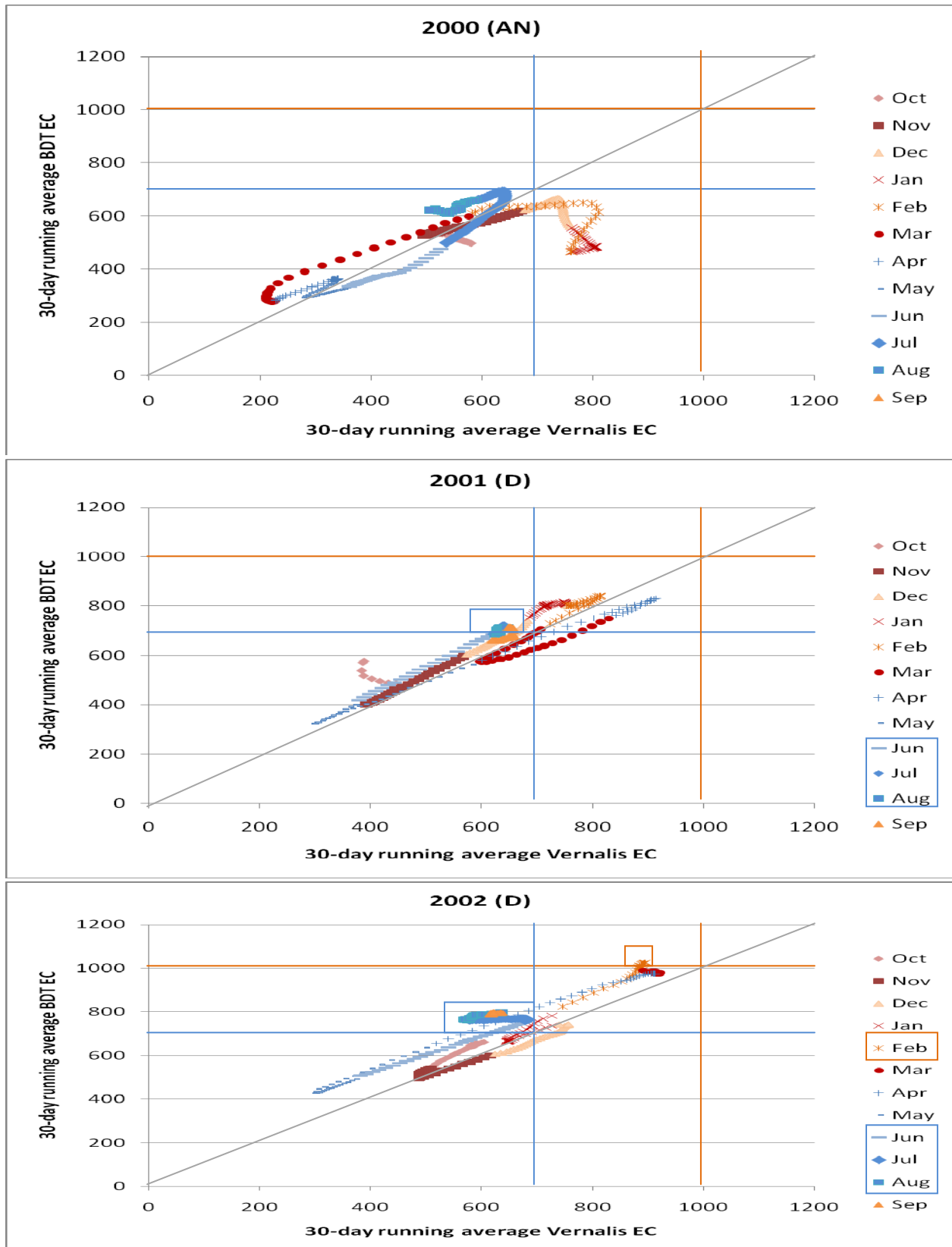
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Old River near Middle River Figures



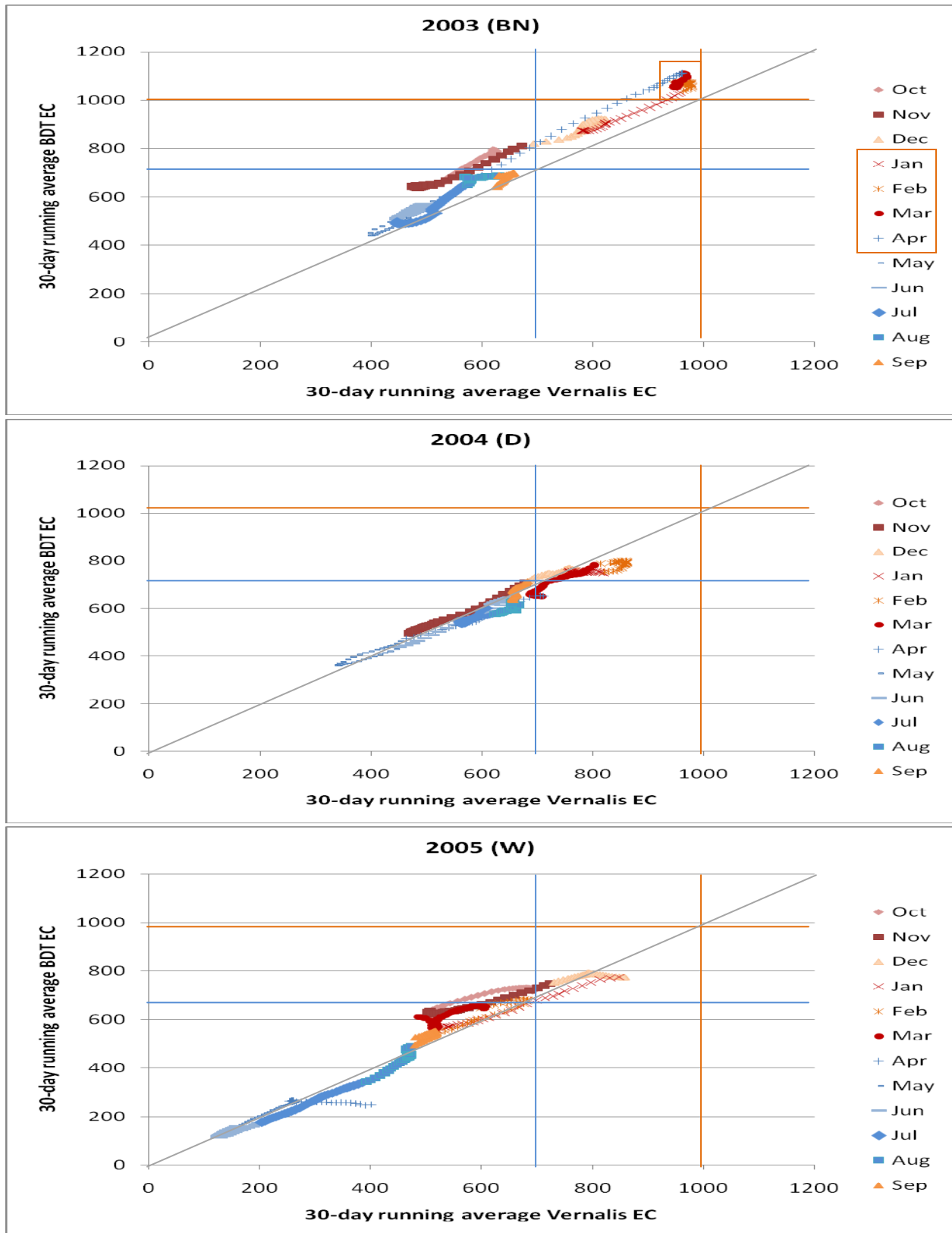
April 2011

San Joaquin River at Brandt Bridge Figures

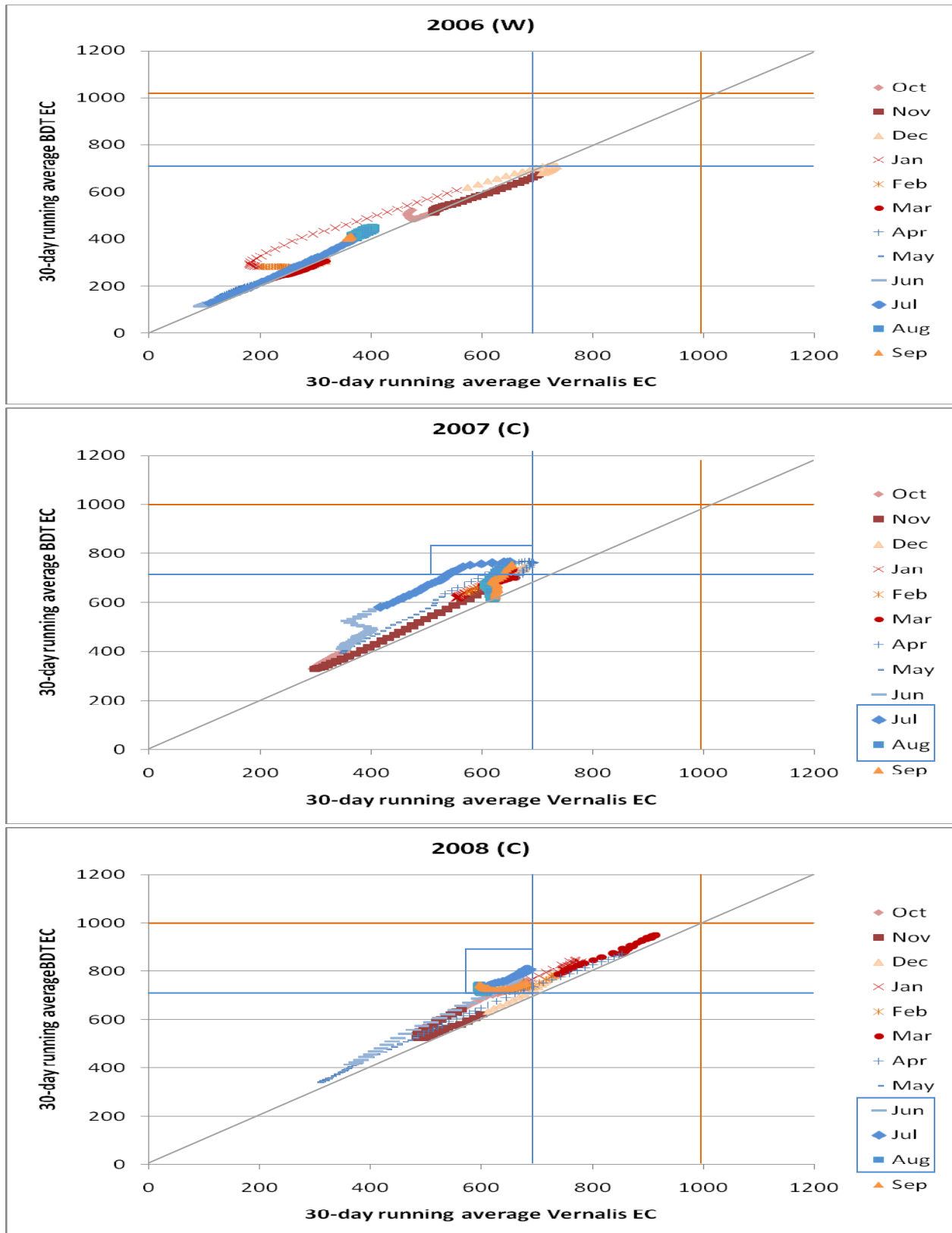


April 2011

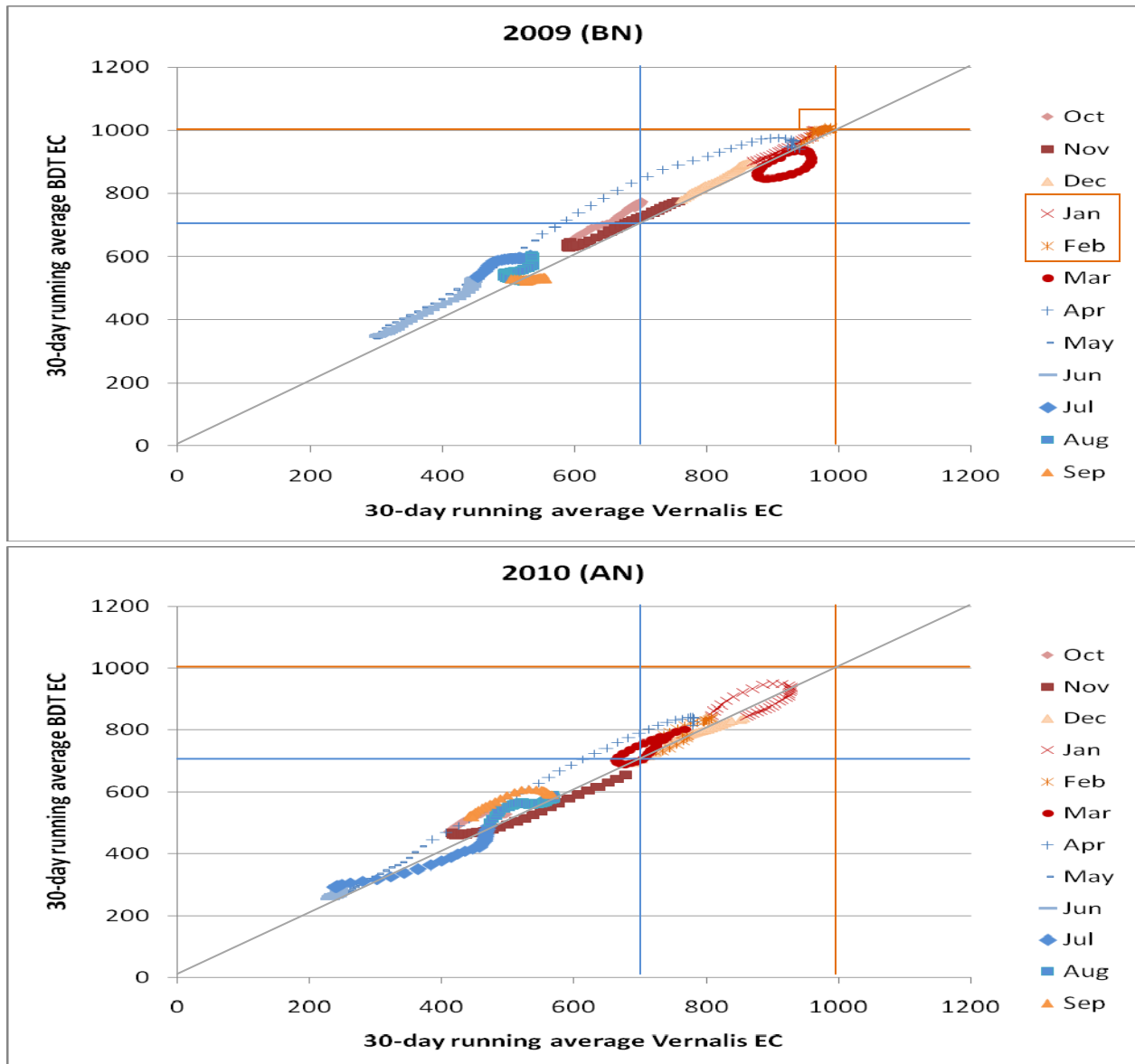
San Joaquin River at Brandt Bridge Figures



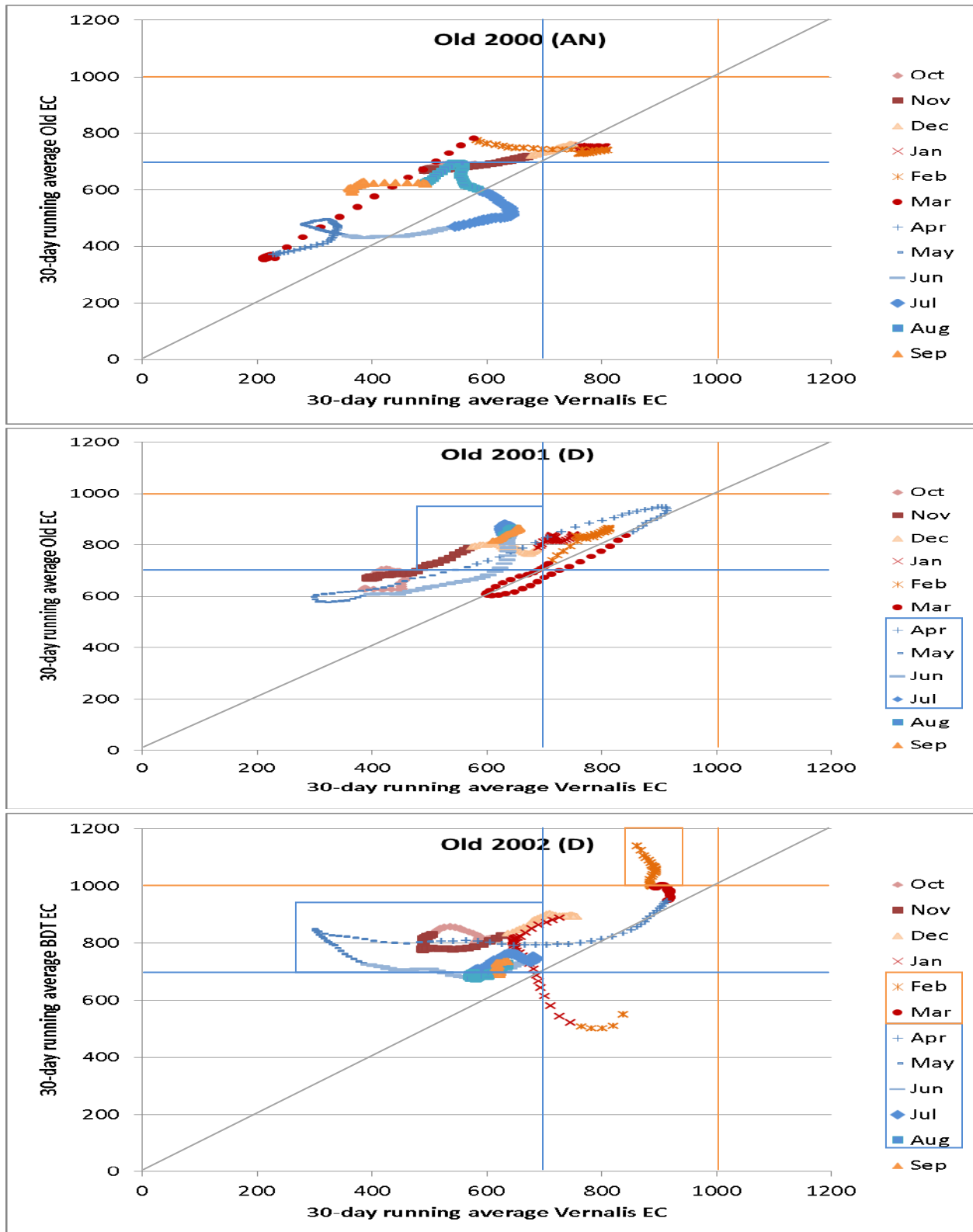
San Joaquin River at Brandt Bridge Figures



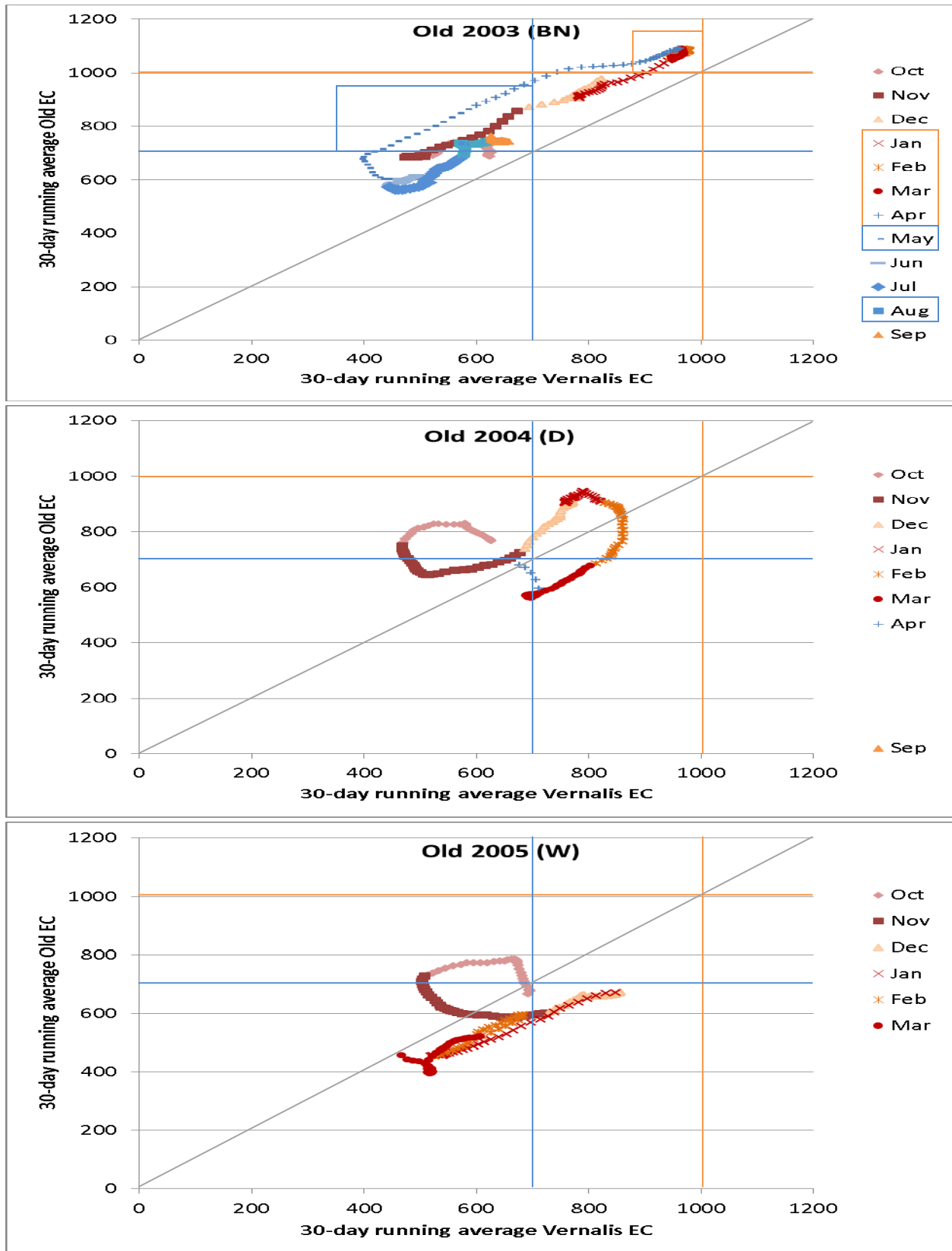
San Joaquin River at Brandt Bridge Figures



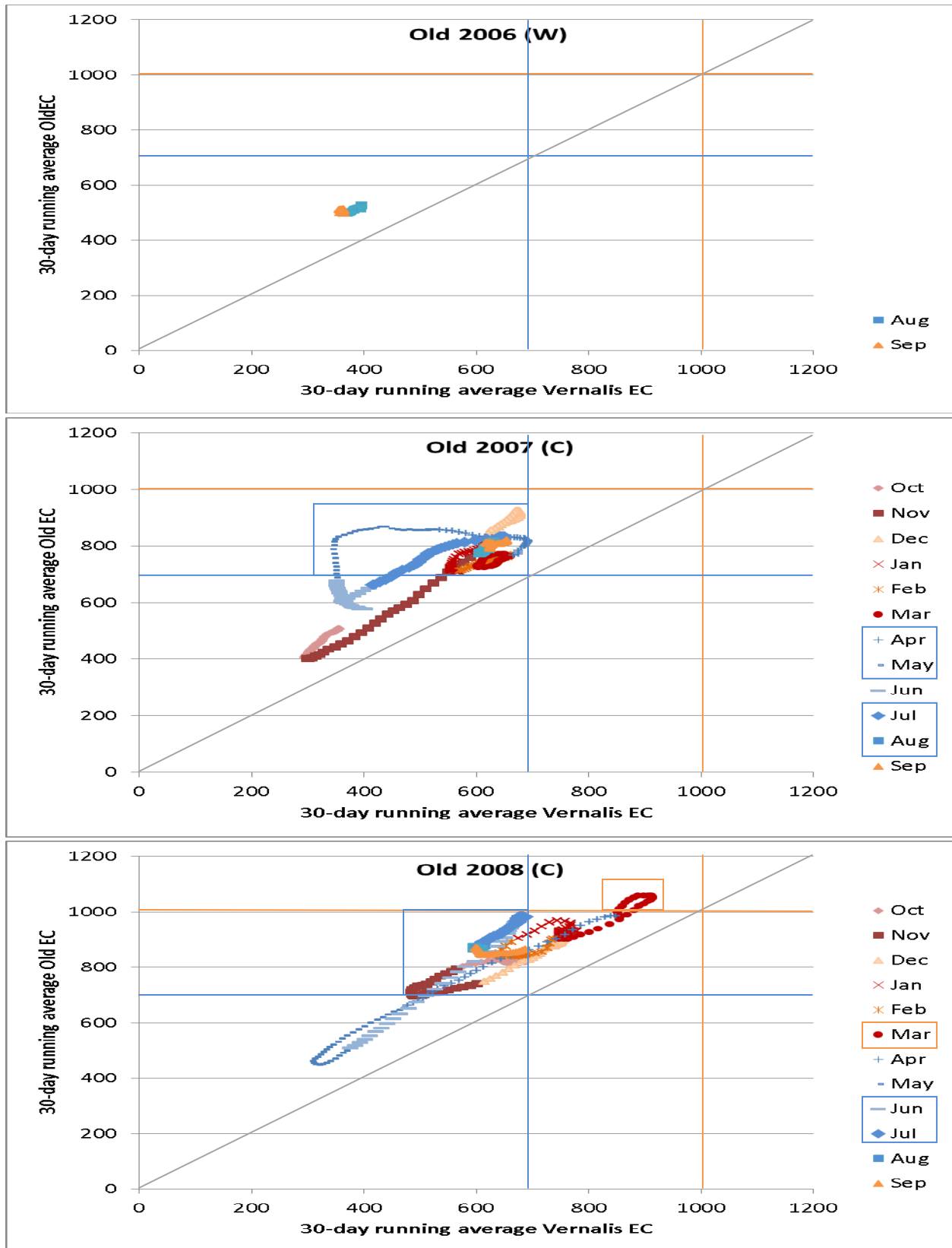
Old River near Tracy Figures



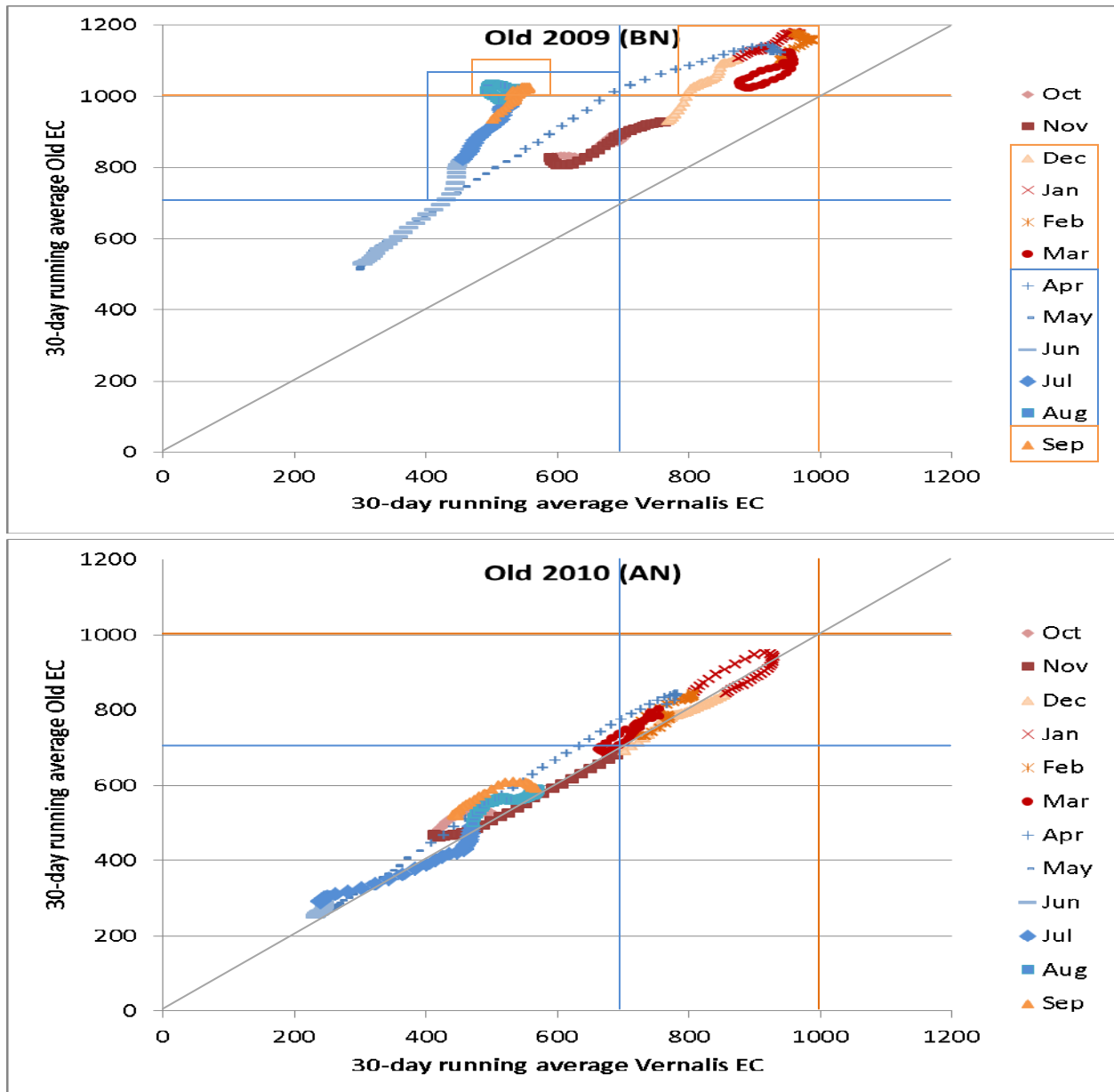
Old River near Tracy Figures



Old River near Tracy Figures



Old River near Tracy Figures



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Appendix F

Dilution Flow Spreadsheet Model Results

Modeled Dilution Flows Estimated to Meet UNI and BDT Objectives 90% of the Time

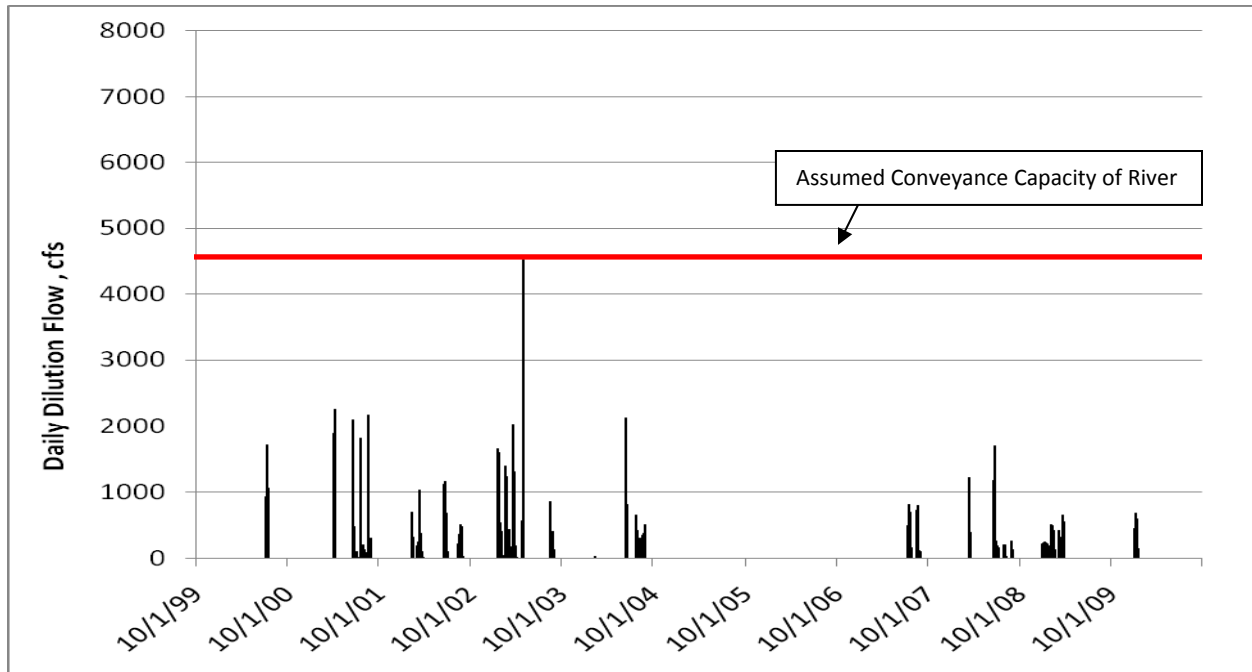
	Days UNI/BDT EC Objectives Exceeded		Required Dilution Flow from Source, TAF/month and (Days UNI/BDT EC Surrogate at VNS Exceeded)			
	UNI	BDT	Stanislaus	Merced	Tuolumne	Recirculation
10/99	0	0				
11/99	0	0				
12/99	0	0				
1/00	0	0				
2/00	0	0				
3/00	0	0				
4/00	0	0				
5/00	0	0				
6/00	0	0				
7/00	0	0	21.66	41.55	24.99	73.83
8/00	0	ND				
9/00						
10/00						
11/00						
12/00						
1/01						
2/01						
3/01						59.71
4/01			23.19	27.13	25.09	59.71
5/01						
6/01		5	16.89	41.37	58.81	74.78
7/01		20	11.58	27.81	24.25	28.52
8/01	14	17	16.44	30.50	28.87	166.59
9/01						
10/01						
11/01						
12/01						
1/02						
2/02		14	6.58	7.28	7.59	33.12
3/02			11.09	13.76	12.34	62.95
4/02						
5/02						
6/02	3	9	19.11	30.95	30.53	90.37
7/02	31	31	0.57	0.79	0.75	1.04
8/02	30	31	8.29	17.08	11.31	87.68
9/02						
10/02						
11/02						
12/02						
1/03		5	19.42	21.22	21.58	73.58
2/03		28	16.90	18.77	19.13	49.79
3/03	6	31	23.04	25.45	26.34	81.54
4/03	3	16	19.42	19.98	31.34	90.04
5/03						
6/03						
7/03						
8/03			8.56	30.78	9.26	26.20
9/03						

	Days UNI/BDT EC Objectives Exceeded		Required Dilution Flow from Source, TAF/month and (Days UNI/BDT EC Surrogate at VNS Exceeded)			
	UNI	BDT	Stanislaus	Merced	Tuolumne	Recirculation
10/03						
11/03						
12/03						
1/04						
2/04			0.06	0.06	0.06	0.14
3/04						
4/04						
5/04						
6/04	9		19.16	37.85	30.84	86.47
7/04			7.24	12.20	9.30	20.55
8/04	31		11.30	18.20	15.73	43.00
9/04						
10/04						
11/04						
12/04						
1/05						
2/05						
3/05						
4/05						
5/05						
6/05						
7/05						
8/05						
9/05						
10/05						
11/05						
12/05						
1/06						
2/06						
3/06						
4/06						
5/06						
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9/06						
10/06						
11/06						
12/06						
1/07						
2/07						
3/07						
4/07						
5/07						
6/07						
7/07	14	17	12.09	28.82	17.86	71.26
8/07	6	6	6.15	9.55	7.83	46.04
9/07						
10/07						

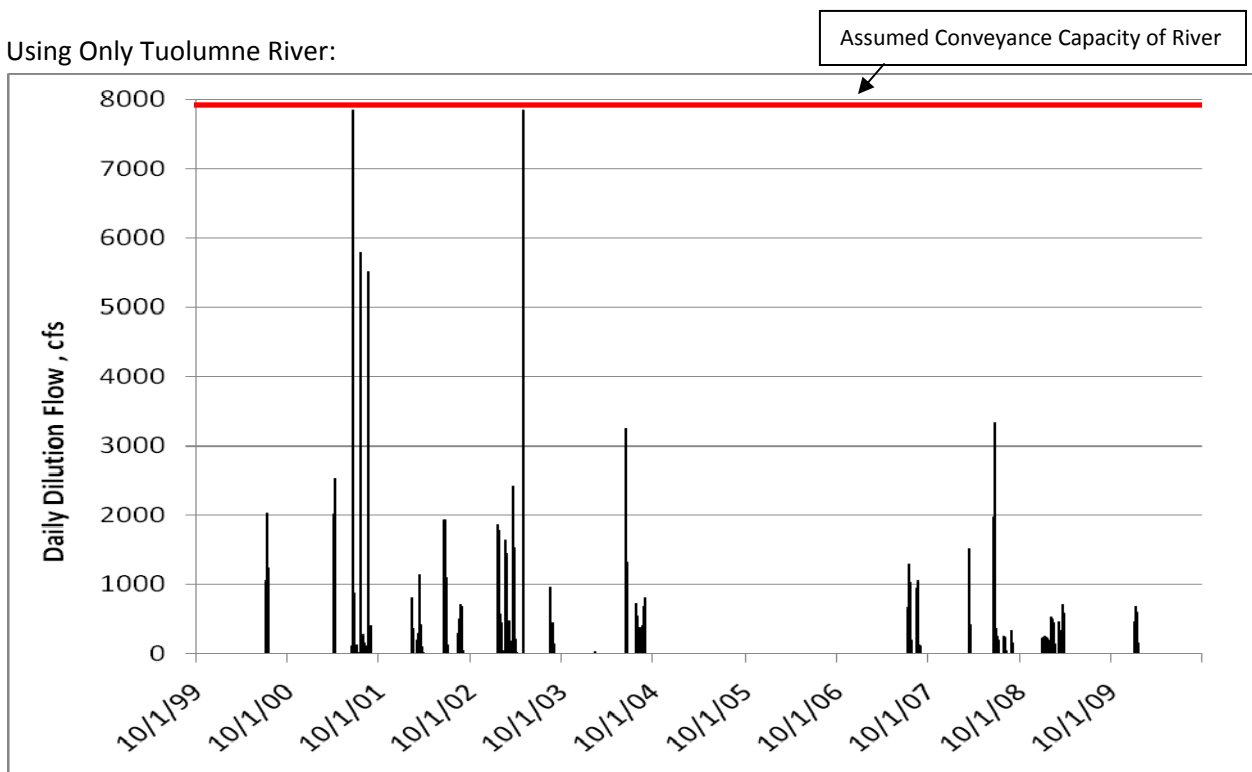
	Days UNI/BDT EC Objectives Exceedeed		Required Dilution Flow from Source, TAF/month and (Days UNI/BDT EC Surrogate at VNS Exceeded)			
	UNI	BDT	Stanislaus	Merced	Tuolumne	Recirculation
11/07						
12/07						
1/08						
2/08						
3/08			9.37	9.46	10.80	31.11
4/08						
5/08						
6/08	12	10	13.77	22.00	22.81	212.57
7/08	31	31	3.07	3.74	3.99	25.16
8/08	31	31	2.12	2.76	2.59	50.74
9/08						
10/08						
11/08						
12/08			0.84	0.83	0.91	162.07
1/09	9	3	9.61	9.54	10.25	230.31(25)
2/09	21	11	11.42	11.40	12.12	162.07(28)
3/09	7	0	10.16	10.55	10.96	82.43(3)
4/09						3.42
5/09	14					
6/09						
7/09						
8/09						
9/09						
10/09						
11/09						
12/09						
1/10			13.06	13.55	13.25	132.78
2/10						
3/10						
4/10						
5/10						
6/10						
7/10						
8/10						
9/10						
10/10						
11/10						
12/10						

Pattern of Dilution Flows Estimated to Meet San Joaquin at Brandt Bridge/Old River near Middle River Objectives 90% of Time

Using Only Stanislaus River:

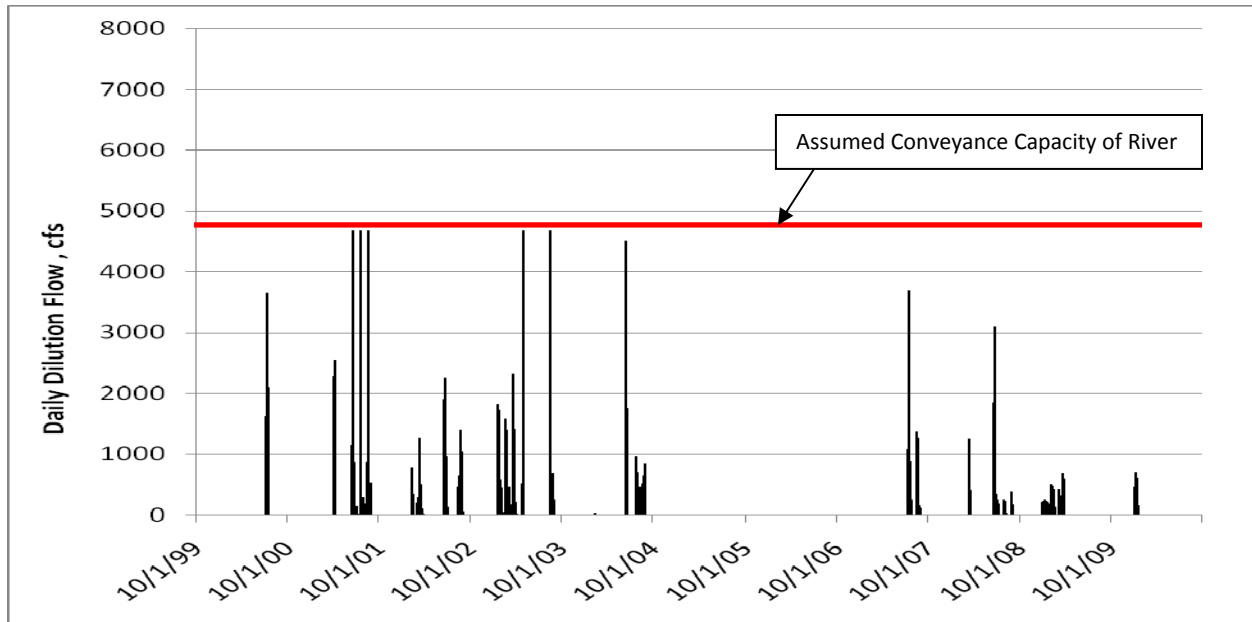


Using Only Tuolumne River:

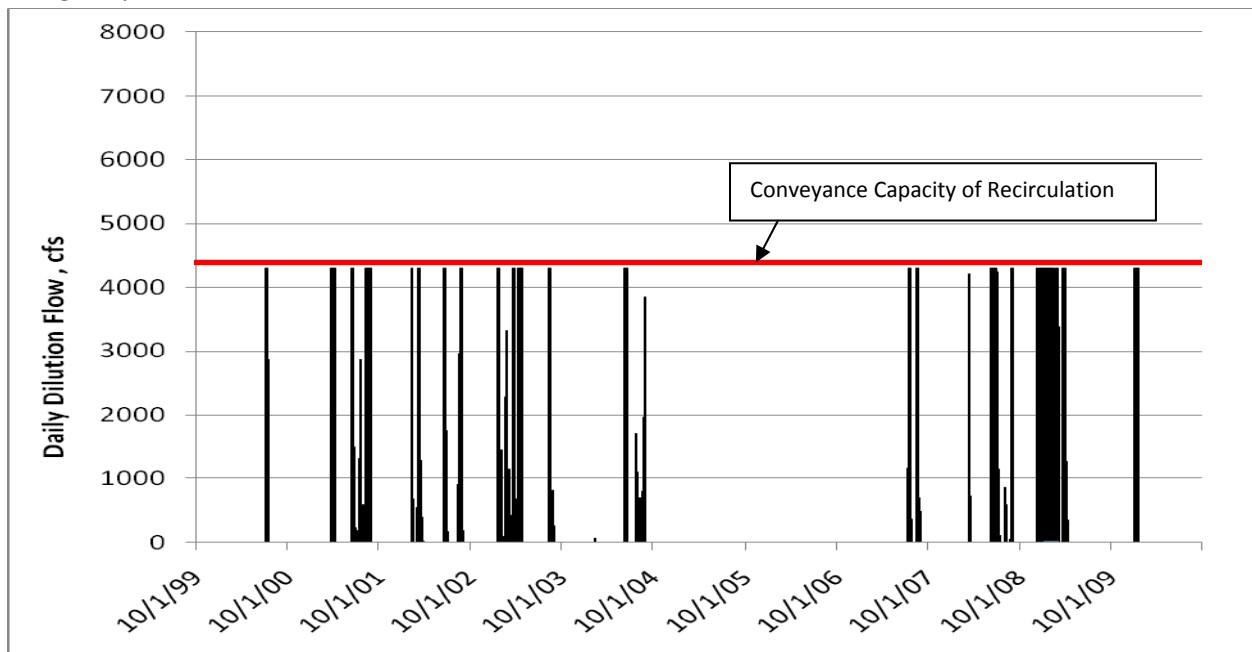


Pattern of Dilution Flows Estimated to Meet San Joaquin at Brandt Bridge/Old River near Middle River Objectives 90% of Time

Using Only Merced River:



Using Only DMC Recirculation:



Modeled Dilution Flows Independently Estimated to Meet UNI and BDT Objectives 100% of the Time

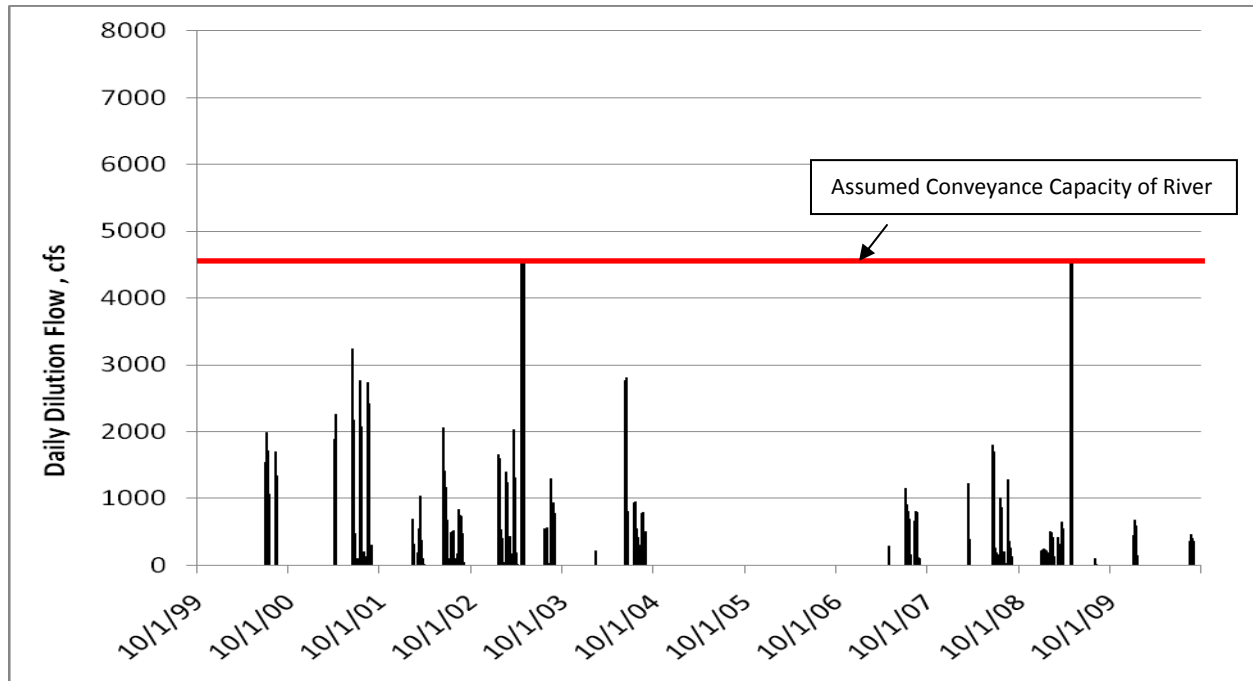
	Days UNI/BDT EC Objectives Exceeded		Estimated Dilution Flow by Source, TAF/month and (Days UNI/BDT EC Surrogate at VNS Exceeded)			
	UNI	BDT	Stanislaus	Merced	Tuolumne	Recirculation
10/99						
11/99						
12/99						
1/00						
2/00						
3/00						
4/00						
5/00						
6/00			0.49	0.65	0.52	9.20
7/00			39.18	74.67	44.88	119.82
8/00		ND	10.91	16.87	12.95	32.53
9/00						
10/00						
11/00						
12/00						
1/01						
2/01						
3/01						59.71
4/01			24.17	28.23	26.10	145.01 (1)
5/01						0.13
6/01		5	37.13	79.10	124.27	183.59
7/01		20	30.82	74.00	74.83	69.59
8/01	14	17	37.21	82.69	58.71	264.43 (3)
9/01						
10/01						
11/01						
12/01						
1/02						
2/02		14	7.11	7.87	8.21	35.18
3/02			11.73	14.48	13.06	65.49
4/02						
5/02						
6/02	3	9	31.62	51.24	52.94	169.00
7/02	31	31	8.61	82.37	12.89	18.34
8/02	30	31	18.81	67.56	27.93	181.56
9/02						
10/02						
11/02						
12/02						
1/03		5	19.93	21.78	22.15	75.93
2/03		28	17.91	19.95	20.33	50.85
3/03	6	31	24.04	26.60	27.57	84.47
4/03	3	16	86.81	86.07	124.99	155.45
5/03						
6/03						
7/03			8.34	52.48	9.19	17.74
8/03			21.12	77.98	23.10	62.43
9/03						

	Days UNI/BDT EC Objectives Exceeded		Estimated Dilution Flow by Source, TAF/month and (Days UNI/BDT EC Surrogate at VNS Exceeded)			
	UNI	BDT	Stanislaus	Merced	Tuolumne	Recirculation
10/03						
11/03						
12/03						
1/04						
2/04			0.76	0.80	0.83	2.12
3/04						
4/04						
5/04						27.29
6/04	9		36.97	70.91	66.65	158.22
7/04			15.68	40.61	21.52	47.73
8/04	31		20.67	36.40	28.37	80.52
9/04						
10/04						
11/04						
12/04						
1/05						
2/05						
3/05						
4/05						
5/05						
6/05						
7/05						
8/05						
9/05						
10/05						
11/05						
12/05						
1/06						
2/06						
3/06						
4/06						
5/06						
6/06						
7/06						
8/06						
9/06						
10/06						
11/06						
12/06						
1/07						
2/07						
3/07						
4/07			0.57	0.74	0.66	9.02
5/07						
6/07						
7/07	14	17	21.49	58.49	30.93	108.28
8/07	6	6	14.66	24.79	19.16	137.98
9/07						
10/07						

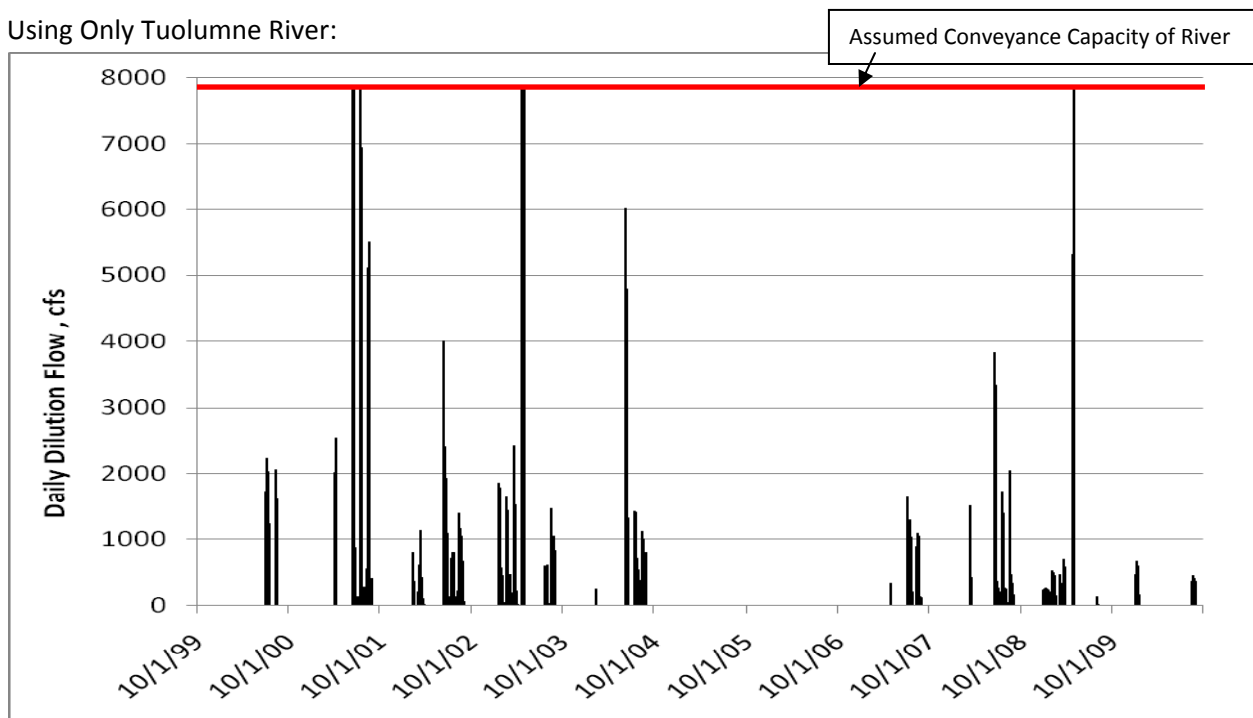
	Days UNI/BDT EC Objectives Exceedeed		Estimated Dilution Flow by Source, TAF/month and (Days UNI/BDT EC Surrogate at VNS Exceeded)			
	UNI	BDT	Stanislaus	Merced	Tuolumne	Recirculation
11/07						
12/07						
1/08						
2/08						
3/08			10.07	10.19	11.68	34.09
4/08						
5/08						42.65
6/08	12	10	25.00	43.50	45.75	247.37 (12)
7/08	31	31	11.23	17.35	16.74	134.13 (13)
8/08	31	31	11.66	18.58	16.52	249.86
9/08						
10/08						
11/08						
12/08			1.09	1.08	1.18	170.60
1/09	9	3	9.94	9.88	10.60	230.31 (25)
2/09	21	11	11.42	11.40	12.12	162.07 (28)
3/09	7		10.55	10.94	11.38	85.08 (4)
4/09	14		28.14	52.36	41.68	80.02
5/09						
6/09						
7/09			0.19	0.27	0.24	1.01
8/09			0.08	0.11	0.10	0.39
9/09						
10/09						
11/09						
12/09						
1/10			13.59	14.09	13.78	139.15
2/10						
3/10						
4/10						
5/10						
6/10						
7/10						
8/10			8.63	11.80	8.58	33.28
9/10						
10/10						
11/10						
12/10						

Pattern of Dilution Flows Estimated to Meet San Joaquin River at Brandt Bridge/Old River near Middle River Objectives 100% of Time

Using Only Stanislaus River:

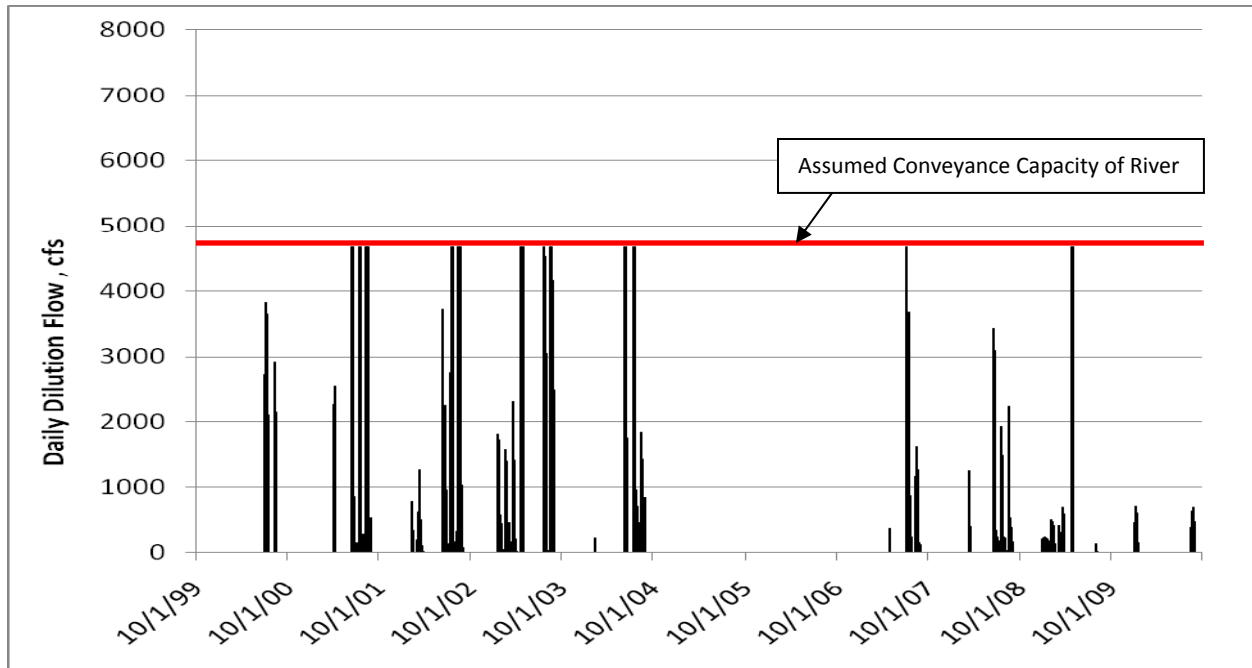


Using Only Tuolumne River:

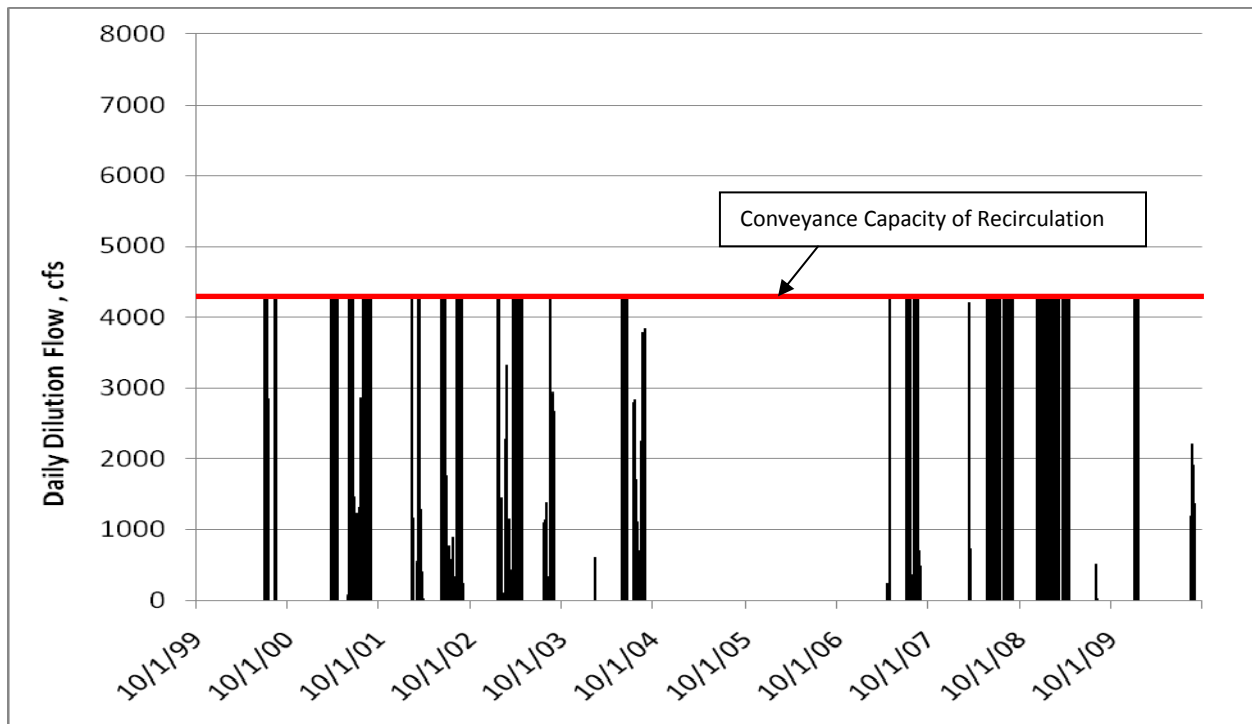


Pattern of Dilution Flows Estimated to Meet San Joaquin River at Brandt Bridge/Old River near Middle River Objectives 100% of Time

Using Only Merced River:



Using Only DMC Recirculation:



Modeled Dilution Flows Independently Estimated to Meet OLD Objective 90% of the Time

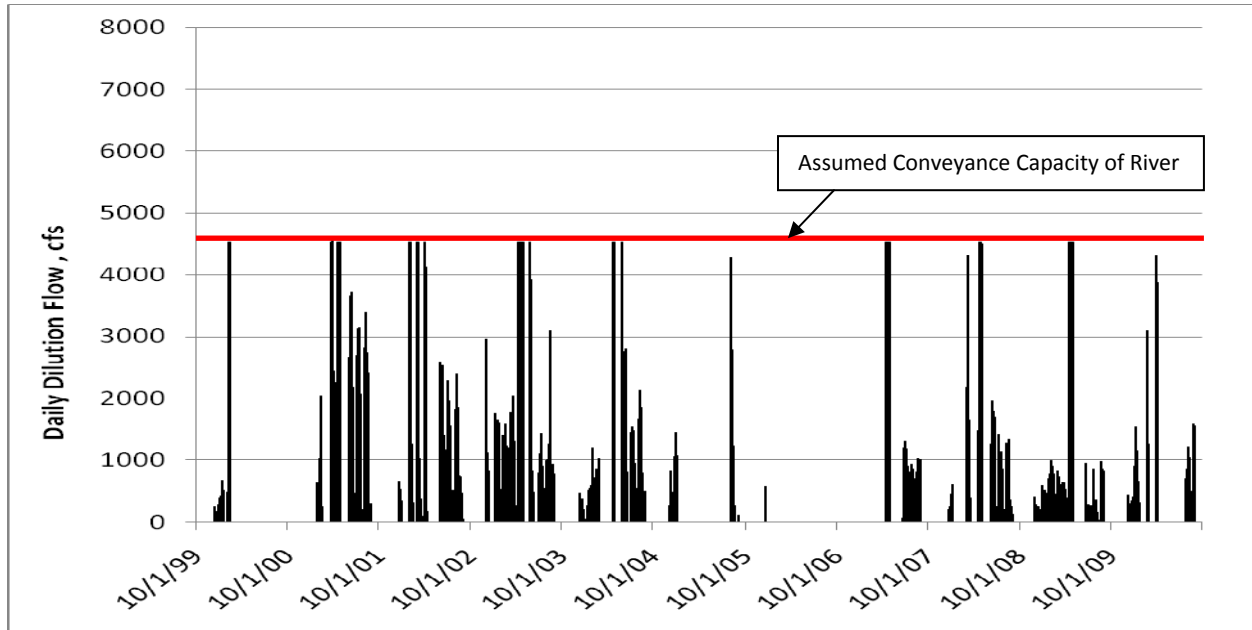
	Days EC Objective at OLD Exceedeed	Estimated Dilution Flow by Source, TAF/month and (Days OLD EC Surrogate at VNS Still Exceeded)			
		Stanislaus	Merced	Tuolumne	Recirculation
10/99					
11/99					
12/99		4.36	5.02	4.58	ND
1/00		13.81	15.91	14.53	165.64
2/00		66.77	72.03	72.27	102.29
3/00					
4/00					
5/00					
6/00			92.97	53.99	170.60 (12)
7/00			139.11	79.13	252.40 (29)
8/00			85.93	47.94	139.66
9/00					
10/00					
11/00					
12/00					
1/01		4.46	7.84	3.23	82.26
2/01		24.01	25.01	23.81	179.13 (18)
3/01		54.99	58.96	58.94	170.60
4/01	1	166.78	177.31	250.56	145.01 (14)
5/01	2				85.30 (8)
6/01	11	90.42	180.42	291.00	255.90 (24)
7/01	31	81.40	214.26	272.44	264.43 (31)
8/01	31	88.05	223.70	177.85	264.43 (31)
9/01					
10/01					
11/01					
12/01		5.99	5.78	6.82	45.80
1/02		4.46	7.84	3.23	82.26
2/02	21	58.56	62.10	84.70	186.56
3/02	5	70.61	80.27	99.12	229.80
4/02	1	55.98	67.16	82.60	102.36 (1)
5/02	31				25.59 (4)
6/02	20	76.02	131.90	169.91	255.90 (26)
7/02	30	45.34	232.04	105.77	264.43 (15)
8/02	8	57.43	203.01	116.18	264.43 (22)
9/02					
10/02					
11/02					13.65
12/02		23.30	25.55	27.02	178.69
1/03	10	46.50	50.79	51.83	248.70 (3)
2/03	28	45.78	50.83	52.47	154.25
3/03	31	54.00	59.89	62.40	227.90
4/03	23	185.59	188.58	279.40	172.05 (1)
5/03	12	38.41	52.50	60.06	110.89 (29)
6/03		13.22	20.88	16.24	162.07 (19)
7/03		37.03	150.19	45.31	127.73
8/03	29	53.72	212.03	60.71	215.99
9/03					

	Days EC Objective at OLD Exceedeed	Estimated Dilution Flow by Source, TAF/month and (Days OLD EC Surrogate at VNS Still Exceeded)			
		Stanislaus	Merced	Tuolumne	Recirculation
10/03					
11/03					
12/03		7.00	7.28	7.61	34.97
1/04		15.58	15.97	16.50	74.96
2/04		25.92	26.88	28.13	109.88
3/04					
4/04		72.26	75.41	109.17	110.89 (1)
5/04	ND	12.74	20.45	20.39	93.83 (4)
6/04	ND	68.36	140.13	119.17	255.90 (30)
7/04	ND	46.89	146.94	76.41	264.43 (31)
8/04	ND	58.14	141.37	93.67	264.43 (31)
9/04	ND				
10/04					
11/04					59.71
12/04		37.38	35.91	41.49	196.19 (13)
1/05					(5)
2/05					
3/05					
4/05	ND				(1)
5/05	ND				(10)
6/05	ND				(7)
7/05	ND				55.90 (25)
8/05	ND	39.27	36.32	34.44	193.91 (28)
9/05	ND				
10/05	ND	76.66	72.23	75.93	505.71
11/05	ND				
12/05	ND				
1/06	ND	1.13	1.25	1.17	3.45
2/06	ND				
3/06	ND				
4/06	ND				
5/06	ND				
6/06	ND				
7/06	ND				
8/06					
9/06					
10/06					
11/06					
12/06					
1/07					
2/07					
3/07					
4/07	1	136.29	148.75	217.72	162.07
5/07	29				
6/07		15.14	25.59	23.18	85.30
7/07	27	44.27	115.57	65.01	264.43
8/07	31	39.64	62.65	53.55	264.43
9/07					
10/07					

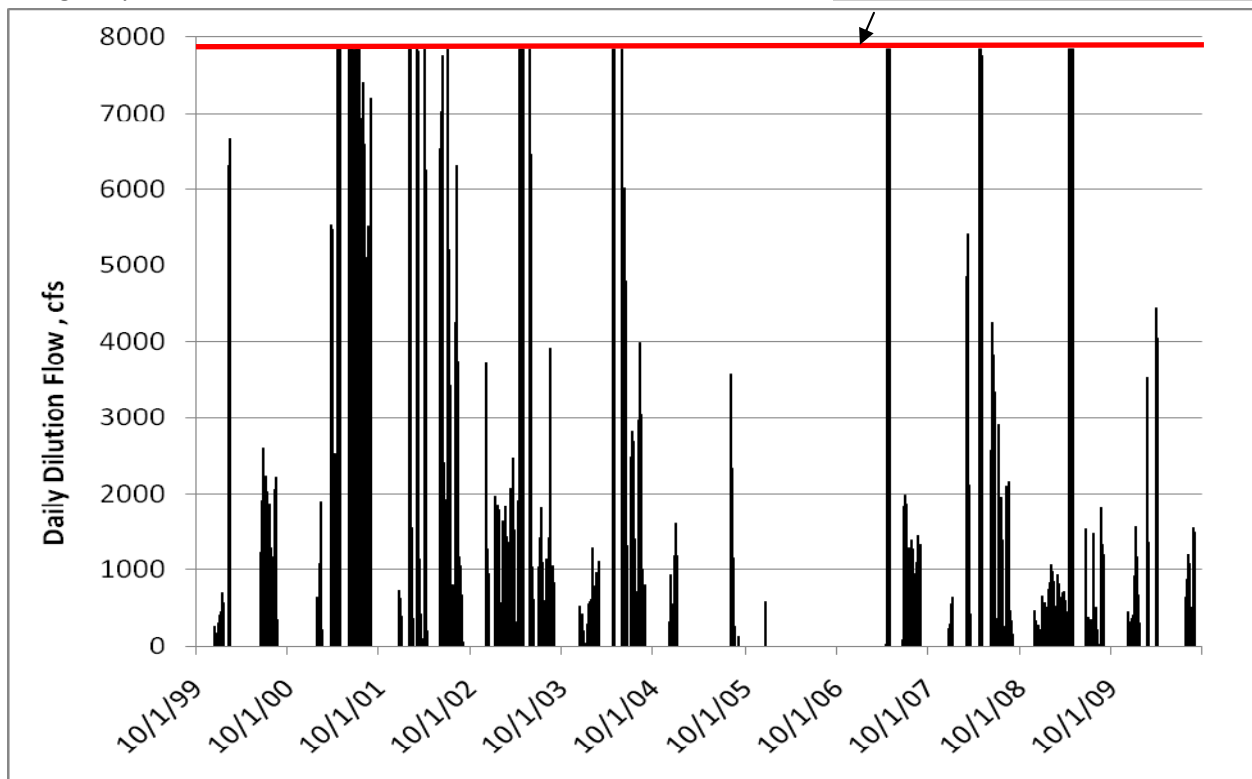
	Days EC Objective at OLD Exceedeed	Estimated Dilution Flow by Source, TAF/month and (Days OLD EC Surrogate at VNS Still Exceeded)			
		Stanislaus	Merced	Tuolumne	Recirculation
11/07					
12/07		4.43	4.47	5.07	26.15
1/08		4.26	4.46	4.83	40.84
2/08		1.36	1.37	1.79	69.70
3/08	17	50.35	51.41	69.98	121.64
4/08		101.86	133.44	147.57	76.77 (1)
5/08					42.65 (5)
6/08	17	53.55	96.97	107.39	247.37 (24)
7/08	31	37.10	67.57	63.93	264.43 (31)
8/08	31	38.56	65.21	62.44	255.90 (31)
9/08					
10/08					
11/08		3.33	3.32	3.75	93.83
12/08	23	14.97	14.94	16.65	238.84 (13)
1/09	31	27.49	27.16	29.63	230.31 (31)
2/09	28	29.22	29.43	31.84	162.07 (28)
3/09	31	27.60	28.74	30.09	238.84 (31)
4/09	24	140.59	171.28	224.27	127.95 (7)
5/09	8				(8)
6/09	10	7.00	15.90	11.40	8.53 (11)
7/09	31	14.48	24.65	20.42	197.48 (15)
8/09	31	20.23	31.31	31.55	247.37 (22)
9/09	19				
10/09					
11/09	6				
12/09	31	16.23	16.60	16.50	195.56
1/10	31	32.76	34.23	33.34	162.07
2/10	11	17.60	20.51	19.64	99.08
3/10	9	11.31	12.48	11.74	102.36
4/10	11	17.65	20.35	18.29	17.06
5/10					
6/10					
7/10		7.11	13.33	6.87	60.36
8/10	8	45.47	74.04	45.12	239.84
9/10					
10/10					
11/10					
12/10					

Pattern of Dilution Flows Estimated to Meet Old River near Tracy Objective 90% of Time

Using Only Stanislaus River:

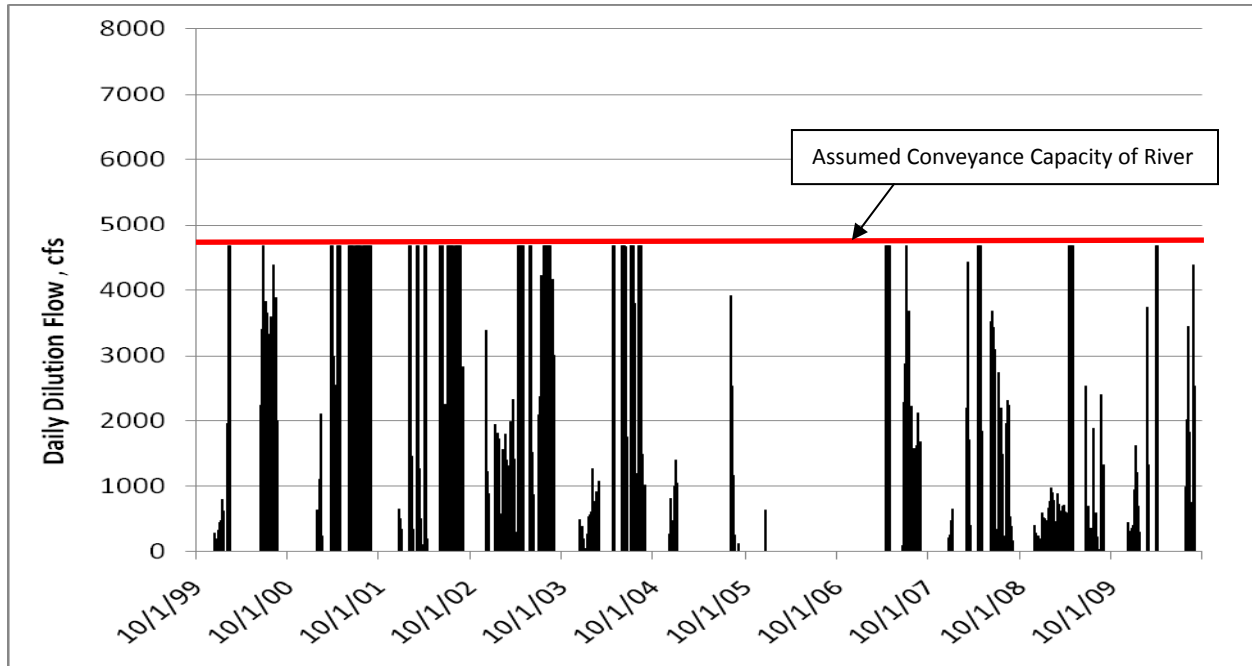


Using Only Tuolumne River:

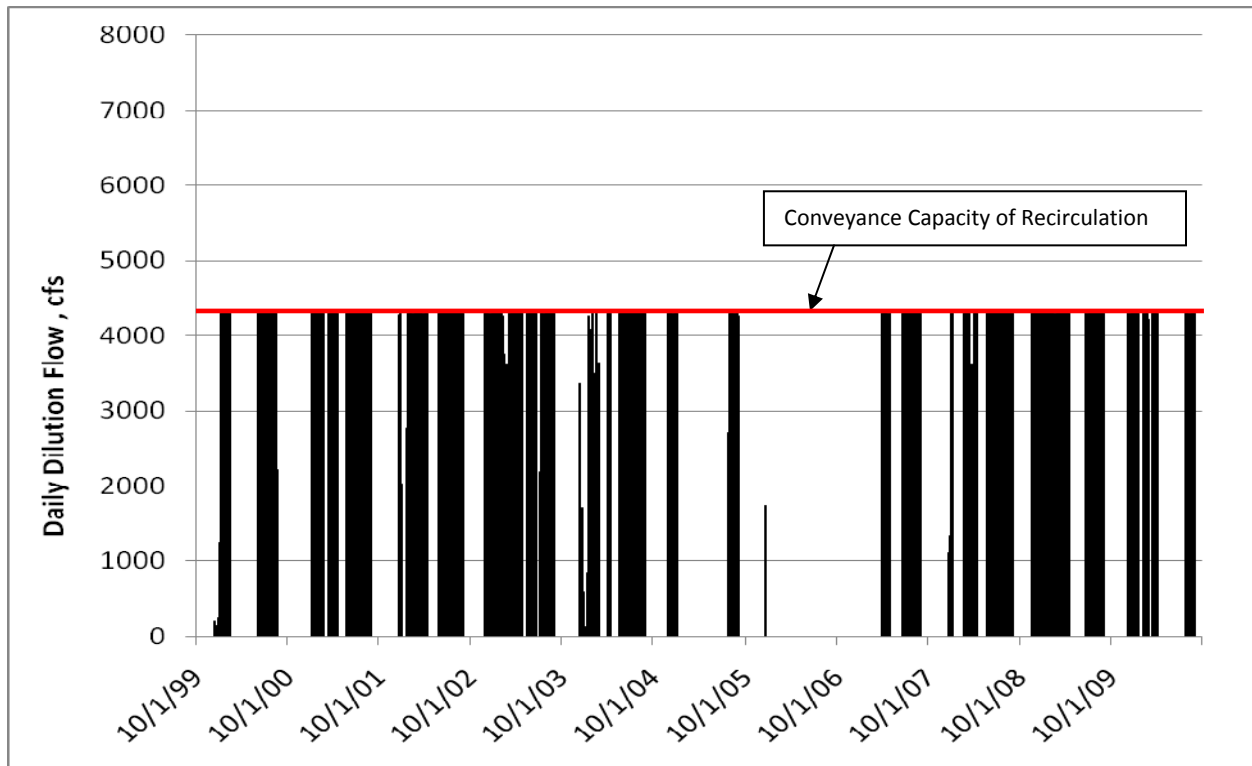


Pattern of Dilution Flows Estimated to Meet Old River near Tracy Objective 90% of Time

Using Only Merced River:



Using Only DMC Recirculation:



Modeled Dilution Flows Independently Estimated to Meet OLD Objective 95% of the Time

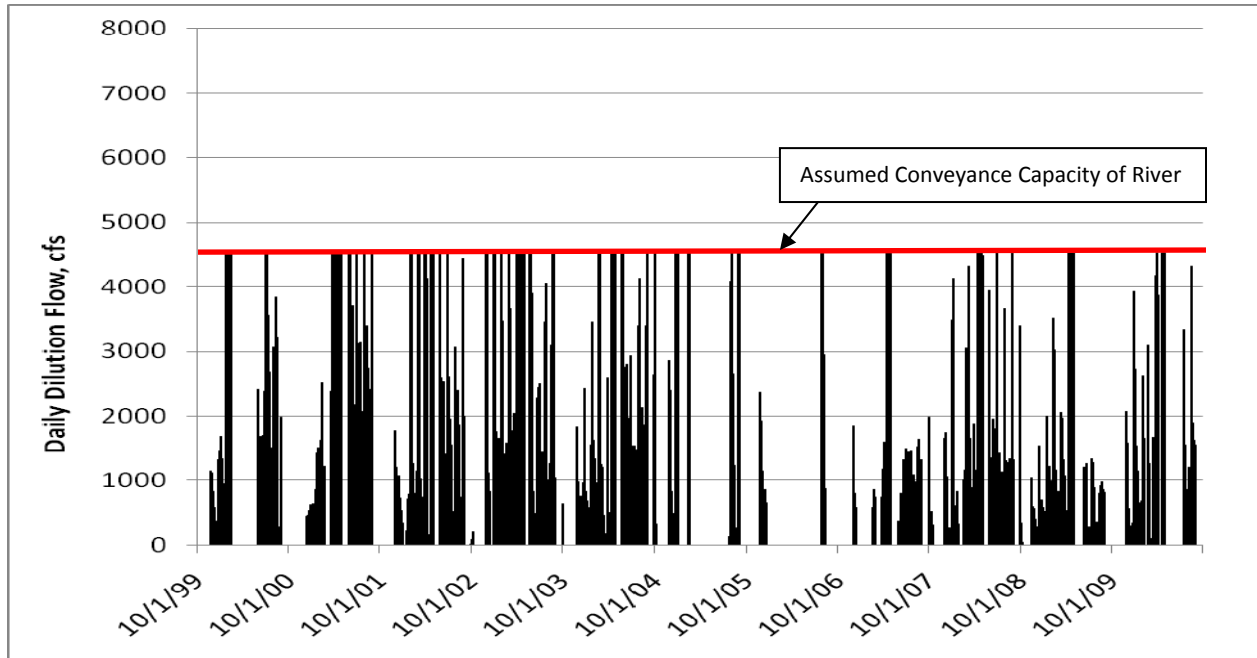
	Days EC Objective at OLD Exceedeed	Estimated Dilution Flow by Source, TAF/month and (Days OLD EC Surrogate at VNS Still Exceeded)			
		Stanislaus	Merced	Tuolumne	Recirculation
10/99					ND
11/99		12.11	15.15	13.20	ND
12/99		34.05	41.68	36.64	ND
1/00		113.85	134.61	68.86	221.78 (31)
2/00		135.00	139.05	182.86	110.89 (21)
3/00					
4/00					
5/00		7.38	46.84	12.09	(2)
6/00		98.25	278.10	131.13	170.60 (30)
7/00		142.12	287.37 (30)	183.27	264.43 (31)
8/00		101.33	247.35 (23)	134.68	264.43 (31)
9/00					
10/00					
11/00					59.71
12/00		18.23	18.95	19.60	264.43 (11)
1/01		36.81	42.82	42.34	196.19 (31)
2/01		51.47	54.62	50.38	187.66 (28)
3/01		96.47	100.47	95.62	204.72 (11)
4/01	1	270.00	253.23	344.38	145.01 (27)
5/01	2	37.92	48.16	78.83	85.30 (17)
6/01	11	132.76	270.68	402.74	255.90 (30)
7/01	31	131.12	287.37 (7)	340.68	264.43 (31)
8/01	31	133.48	287.37 (24)	251.37	264.43 (31)
9/01					
10/01					
11/01		0.82	0.78	0.98	153.54
12/01		42.20	39.88	50.83	247.37 (20)
1/02		36.81	42.82	422.34	196.19 (3)
2/02	21	82.68	101.82	110.40	238.84 (28)
3/02	5	116.29	138.01	165.15	264.43 (31)
4/02	1	155.69	207.55	238.16	102.36 (19)
5/02	31	32.64	37.37	44.31	25.59 (18)
6/02	20	113.50	230.17	253.12	255.90 (30)
7/02	30	78.83	287.37 (18)	191.15	264.43 (31)
8/02	8	96.34	287.37 (31)	214.40	264.43 (31)
9/02		0.02	0.02	0.02	51.18
10/02		0.97	1.33	1.26	24.08
11/02		33.34	37.73	46.02	221.78
12/02		76.37	73.85	104.44	213.25 (28)
1/03	10	101.40	115.68	142.36	264.43 (31)
2/03	28	77.27	91.55	98.94	238.84 (28)
3/03	31	112.90	128.45	155.64	264.43 (31)
4/03	23	219.96	225.73	326.61	179.13 (22)
5/03	12	95.63	121.13	143.88	110.89 (31)
6/03		50.53	117.42	129.12	248.41 (29)
7/03		87.05	278.10 (7)	130.18	234.13
8/03	29	117.14	287.37 (31)	164.74	238.84 (17)
9/03		1.28	1.89	1.41	8.47

	Days EC Objective at OLD Exceedeed	Estimated Dilution Flow by Source, TAF/month and (Days OLD EC Surrogate at VNS Still Exceeded)			
		Stanislaus	Merced	Tuolumne	Recirculation
10/03					
11/03		14.25	15.46	16.44	162.07
12/03		38.01	39.14	43.35	264.43 (20)
1/04		53.34	55.89	58.94	264.43 (8)
2/04		75.10	77.44	85.44	247.37 (29)
3/04		34.03	35.61	31.61	178.43 (19)
4/04		164.37	170.85	254.94	110.89 (1)
5/04	ND	59.80	71.78	94.04	93.83 (31)
6/04	ND	91.22	227.91	186.23	255.90 (30)
7/04	ND	85.24	275.69	162.69	264.43 (31)
8/04	ND	101.41	251.63	196.35	264.43 (31)
9/04	ND	31.10	48.21	47.29	108.71
10/04		1.20	1.66	1.43	4.68
11/04		33.05	31.19	44.07	196.19
12/04		126.34	122.20	167.77	196.19 (25)
1/05					68.24 (12)
2/05		81.87	58.83	79.24	136.48
3/05					
4/05	ND				
5/05	ND				
6/05	ND				
7/05	ND	32.59	30.05	29.60	153.54
8/05	ND	109.84	101.65	106.49	264.43 (30)
9/05	ND				
10/05	ND	29.99	35.15	31.06	187.66
11/05	ND	19.06	21.55	19.70	179.13 (18)
12/05	ND				
1/06	ND				
2/06	ND				
3/06	ND				
4/06	ND				
5/06	ND				
6/06	ND				
7/06	ND				
8/06		44.10	81.61	39.23	238.84 (31)
9/06					
10/06					
11/06					
12/06		17.89	19.07	19.07	86.05
1/07					
2/07		11.57	14.92	12.40	181.54
3/07		10.14	10.53	10.78	96.59
4/07	1	178.24	188.57	276.47	162.07 (1)
5/07	29	1.28	1.88	2.15	(25)
6/07		37.66	121.90	64.90	85.30 (30)
7/07	27	71.06	225.37	118.18	264.43 (31)
8/07	31	64.36	136.89	94.39	264.43 (31)
9/07		9.93	11.09	15.34	53.14
10/07		6.78	6.68	8.17	57.46

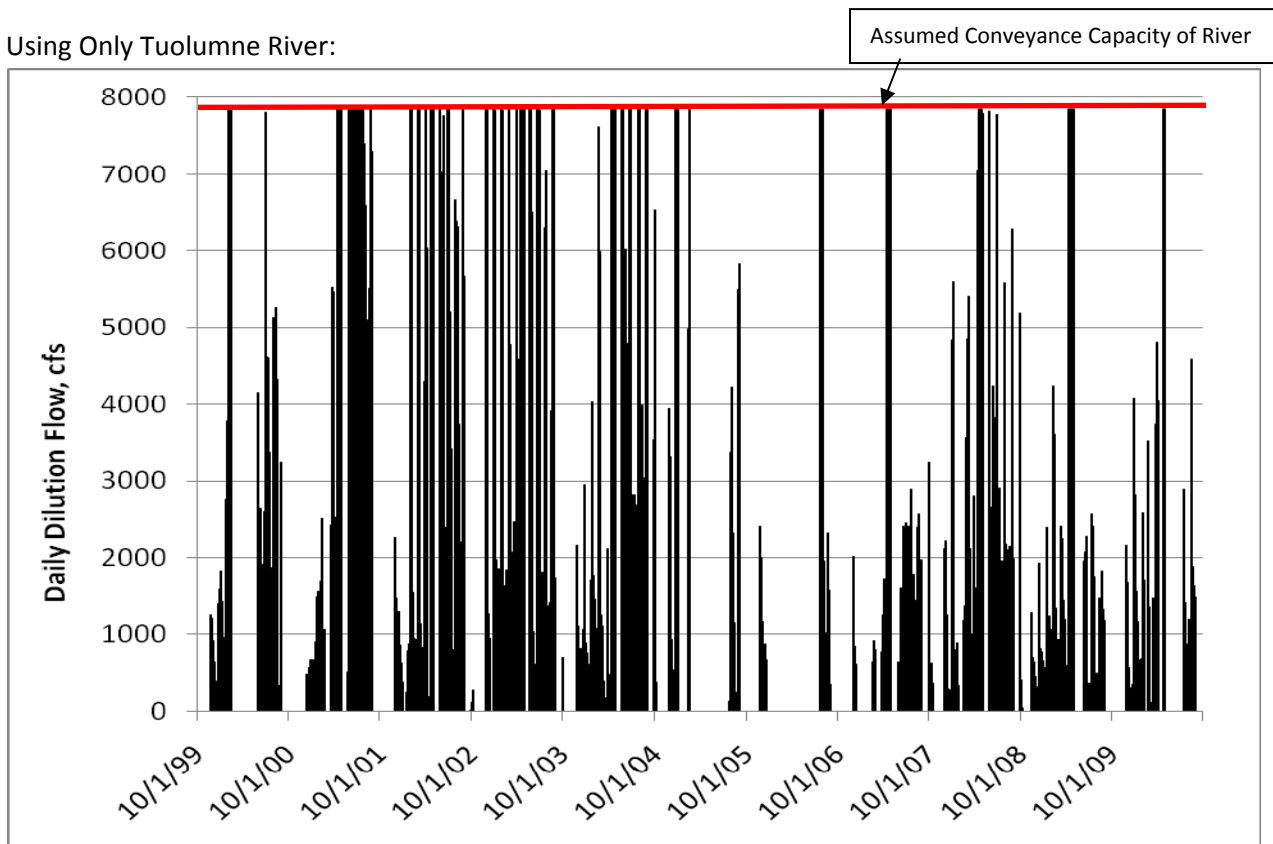
	Days EC Objective at OLD Exceedeed	Estimated Dilution Flow by Source, TAF/month and (Days OLD EC Surrogate at VNS Still Exceeded)			
		Stanislaus	Merced	Tuolumne	Recirculation
11/07					86.62
12/07		32.62	33.52	39.23	264.44 (4)
1/08		50.36	53.22	64.21	119.42 (31)
2/08		36.21	38.10	42.74	162.07 (1)
3/08	17	71.55	78.42	98.15	213.25 (31)
4/08		166.92	195.62	268.68	76.77 (13)
5/08		10.13	17.16	19.20	42.65 (11)
6/08	17	78.65	143.49	151.99	247.37 (30)
7/08	31	61.45	101.23	109.72	264.43 (31)
8/08	31	64.52	112.85	103.67	255.90 (31)
9/08		23.15	35.53	37.56	247.37 (2)
10/08		2.10	2.33	2.40	76.77 (12)
11/08		19.92	19.70	23.22	187.66
12/08	23	34.07	34.13	39.41	238.84 (23)
1/09	31	52.61	52.10	58.42	230.31 (31)
2/09	28	61.03	62.14	70.69	162.07 (28)
3/09	31	54.91	57.48	61.72	238.84 (31)
4/09	24	191.38	220.41	315.60	127.95 (23)
5/09	8				(14)
6/09	10	25.22	50.19	42.34	8.53 (19)
7/09	31	30.00	60.22	50.59	247.37 (31)
8/09	31	33.39	59.08	54.75	247.37 (31)
9/09	19	23.15	35.53	37.56	247.37
10/09					
11/09	6	18.32	20.05	19.38	170.60
12/09	31	60.72	63.86	62.93	264.43 (21)
1/10	31	55.44	57.95	56.14	162.07 (31)
2/10	11	48.70	53.63	51.31	119.42 (28)
3/10	9	63.11	66.92	59.31	230.31 (27)
4/10	11	111.85	115.89	132.51	34.12 (15)
5/10					(4)
6/10					
7/10		34.46	86.86	32.40	179.13
8/10	8	86.42	152.53	86.44	264.43 (21)
9/10					

Pattern of Dilution Flows Estimated to Meet Old River near Tracy Objective 95% of Time

Using Only Stanislaus River:

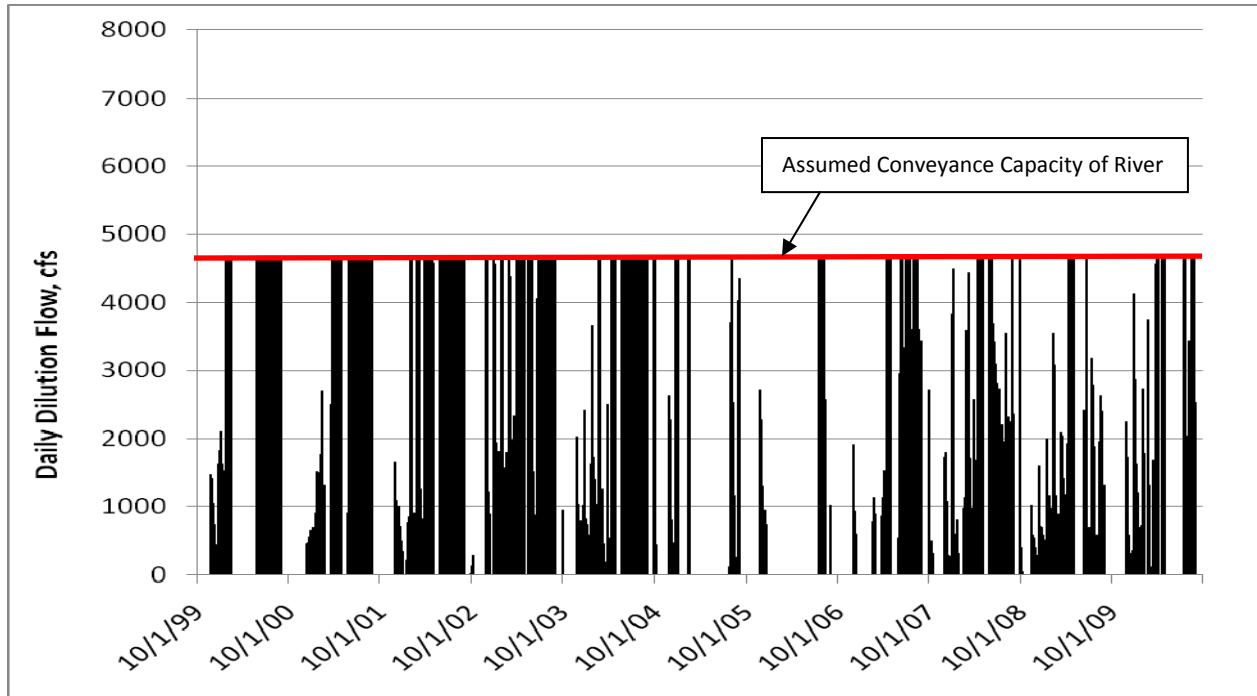


Using Only Tuolumne River:

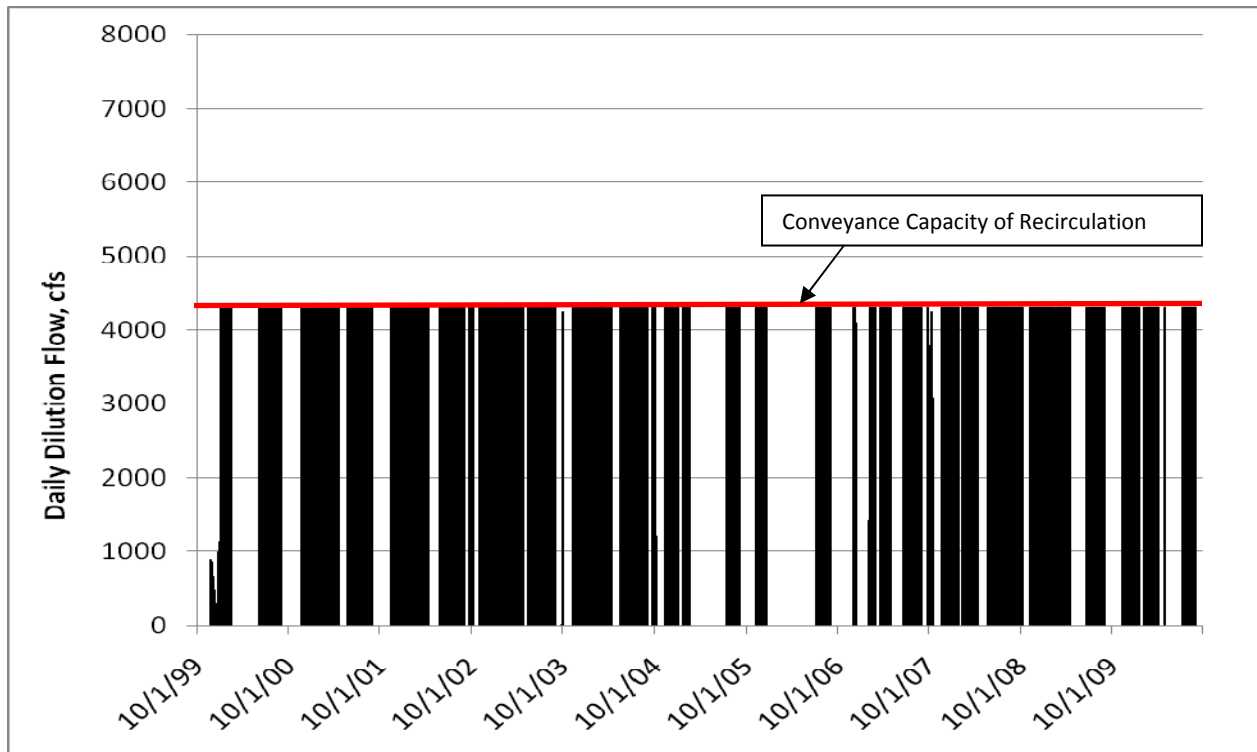


Pattern of Dilution Flows Estimated to Meet Old River near Tracy Objective 95% of Time

Using Only Merced River:



Using Only DMC Recirculation:



Modeled Dilution Flows Independently Estimated to Meet OLD Objective 100% of the Time

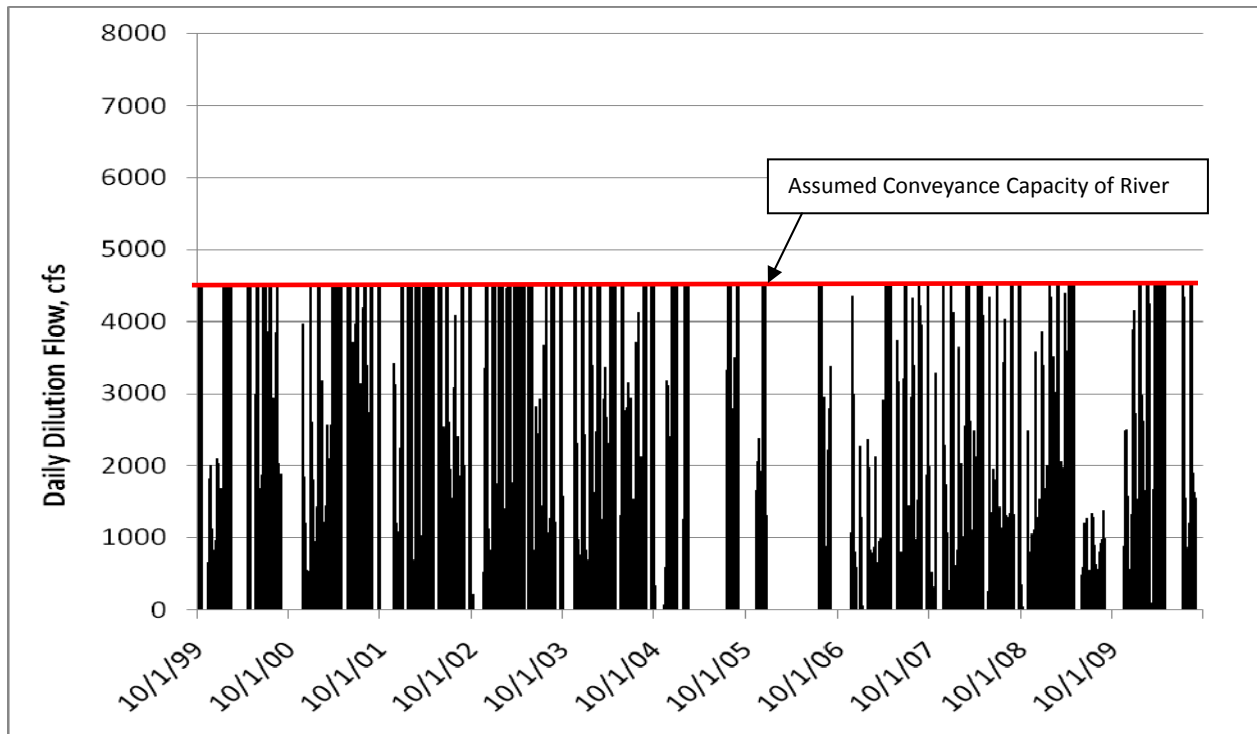
	Days EC Objective at OLD Exceedeed	Estimated Dilution Flow by Source, TAF/month and (Days OLD EC Surrogate at VNS Still Exceeded)			
		Stanislaus	Merced	Tuolumne	Recirculation
10/99		ND	ND	ND	ND
11/99		42.21	55.79	47.05	ND
12/99		63.34	80.56	68.87	ND
1/00		188.49	192.89	145.59	221.78 (31)
2/00		135.00 (4)	166.86 (11)	203.86	110.89 (29)
3/00					
4/00		100.48	196.20	237.25	(1)
5/00		77.94	287.37 (1)	137.21	(22)
6/00		159.10	278.10 (30)	242.46	170.60 (30)
7/00		184.01	287.37 (31)	271.53	264.43 (31)
8/00		146.60	287.37 (31)	206.21	264.43 (31)
9/00					
10/00					
11/00		22.37	19.75	27.07	59.71 (5)
12/00		68.03	72.26	78.73	264.43 (31)
1/01		99.91	107.57	127.29	196.19 (31)
2/01		91.98	96.26	90.01	187.66 (28)
3/01		141.50	149.48	143.63	221.78 (31)
4/01	1	270.00 (1)	278.10 (1)	404.27	145.01 (30)
5/01	2	70.45	111.24 (2)	171.16	85.30 (30)
6/01	11	174.46	278.10 (10)	466.80 (10)	255.90 (30)
7/01	31	173.49	287.37 (31)	443.79 (22)	264.43 (31)
8/01	31	185.54	287.37 (31)	344.16	264.43 (31)
9/01		59.75	65.51	102.85	93.83 (30)
10/01					110.89 (26)
11/01		44.66	40.62	65.30	153.54 (5)
12/01		114.89	101.69	150.80	247.37 (31)
1/02		99.91	107.57	127.29	196.19 (31)
2/02	21	147.88	170.89	215.51	238.84 (28)
3/02	5	178.69	208.65	260.57	264.43 (31)
4/02	1	231.90	252.93	360.28	102.36 (26)
5/02	31	73.07	101.97	139.81	25.59 (30)
6/02	20	159.93	278.10 (3)	371.43	255.90 (30)
7/02	30	108.88	287.37 (31)	244.84	264.43 (31)
8/02	8	140.13	287.37 (31)	289.57	264.43 (31)
9/02		58.27	87.72	116.94	230.31 (18)
10/02		0.97	1.33	1.25	68.24 (27)
11/02		69.58	82.34	95.67	221.78 (5)
12/02		124.50	139.91	176.38	213.25 (31)
1/03	10	167.06	184.84	238.95	264.43 (31)
2/03	28	142.11	161.99	194.63	238.84 (28)
3/03	31	178.78	200.16	259.38	264.43 (31)
4/03	23	257.91	268.79	386.14	179.13 (30)
5/03	12	136.88	178.74	208.56	110.89 (31)
6/03		81.82	224.94	222.71	255.90 (30)
7/03		120.69	278.10 (13)	172.42	264.43 (31)
8/03	29	159.11	287.37 (31)	218.30	238.84 (31)
9/03		61.61	90.68	91.75	151.12

	Days EC Objective at OLD Exceedeed	Estimated Dilution Flow by Source, TAF/month and (Days OLD EC Surrogate at VNS Still Exceeded)			
		Stanislaus	Merced	Tuolumne	Recirculation
10/03					
11/03		58.38	62.59	91.75	162.07 (10)
12/03		90.45	97.03	116.92	264.43 (31)
1/04		110.64	116.89	137.43	264.43 (31)
2/04		144.69	151.25	196.41	247.37 (29)
3/04		86.87	95.25	80.18	230.31 (31)
4/04		205.25	221.48	316.06	110.89 (16)
5/04	ND	92.61	114.65	156.61	93.83 (31)
6/04	ND	116.93	278.10 (10)	267.26	255.90 (30)
7/04	ND	115.83	287.37 (31)	240.69	264.43 (31)
8/04	ND	136.83	287.37 (31)	284.00	264.43 (31)
9/04	ND	88.22	121.78	140.48	255.90
10/04		1.20	1.65	1.43	153.54 (21)
11/04		63.42	59.68	86.15	196.19 (9)
12/04		191.26	186.49	271.72	196.19 (31)
1/05		38.48	5.62		85.30 (22)
2/05		145.23	146.42	210.02	170.60 (23)
3/05					25.59 (12)
4/05	ND				
5/05	ND				
6/05	ND				
7/05	ND	78.88	71.48	125.13	153.54 (11)
8/05	ND	148.82	136.01	142.77	264.43 (31)
9/05	ND				
10/05	ND				
11/05	ND	59.46	71.62	62.38	187.66 (14)
12/05	ND	127.10	141.23	157.33	179.13 (31)
1/06	ND				
2/06	ND				
3/06	ND				
4/06	ND				
5/06	ND				
6/06	ND				
7/06	ND		(2)		
8/06		87.83	266.01 (25)	143.83	238.84 (31)
9/06					
10/06					
11/06		47.82	48.58	53.11	137.13
12/06		40.10	44.09	45.33	221.78 (15)
1/07		20.31	22.59	23.50	25.59 (31)
2/07		40.81	51.91	45.20	196.19 (28)
3/07		41.95	46.68	45.96	213.25 (31)
4/07	1	217.73	226.05	331.32	162.07 (25)
5/07	29	46.40	43.17	126.27	(31)
6/07		91.35	242.74	218.02	85.30 (30)
7/07	27	113.67	287.37 (19)	236.14	264.43 (31)
8/07	31	110.83	230.67 (4)	181.39	264.43 (31)
9/07		59.67	50.89	111.24	170.60 (23)
10/07		23.70	21.48	27.99	204.72 (28)

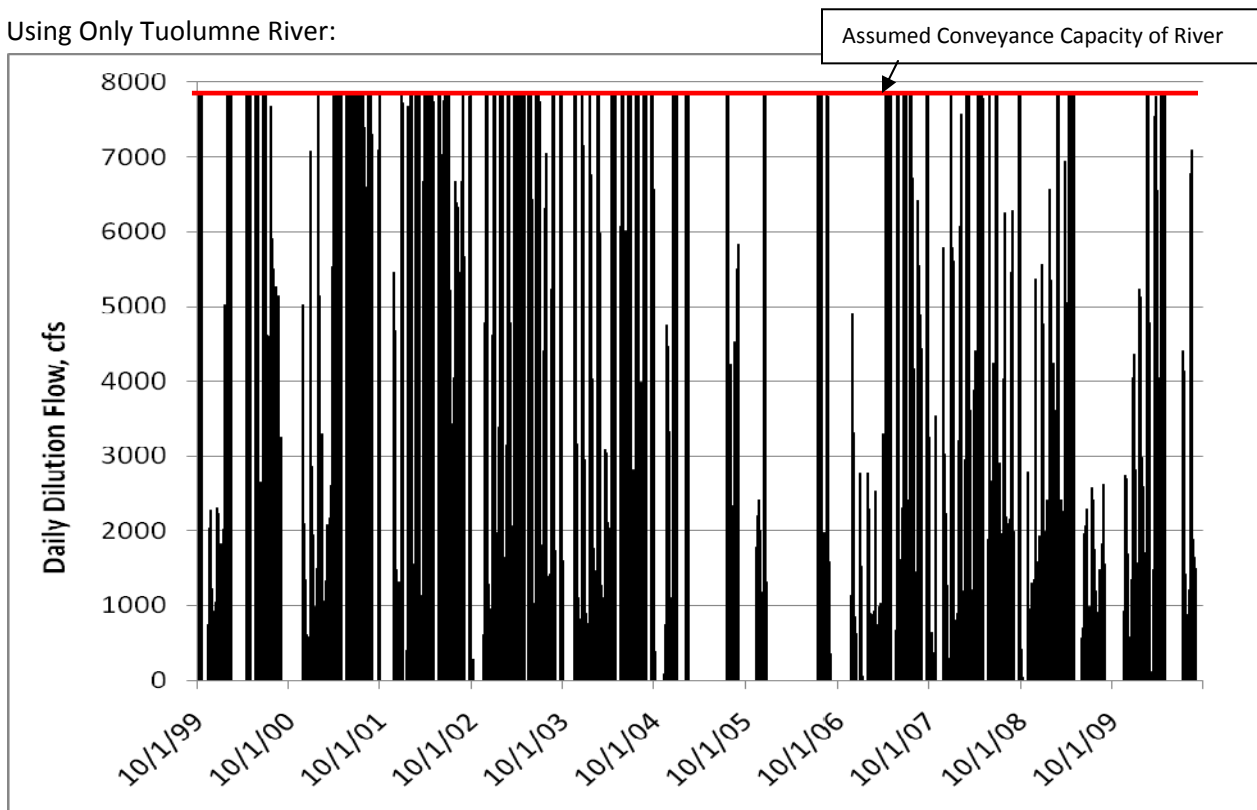
	Days EC Objective at OLD Exceedeed	Estimated Dilution Flow by Source, TAF/month and (Days OLD EC Surrogate at VNS Still Exceeded)			
		Stanislaus	Merced	Tuolumne	Recirculation
11/07		27.71	32.47	36.40	86.62 (4)
12/07		82.78	89.13	116.63	264.43 (31)
1/08		71.08	75.70	88.07	119.42 (31)
2/08		80.98	85.60	130.70	187.66 (29)
3/08	17	128.12	145.05	203.56	213.25 (31)
4/08		192.62	232.21	307.88	76.77 (23)
5/08		41.35	71.01	84.18	42.65 (31)
6/08	17	104.80	187.69	226.79	247.37 (30)
7/08	31	89.65	128.28	154.93	264.43 (31)
8/08	31	99.52	174.72	153.86	255.90 (31)
9/08		70.57	76.18	120.63	247.37 (30)
10/08		19.29	18.22	21.64	163.52 (27)
11/08		47.96	45.87	62.86	193.92 (16)
12/08	23	66.19	63.51	83.81	238.84 (31)
1/09	31	94.72	89.25	110.71	230.31 (31)
2/09	28	108.03	111.04	142.61	162.07 (28)
3/09	31	93.18	104.42	115.63	238.84 (31)
4/09	24	208.90	253.84	352.17	127.95 (29)
5/09	8	1.36	2.08	1.56	(25)
6/09	10	37.95	72.15	59.70	8.53 (30)
7/09	31	40.65	83.70	69.40	247.37 (31)
8/09	31	44.15	81.35	74.33	247.37 (31)
9/09	19	70.57	76.18	120.63	247.37 (3)
10/09					
11/09	6	47.01	52.99	50.44	170.60 (8)
12/09	31	100.86	106.38	104.65	264.43 (31)
1/10	31	121.15	119.51	121.05	162.07 (31)
2/10	11	115.54	128.45	147.34	119.42 (28)
3/10	9	142.46	151.92	163.72	230.31 (31)
4/10	11	201.72	229.61	266.15	34.12 (28)
5/10					(9)
6/10					
7/10		74.34	154.66	69.73	180.77 (21)
8/10	8	127.91	233.50	141.92	264.43 (31)
9/10					

Pattern of Dilution Flows Independently Estimated to Meet Old River near Tracy Objective 100% of Time

Using Only Stanislaus River:

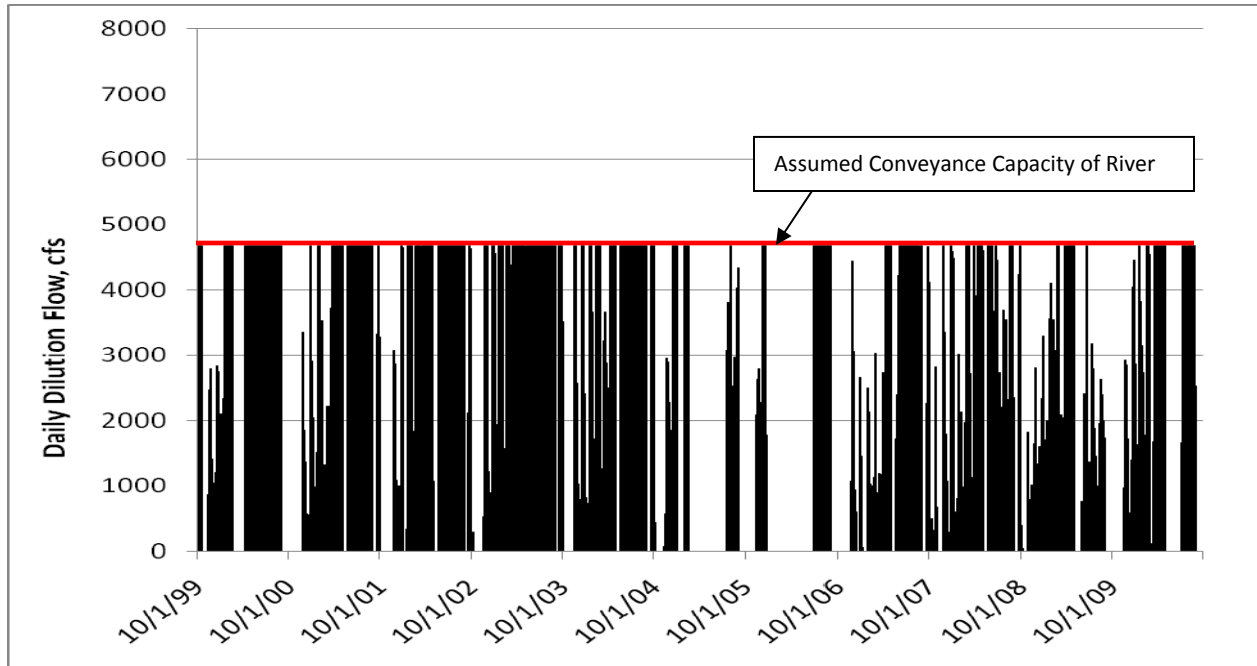


Using Only Tuolumne River:

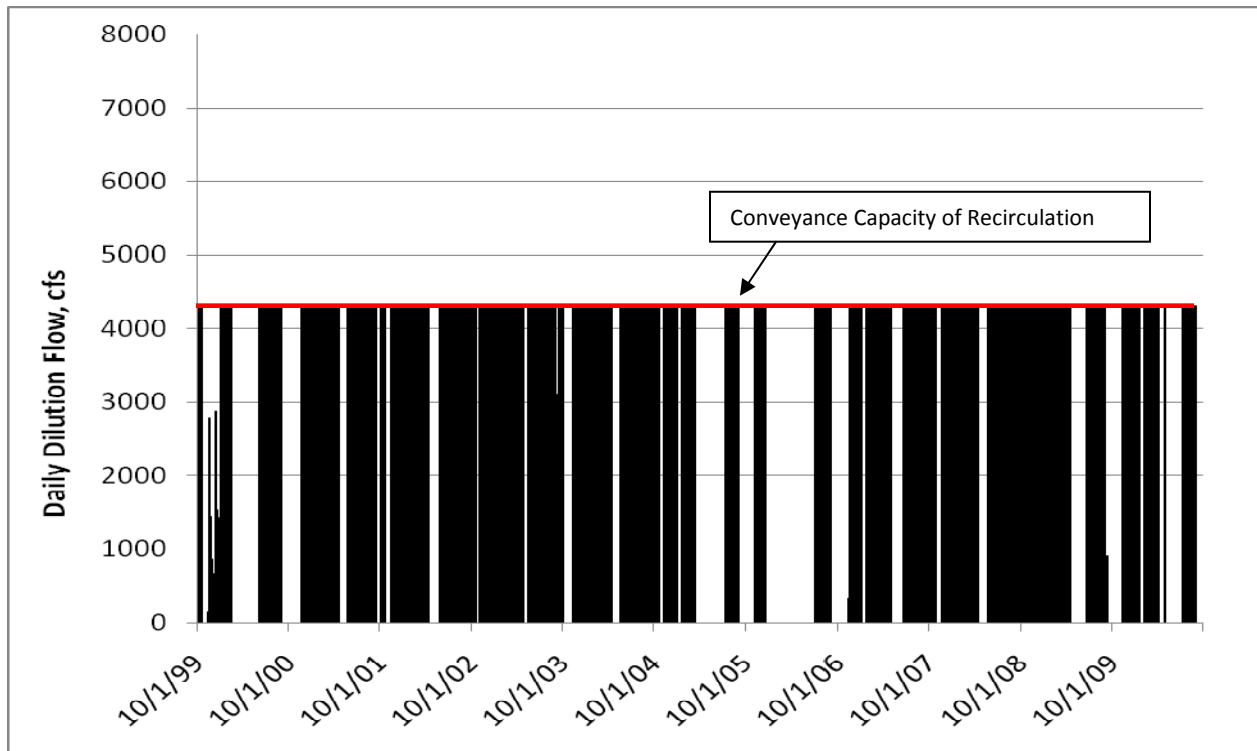


Pattern of Dilution Flows Estimated to Meet Old River near Tracy Objective 100% of Time

Using only Merced River:



Using Only DMC Recirculation:



Appendix G

CALSIM Post-Processing Results

Monthly Minimum, Average and Maximum Estimated Dilution Flow (TAF/mo) by Water Year Type Needed to Meet Vernalis Surrogate Target EC (using the 2002 CALSIM II Benchmark Study at 2001 LOD) Please note that the release to meet the 1000/700 objectives is part of the CALSIM run, and all other categories are additional volumes of water needed to meet the surrogate EC targets.

	Release to Meet 1000/700 WQOs, TAF/mo			Release to Meet 862/583 Surrogates, TAF/mo			Release to Meet 859/534 Surrogates, TAF/mo			Release to Meet 735/416 Surrogates, TAF/mo			Release to Meet 623/346 Surrogates, TAF/mo			Release to Meet 531/298 Surrogates, TAF/mo		
	min	ave	max	min	ave	max	min	ave	max	min	ave	max	min	ave	max	min	ave	max
Critical Years																		
Oct	0	1	18	1	21	33	1	21	33	23	41	54	48	68	81	71	99	117
Nov	0	0	2	0	0	0	0	0	0	0	6	14	0	20	37	0	38	67
Dec	0	0	0	0	0	0	0	0	0	0	5	14	0	21	34	15	42	59
Jan	0	0	0	0	0	0	0	0	0	0	0	4	0	7	22	18	29	43
Feb	0	0	0	0	0	0	0	0	0	0	0	3	1	10	20	16	27	41
Mar	0	0	0	0	1	7	0	1	8	0	10	25	0	30	48	3	56	76
Apr	0	0	5	12	51	68	29	68	84	90	127	141	152	187	207	219	251	278
May	0	2	9	0	11	27	0	24	42	35	75	94	82	128	160	131	184	231
Jun	0	3	8	0	10	20	0	21	32	37	66	83	74	111	142	114	160	205
Jul	19	33	43	11	19	25	19	29	38	50	68	82	81	107	128	114	148	178
Aug	10	30	40	12	19	37	21	29	48	48	65	88	75	102	129	104	141	172
Sep	0	5	36	0	4	14	0	4	14	0	11	25	6	24	39	18	40	57
Dry Years																		
Oct	0	0	0	0	9	22	0	9	23	0	24	48	11	52	83	54	90	125
Nov	0	0	0	0	0	0	0	0	0	0	1	8	0	14	33	0	33	62
Dec	0	0	0	0	0	0	0	0	0	0	3	10	7	21	31	28	46	57
Jan	0	0	0	0	0	0	0	0	0	0	0	0	0	3	12	9	21	35
Feb	0	0	0	0	0	0	0	0	0	0	0	2	0	3	18	4	18	36
Mar	0	0	0	0	0	0	0	0	0	0	3	11	0	15	38	0	39	71
Apr	0	0	0	0	33	63	0	47	81	74	116	147	153	186	216	228	262	290
May	0	1	5	0	3	11	0	10	29	27	62	95	107	134	166	174	211	249
Jun	0	1	6	0	1	7	0	6	23	25	56	80	87	117	140	141	183	212
Jul	19	32	40	14	26	32	24	40	48	60	90	106	97	140	165	136	194	228
Aug	25	40	47	14	21	26	24	33	39	57	78	89	90	124	142	125	173	198
Sep	3	26	45	0	2	10	0	2	10	0	6	23	9	20	41	24	40	62

	Release to Meet 1000/700 WQOs, TAF/mo			Release to Meet 862/583 Surrogates, TAF/mo			Release to Meet 859/534 Surrogates, TAF/mo			Release to Meet 735/416 Surrogates, TAF/mo			Release to Meet 623/346 Surrogates, TAF/mo			Release to Meet 531/298 Surrogates, TAF/mo		
	min	ave	max	min	ave	max	min	ave	max	min	ave	max	min	ave	max	min	ave	max
Below Normal Years																		
Oct	0	1	8	0	16	37	0	16	38	5	36	59	39	66	88	80	102	121
Nov	0	0	1	0	1	9	0	1	9	0	7	26	0	24	48	0	48	75
Dec	0	0	0	0	0	0	0	0	0	0	6	14	0	23	41	0	46	73
Jan	0	0	0	0	0	0	0	0	0	0	0	5	0	10	22	0	25	50
Feb	0	0	0	0	0	0	0	0	0	0	2	11	0	10	27	0	23	48
Mar	0	0	0	0	1	12	0	1	12	0	4	30	0	11	54	0	31	82
Apr	0	0	0	0	16	55	0	30	73	0	90	138	39	163	226	127	245	322
May	0	0	0	0	0	0	0	0	0	0	23	71	20	93	157	105	176	260
Jun	0	0	0	0	0	0	0	0	2	0	28	73	66	99	146	140	174	223
Jul	0	4	17	8	24	40	25	40	60	85	98	130	142	158	202	197	221	279
Aug	4	13	27	26	30	37	40	46	56	88	101	123	137	158	191	190	218	264
Sep	8	15	29	0	0	0	0	0	0	0	0	0	15	18	22	37	43	52
Above Normal Years																		
Oct	0	3	19	0	15	29	0	15	29	0	32	52	0	59	88	0	92	132
Nov	0	0	0	0	0	0	0	0	0	0	8	20	0	23	51	0	41	88
Dec	0	0	0	0	0	1	0	0	1	0	5	19	0	22	42	0	44	70
Jan	0	0	0	0	0	0	0	0	0	0	0	6	0	6	27	0	17	52
Feb	0	0	0	0	0	0	0	0	0	0	0	2	0	2	24	0	6	50
Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apr	0	0	0	0	2	23	0	5	44	0	29	124	0	79	205	24	158	291
May	0	0	0	0	0	0	0	0	0	0	0	0	0	22	87	24	99	184
Jun	0	0	0	0	0	0	0	0	0	0	1	9	0	51	95	74	132	186
Jul	0	0	0	0	13	33	0	28	54	47	90	132	101	155	211	151	225	295
Aug	0	5	16	1	29	43	13	45	63	56	106	136	100	167	212	147	233	292
Sep	0	8	20	0	0	0	0	0	0	0	0	0	0	18	26	16	45	59

	Release to Meet 1000/700 WQOs, TAF/mo			Release to Meet 862/583 Surrogates, TAF/mo			Release to Meet 859/534 Surrogates, TAF/mo			Release to Meet 735/416 Surrogates, TAF/mo			Release to Meet 623/346 Surrogates, TAF/mo			Release to Meet 531/298 Surrogates, TAF/mo		
	min	ave	max	min	ave	max	min	ave	max	min	ave	max	min	ave	max	min	ave	max
Wet																		
Oct	0	3	17	0	16	35	0	16	35	0	37	56	0	65	84	26	99	122
Nov	0	0	3	0	1	12	0	1	13	0	6	32	0	22	58	0	46	89
Dec	0	0	0	0	0	0	0	0	0	0	7	17	0	28	41	0	53	71
Jan	0	0	0	0	0	0	0	0	0	0	0	2	0	4	25	0	15	52
Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	4	25
Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	15
Apr	0	0	0	0	0	0	0	0	0	0	2	15	0	21	106	0	61	209
May	0	0	0	0	0	0	0	0	0	0	0	0	0	2	24	0	27	107
Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	6	60	0	37	144
Jul	0	0	0	0	0	0	0	2	19	0	17	94	0	49	170	0	94	252
Aug	0	0	9	0	14	39	0	26	59	0	84	131	0	147	206	0	214	285
Sep	0	2	15	0	0	0	0	0	0	0	0	0	2	17	26	26	45	57

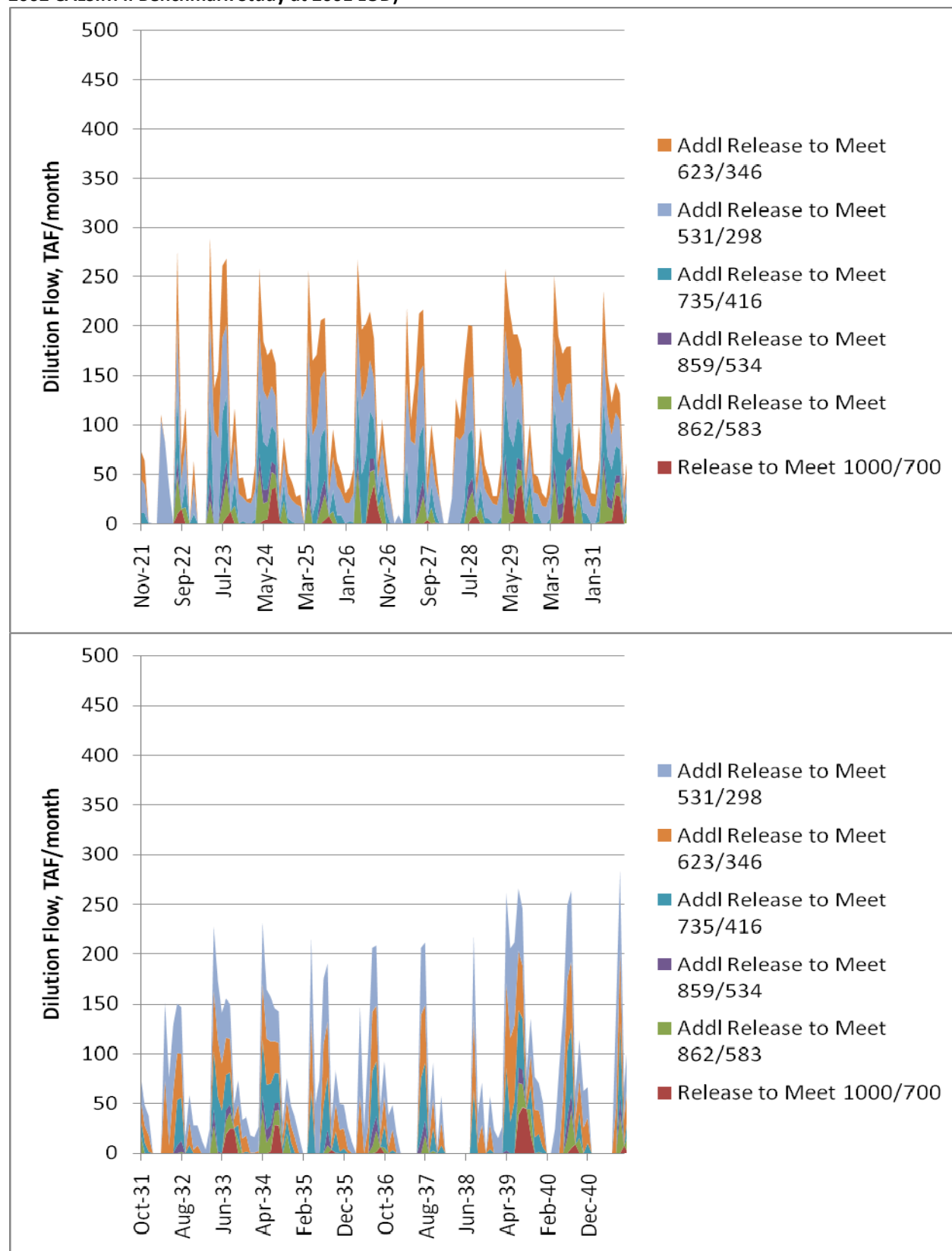
Monthly Minimum, Average and Maximum Estimated Dilution Flow (TAF/mo) by Water Year Type Needed to Meet Vernalis Surrogate Target EC (using the 2009 CALSIM II SWP Delivery Availability Study at 2005 LOD) Please note that the release to meet the 1000/700 objectives is part of the CALSIM run, and all other categories are additional volumes of water needed to meet the surrogate EC targets.

	Release to Meet 1000/700 WQOs, TAF/mo			Release to Meet 862/583 Surrogates, TAF/mo			Release to Meet 859/534 Surrogates, TAF/mo			Release to Meet 735/416 Surrogates, TAF/mo			Release to Meet 623/346 Surrogates, TAF/mo			Release to Meet 531/298 Surrogates, TAF/mo		
	min	ave	max	min	ave	max	min	ave	max	min	ave	max	min	ave	max	min	ave	max
Critical Years																		
Oct	0	0	0	0	0	0	0	0	0	0	0	1	0	3	14	0	18	30
Nov	0	1	5	0	0	0	0	0	0	0	0	0	0	6	17	0	18	40
Dec	0	0	0	0	0	0	0	0	0	0	0	3	0	13	24	0	38	48
Jan	0	0	1	0	2	6	0	3	6	10	23	26	41	50	55	73	83	92
Feb	0	1	6	0	6	11	0	6	12	14	24	29	40	48	54	68	76	85
Mar	4	19	33	17	20	22	17	20	23	42	50	57	75	88	100	114	134	152
Apr	0	25	34	63	89	113	79	111	141	136	191	242	194	272	346	256	359	456
May	4	10	16	0	7	21	0	15	33	0	54	81	22	101	136	89	153	202
Jun	9	11	15	0	8	21	0	17	33	0	54	77	10	100	136	73	152	199
Jul	11	19	24	7	13	16	13	21	28	32	54	69	51	87	112	72	122	157
Aug	9	17	22	8	11	15	13	18	25	31	46	62	48	74	100	66	104	141
Sep	0	13	22	0	0	6	0	0	6	0	1	12	3	6	18	15	21	27
Dry Years																		
Oct	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	23
Nov	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	4	29
Dec	0	0	0	0	0	0	0	0	0	0	0	0	0	6	17	0	27	44
Jan	0	0	0	0	0	3	0	0	4	10	19	27	44	50	58	81	88	99
Feb	0	0	0	0	1	5	0	1	6	12	17	27	41	46	54	73	81	87
Mar	0	7	23	0	13	21	0	14	22	34	46	54	80	89	96	135	139	147
Apr	0	11	23	60	96	111	81	122	139	158	217	246	237	314	354	321	417	472
May	0	3	13	0	0	0	0	3	18	0	33	80	0	83	163	62	155	253
Jun	0	6	12	0	0	5	0	3	22	0	30	84	17	79	148	84	147	216
Jul	0	10	22	15	17	18	27	30	31	71	75	78	115	121	126	162	170	177
Aug	5	11	22	14	15	18	24	26	31	60	65	77	97	105	124	136	148	175
Sep	0	4	16	0	0	0	0	0	0	0	0	0	1	5	7	21	23	25

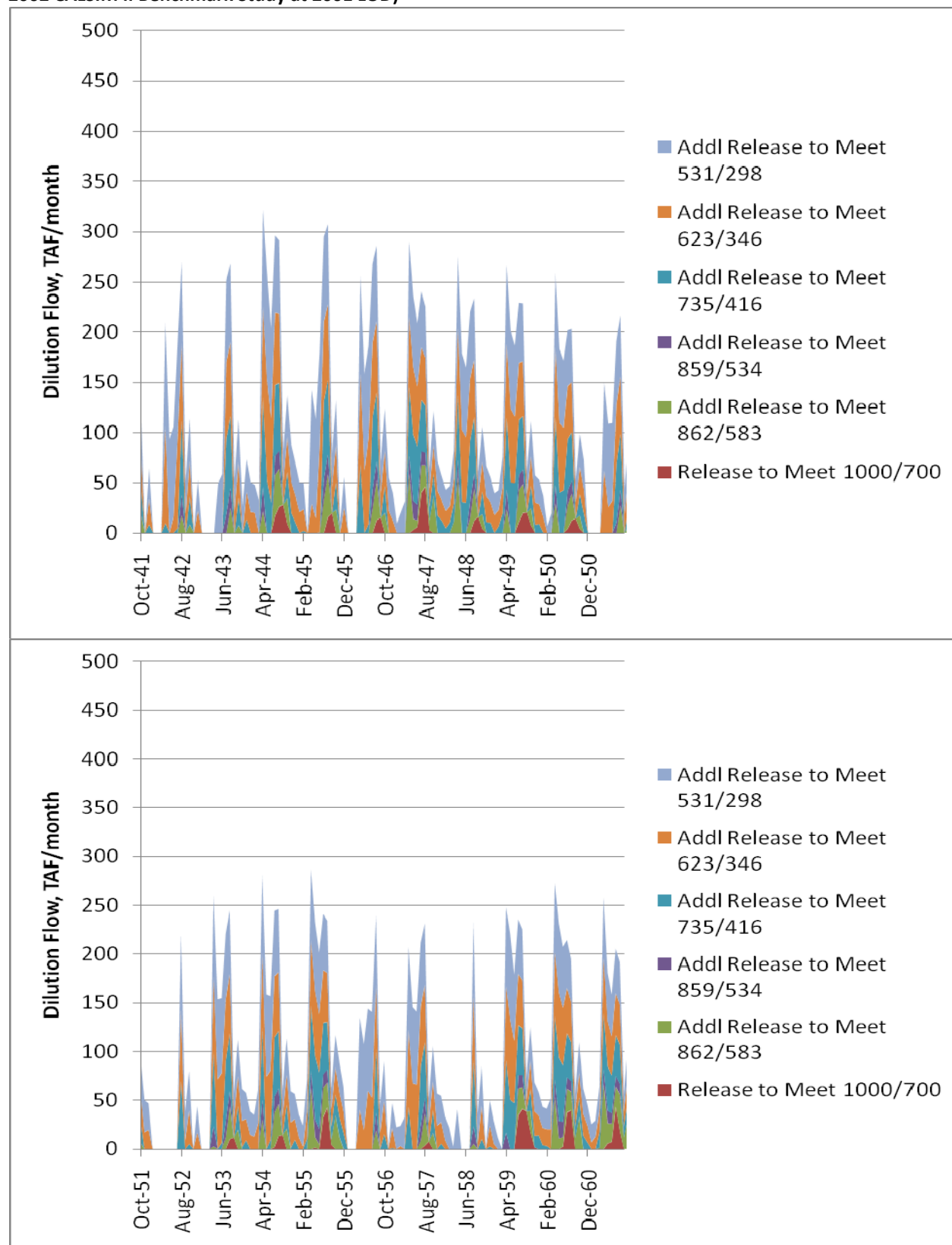
	Release to Meet 1000/700 WQOs, TAF/mo			Release to Meet 862/583 Surrogates, TAF/mo			Release to Meet 859/534 Surrogates, TAF/mo			Release to Meet 735/416 Surrogates, TAF/mo			Release to Meet 623/346 Surrogates, TAF/mo			Release to Meet 531/298 Surrogates, TAF/mo		
	min	ave	max	min	ave	max	min	ave	max	min	ave	max	min	ave	max	min	ave	max
Below Normal Years																		
Oct	0	0	0	0	0	0	0	0	0	0	0	0	0	1	9	0	13	28
Nov	0	0	0	0	0	0	0	0	0	0	0	1	0	2	19	0	6	40
Dec	0	0	0	0	0	0	0	0	0	0	0	0	0	8	19	0	30	44
Jan	0	0	0	0	0	1	0	0	2	0	18	24	18	47	56	79	58	94
Feb	0	0	0	0	2	11	0	2	11	0	17	27	17	43	51	66	78	90
Mar	0	5	20	0	12	22	0	12	22	0	37	55	9	76	97	68	130	153
Apr	0	4	20	0	83	113	0	108	141	99	208	243	213	311	348	334	420	467
May	0	3	14	0	0	0	0	0	0	0	21	52	0	72	135	0	139	229
Jun	0	3	13	0	0	0	0	0	0	0	19	59	0	67	126	0	133	226
Jul	0	4	23	0	14	24	0	27	41	41	81	104	93	136	168	148	196	236
Aug	0	7	19	11	16	18	23	28	30	64	72	78	103	116	127	145	164	179
Sep	0	2	10	0	0	0	0	0	0	0	0	0	0	2	7	18	21	24
Above Normal Years																		
Oct	0	0	0	0	0	0	0	0	0	0	0	0	0	1	7	0	14	26
Nov	0	0	0	0	0	0	0	0	0	0	0	0	0	3	17	0	12	40
Dec	0	0	0	0	0	0	0	0	0	0	0	0	0	7	20	0	30	46
Jan	0	0	0	0	1	5	0	1	5	0	13	27	0	37	56	0	68	95
Feb	0	0	0	0	0	3	0	1	4	0	12	27	0	32	57	0	64	95
Mar	0	1	12	0	2	22	0	2	22	0	8	55	0	29	97	0	58	148
Apr	0	0	0	0	25	77	0	38	107	0	94	218	0	164	331	55	275	451
May	0	0	5	0	0	0	0	0	0	0	10	41	0	69	139	22	164	243
Jun	0	0	0	0	0	0	0	0	0	0	9	77	0	57	158	0	131	243
Jul	0	2	18	0	0	0	0	2	16	24	60	84	79	126	160	127	198	242
Aug	0	4	18	12	18	23	28	34	39	73	89	115	118	145	194	166	205	278
Sep	0	1	7	0	0	0	0	0	0	0	0	0	0	0	3	0	12	22

	Release to Meet 1000/700 WQOs, TAF/mo			Release to Meet 862/583 Surrogates, TAF/mo			Release to Meet 859/534 Surrogates, TAF/mo			Release to Meet 735/416 Surrogates, TAF/mo			Release to Meet 623/346 Surrogates, TAF/mo			Release to Meet 531/298 Surrogates, TAF/mo		
	min	ave	max	min	ave	max	min	ave	max	min	ave	max	min	ave	max	min	ave	max
Wet																		
Oct	0	0	0	0	0	4	0	0	4	0	1	14	0	3	26	0	16	41
Nov	0	0	7	0	0	0	0	0	0	0	0	5	0	2	17	0	7	37
Dec	0	0	0	0	0	0	0	0	0	0	1	10	0	9	28	0	31	49
Jan	0	0	3	0	1	7	0	1	7	0	13	25	0	42	56	0	84	139
Feb	0	0	0	0	0	1	0	0	2	0	5	22	0	19	49	0	47	95
Mar	0	0	0	0	0	0	0	0	0	0	1	14	0	11	62	0	33	120
Apr	0	0	0	0	4	77	0	11	108	0	44	269	0	110	478	0	235	702
May	0	1	14	0	0	0	0	0	0	0	1	24	0	20	85	0	66	183
Jun	0	1	16	0	0	0	0	0	0	0	2	30	0	16	92	0	51	167
Jul	0	0	0	0	0	0	0	1	17	0	36	123	0	129	270	0	258	426
Aug	0	0	1	0	4	22	0	14	40	0	89	140	0	193	251	0	313	388
Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	10

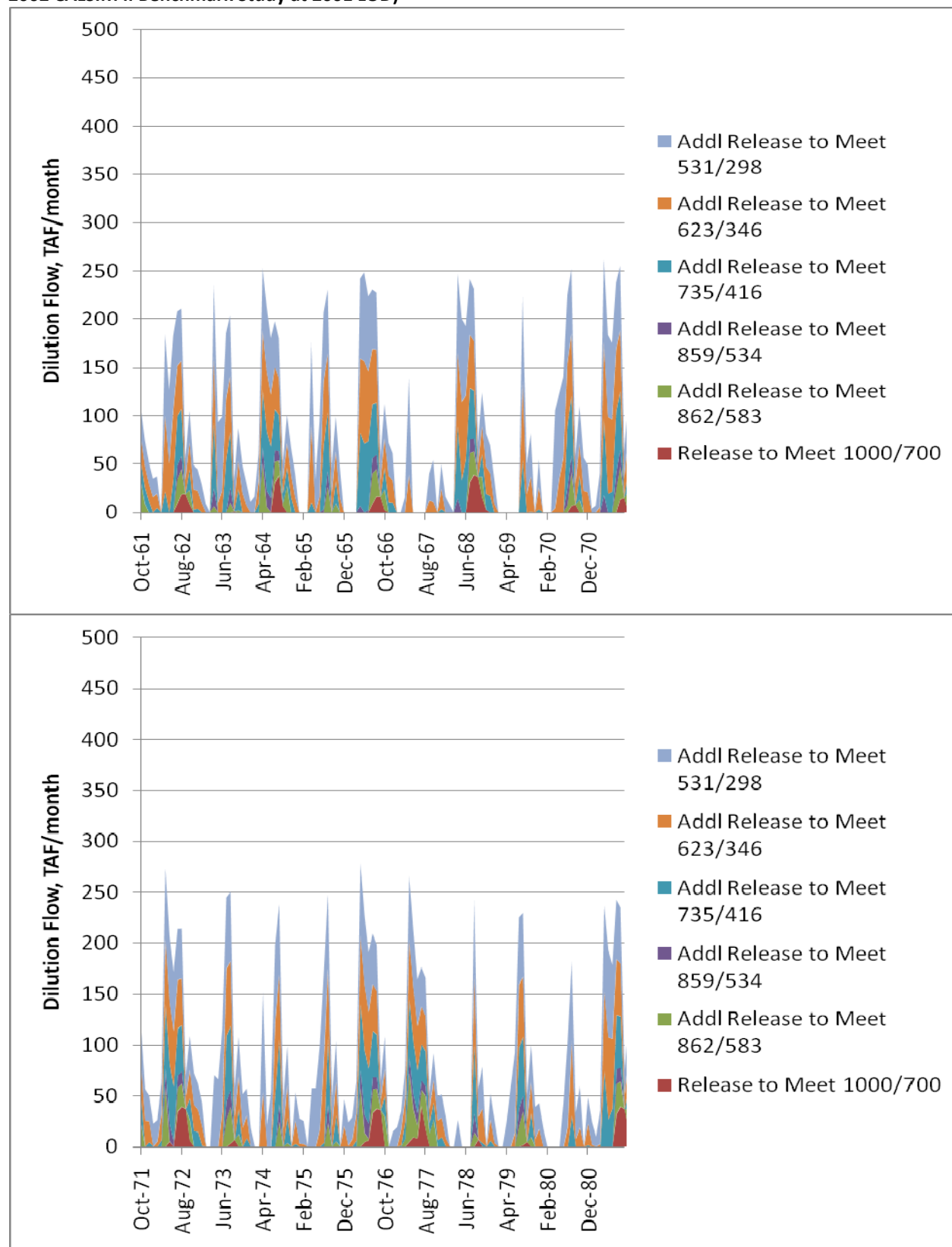
Time Series Plots of Average Estimated Dilution Flow (TAF/mo) to Meet Vernalis Surrogate Target EC (using the 2002 CALSIM II Benchmark Study at 2001 LOD)



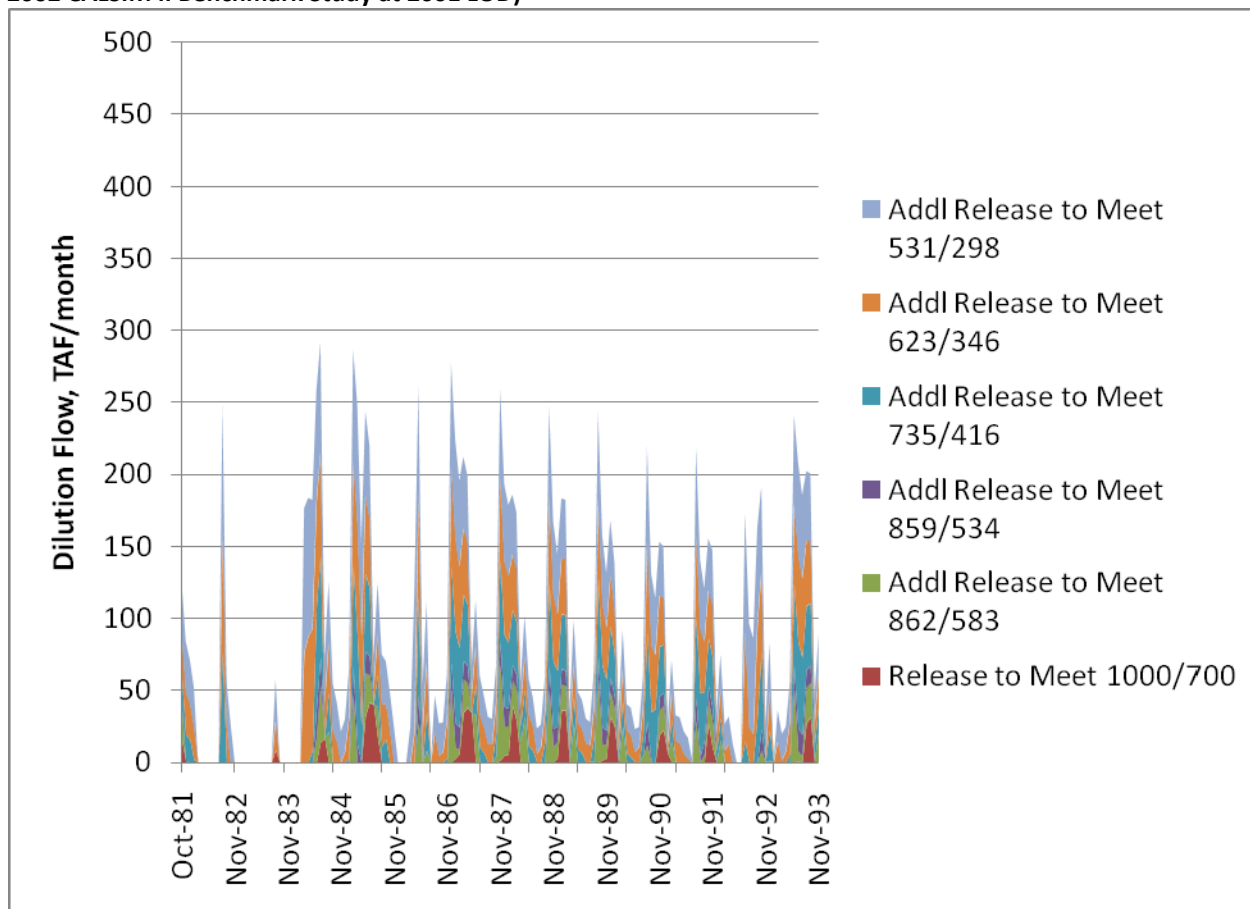
Time Series Plots of Average Estimated Dilution Flow (TAF/mo) to Meet Vernalis Surrogate Target EC (using the 2002 CALSIM II Benchmark Study at 2001 LOD)



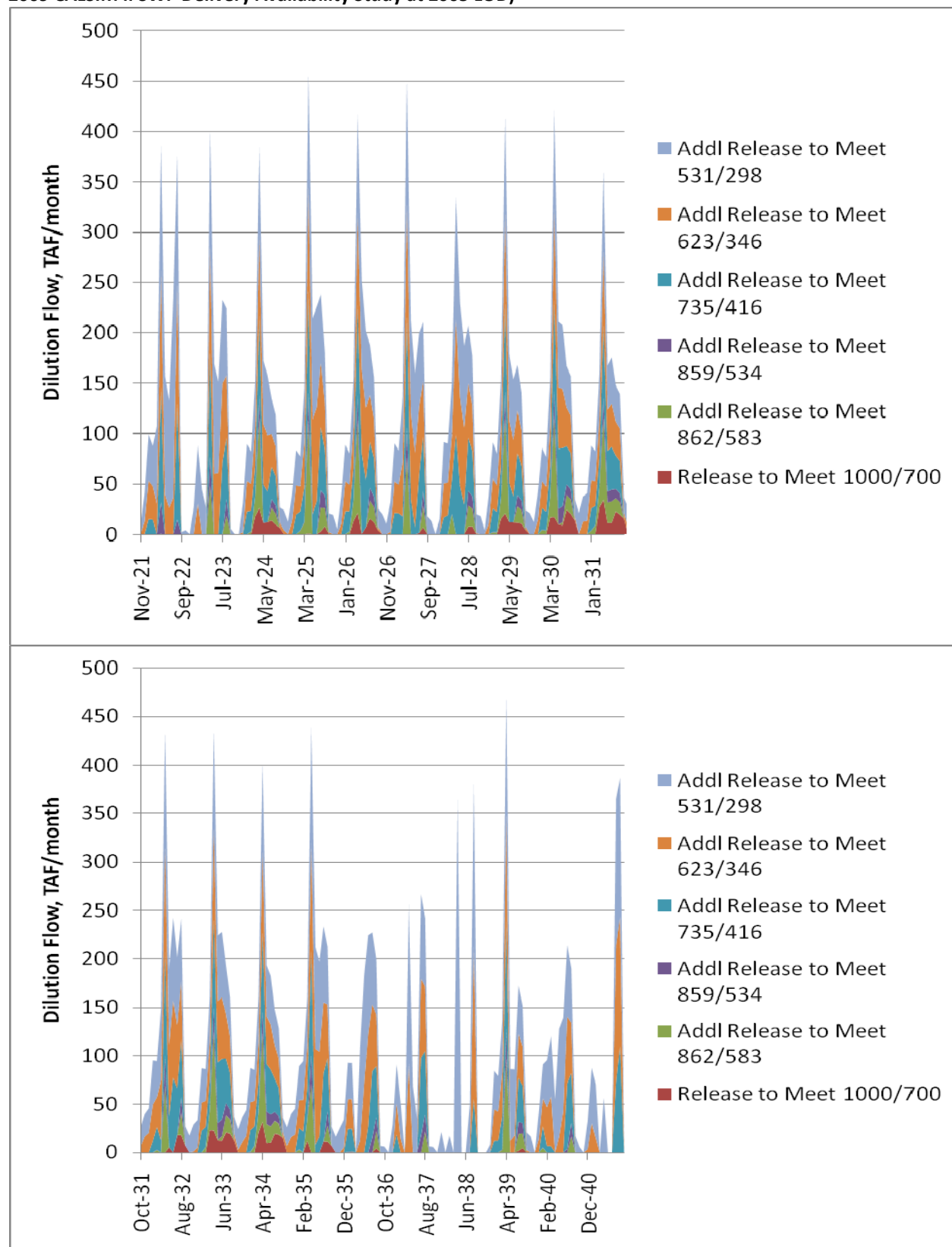
Time Series Plots of Average Estimated Dilution Flow (TAF/mo) to Meet Vernalis Surrogate Target EC (using the 2002 CALSIM II Benchmark Study at 2001 LOD)



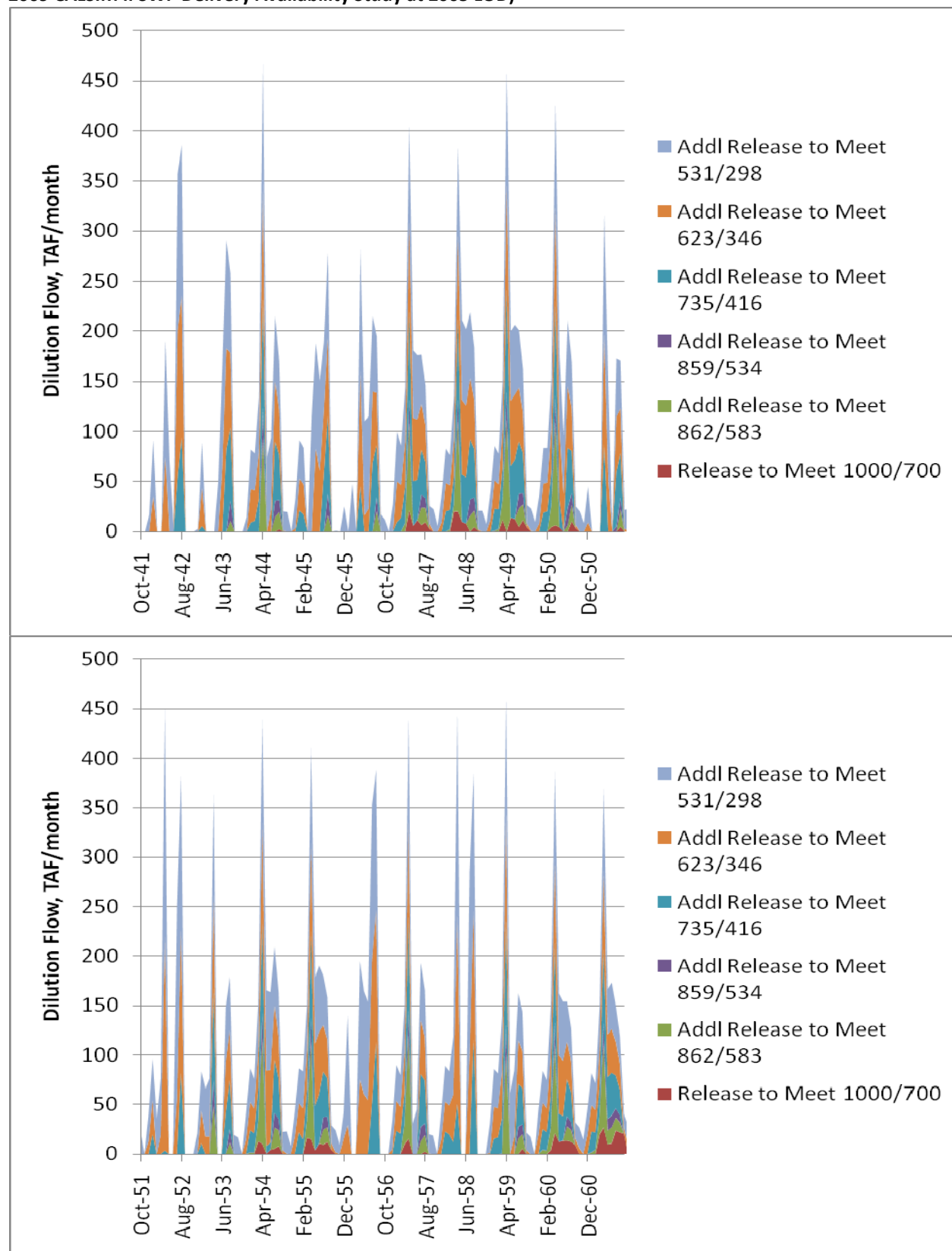
Time Series Plots of Average Estimated Dilution Flow (TAF/mo) to Meet Vernalis Surrogate Target EC (using the 2002 CALSIM II Benchmark Study at 2001 LOD)



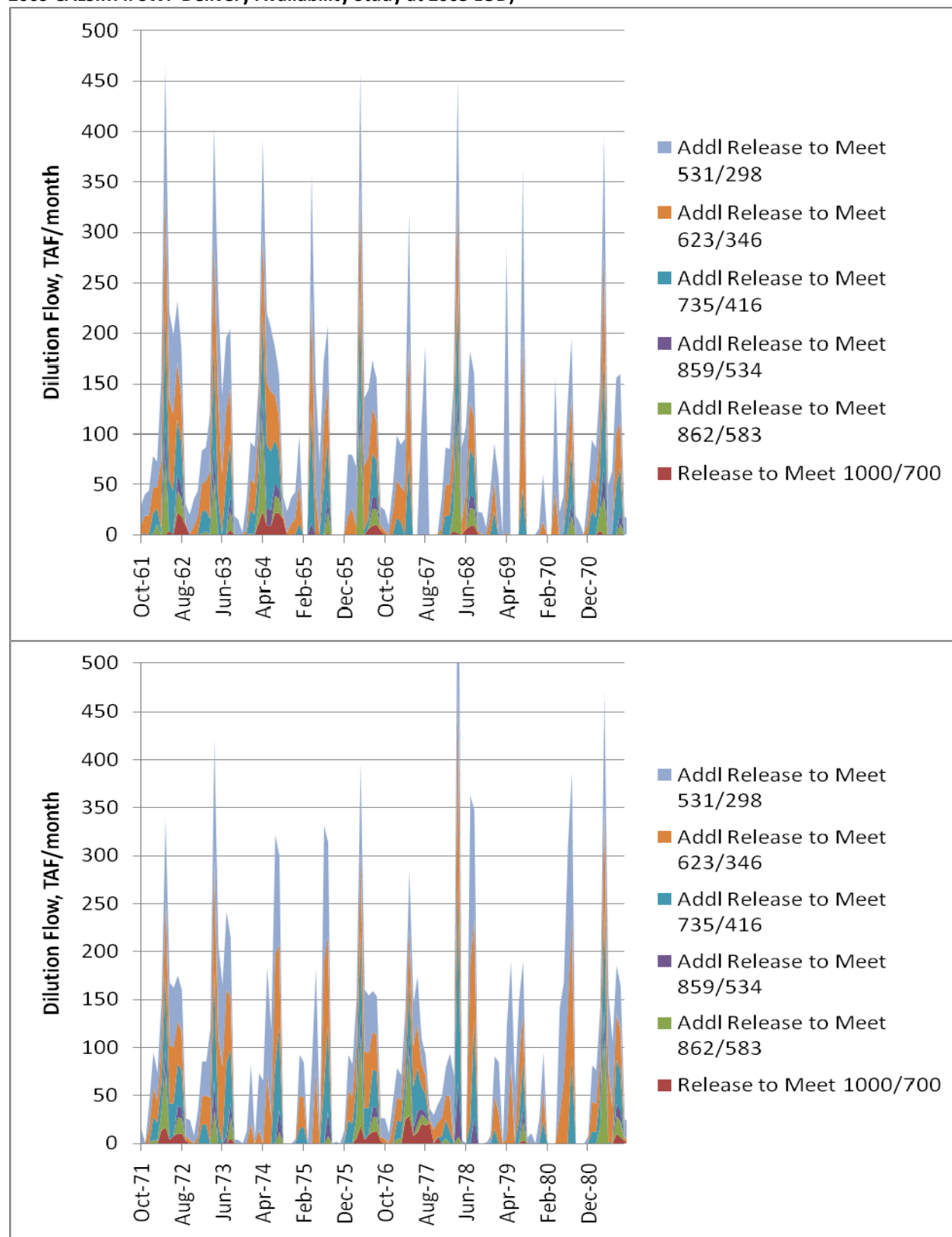
Time Series Plots of Average Estimated Dilution Flow (TAF/mo) to Meet Vernalis Surrogate Target EC (using the 2009 CALSIM II SWP Delivery Availability Study at 2005 LOD)



Time Series Plots of Average Estimated Dilution Flow (TAF/mo) to Meet Vernalis Surrogate Target EC (using the 2009 CALSIM II SWP Delivery Availability Study at 2005 LOD)



Time Series Plots of Average Estimated Dilution Flow (TAF/mo) to Meet Vernalis Surrogate Target EC (using the 2009 CALSIM II SWP Delivery Availability Study at 2005 LOD)



Time Series Plots of Average Estimated Dilution Flow (TAF/mo) to Meet Vernalis Surrogate Target EC (using the 2009 CALSIM II SWP Delivery Availability Study at 2005 LOD)

