Figure 9a

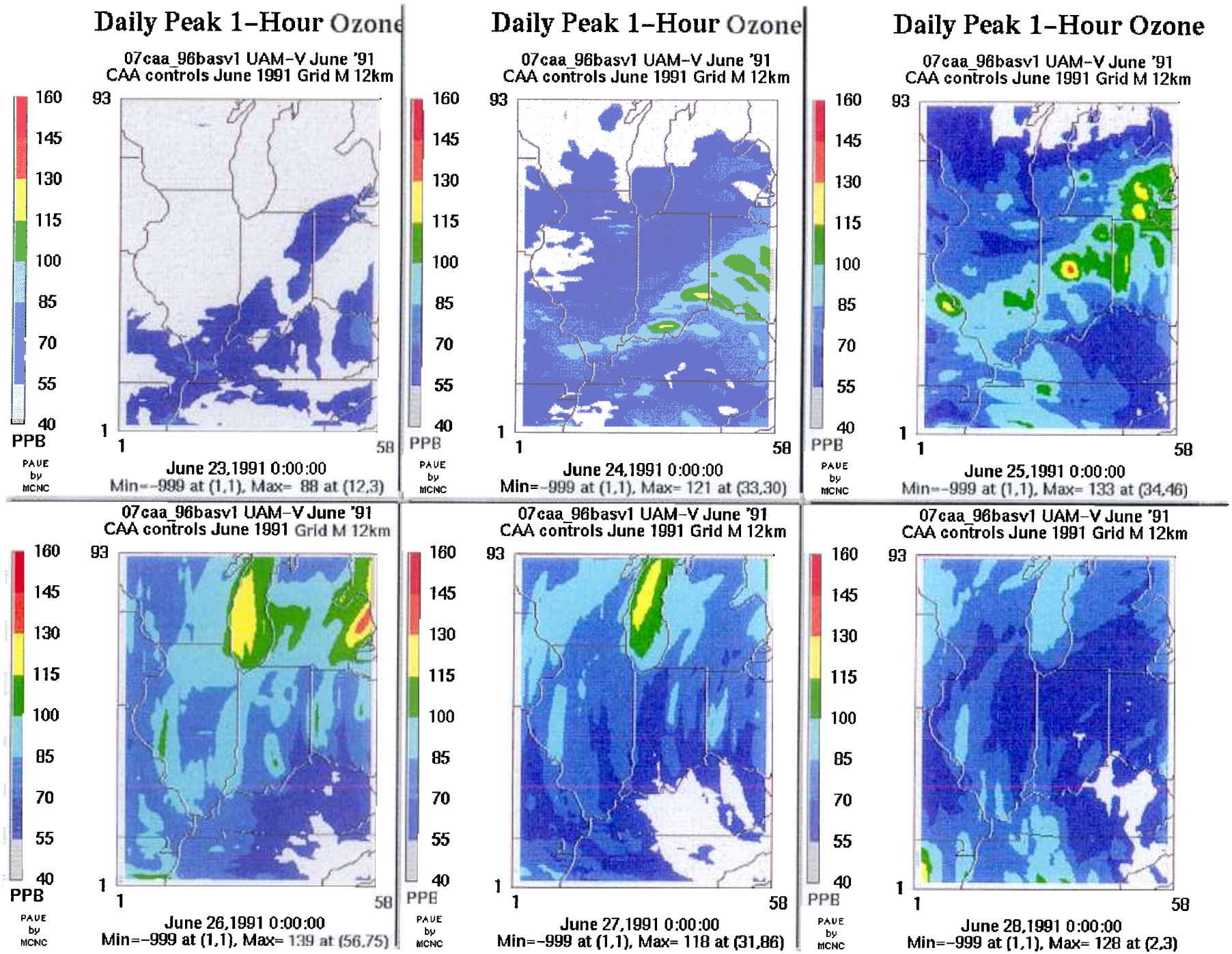

Daily Peak 1-Hour Ozone
07caa_96basv1 UAM-V June '91
CAA controls June 1991 Grid M 12km
160
145
130
115
100
85
70
55
40
PPB
PAVE by MCNC
93
1
1
58
June 23,1991 0:00:00
Min=-999 at (1,1), Max= 88 at (12,3)
June 24,1991 0:00:00
Min=-999 at (1,1), Max= 121 at (33,30)
June 25,1991 0:00:00
Min=-999 at (1,1), Max= 133 at (34,46)
June 26,1991 0:00:00
Min=-999 at (1,1), Max= 139 at (56,75)
June 27,1991 0:00:00
Min=-999 at (1,1), Max= 118 at (31,86)
June 28,1991 0:00:00
Min=-999 at (1,1), Max= 128 at (2,3)

Figure 9b

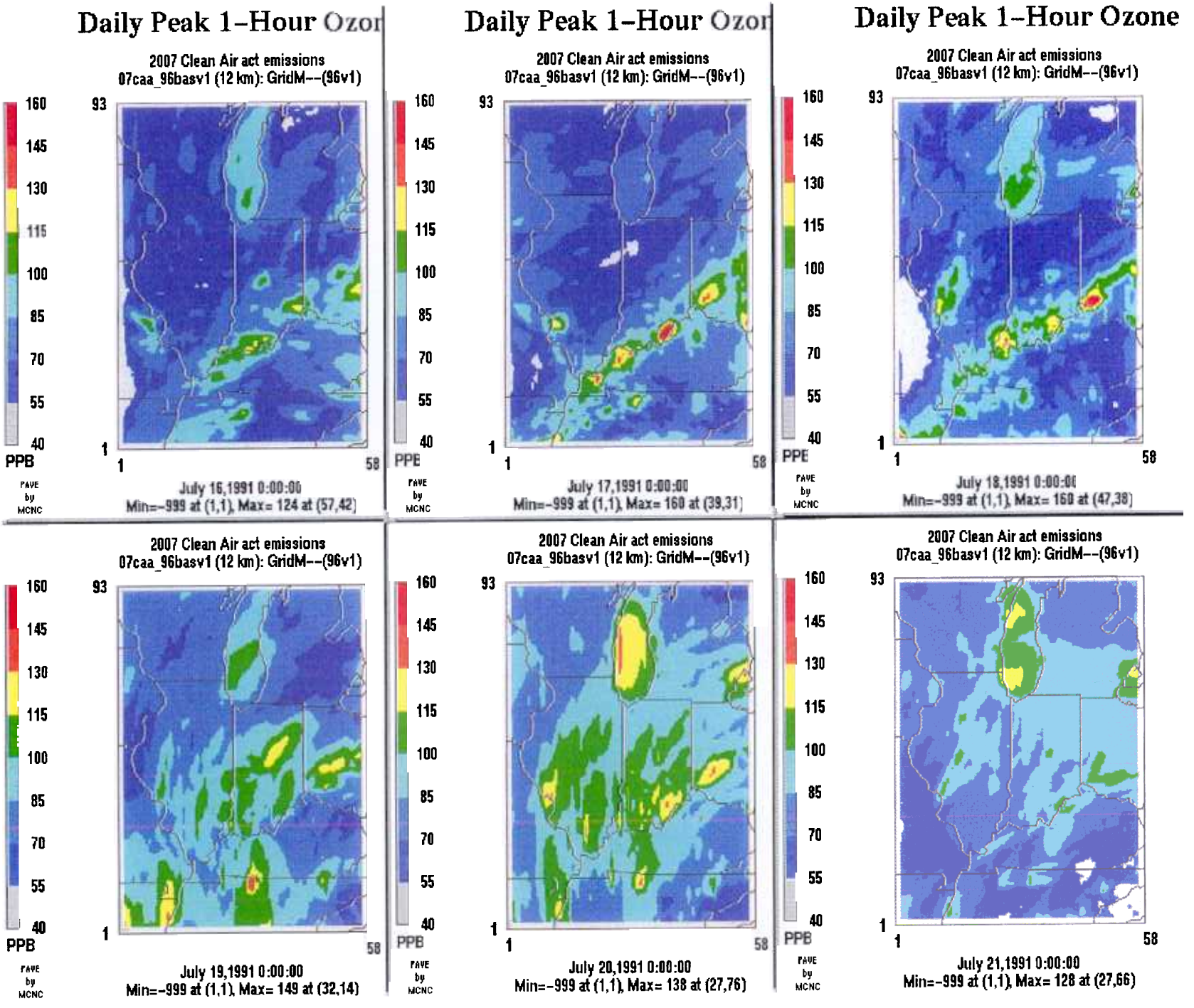

Daily Peak 1-Hour Ozon
2007 Clean Air act emissions
07caa_96basv1 (12 km): GridM--(96v1)
160
145
130
115
100
85
70
55
40
PPB
PAVE by MCNC
93
1
1
58
July 16,1991 0:00:00
Min=-999 at (1,1), Max= 124 at (57,42)
Daily Peak 1-Hour Ozon
2007 Clean Air act emissions
07caa_96basv1 (12 km): GridM--(96v1)
July 17,1991 0:00:00
Min=-999 at (1,1), Max= 160 at (39,31)
Daily Peak 1-Hour Ozone
2007 Clean Air act emissions
07caa_96basv1 (12 km): GridM--(96v1)
July 18,1991 0:00:00
Min=-999 at (1,1), Max= 160 at (47,38)
2007 Clean Air act emissions
07caa_96basv1 (12 km): GridM--(96v1)
July 19,1991 0:00:00
Min=-999 at (1,1), Max= 149 at (32,14)
2007 Clean Air act emissions
07caa_96basv1 (12 km): GridM--(96v1)
July 20,1991 0:00:00
Min=-999 at (1,1), Max= 138 at (27,76)
2007 Clean Air act emissions
07caa_96basv1 (12 km): GridM--(96v1)
July 21,1991 0:00:00
Min=-999 at (1,1), Max= 128 at (27,66)

Figure 9c

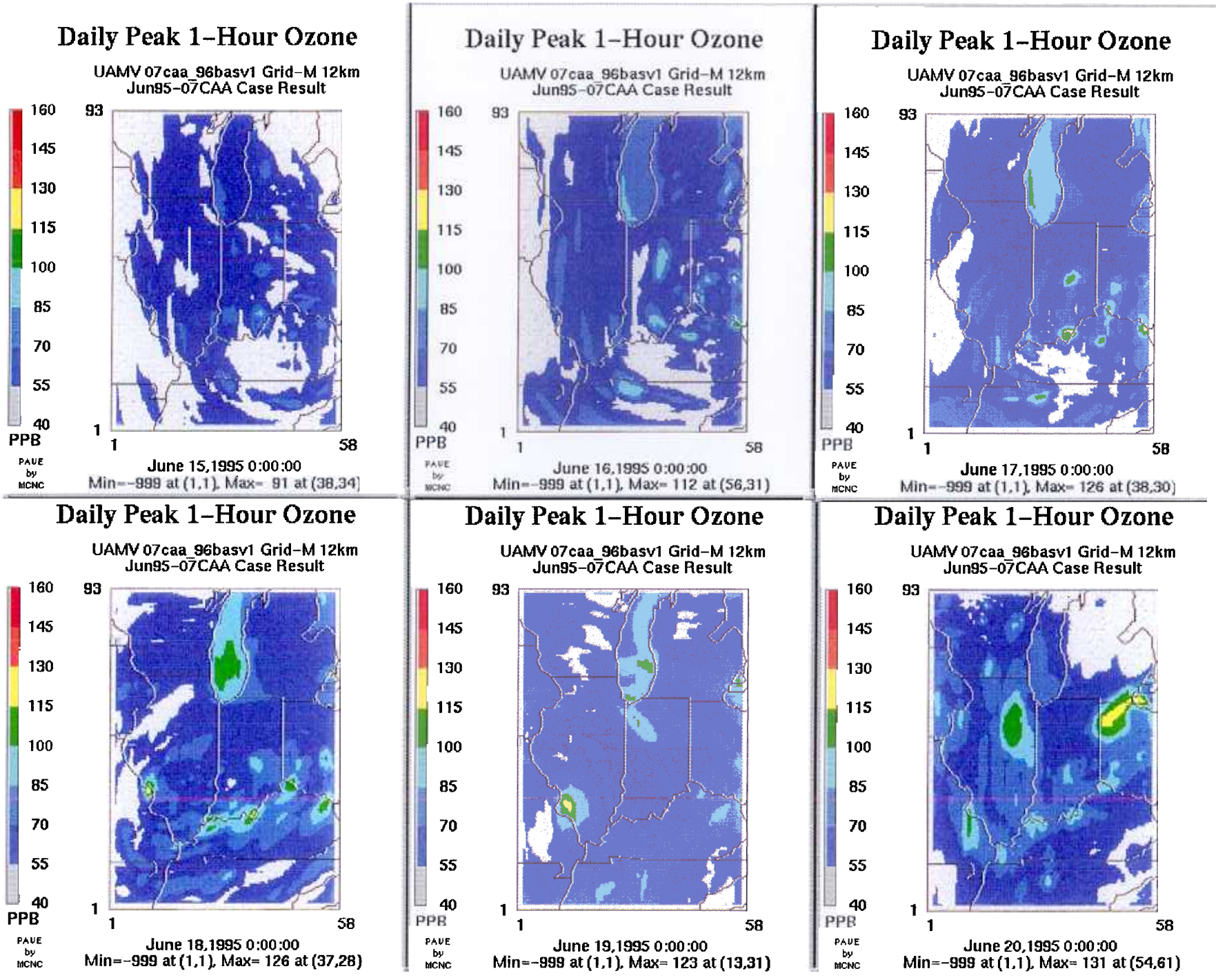

Daily Peak 1-Hour Ozone
UAMV 07caa_96basv1 Grid-M 12km
Jun95-07CAA Case Result
160
145
130
115
100
85
70
55
40
PPB
93
1
1
58
PAVE by MCNC
June 15,1995 0:00:00
Min=-999 at (1,1), Max= 91 at (38,34)
June 16,1995 0:00:00
Min=-999 at (1,1), Max= 112 at (56,31)
June 17,1995 0:00:00
Min=-999 at (1,1), Max= 126 at (38,30)
June 18,1995 0:00:00
Min=-999 at (1,1), Max= 126 at (37,28)
June 19,1995 0:00:00
Min=-999 at (1,1), Max= 123 at (13,31)
June 20,1995 0:00:00
Min=-999 at (1,1), Max= 131 at (54,61)

Figure 9d

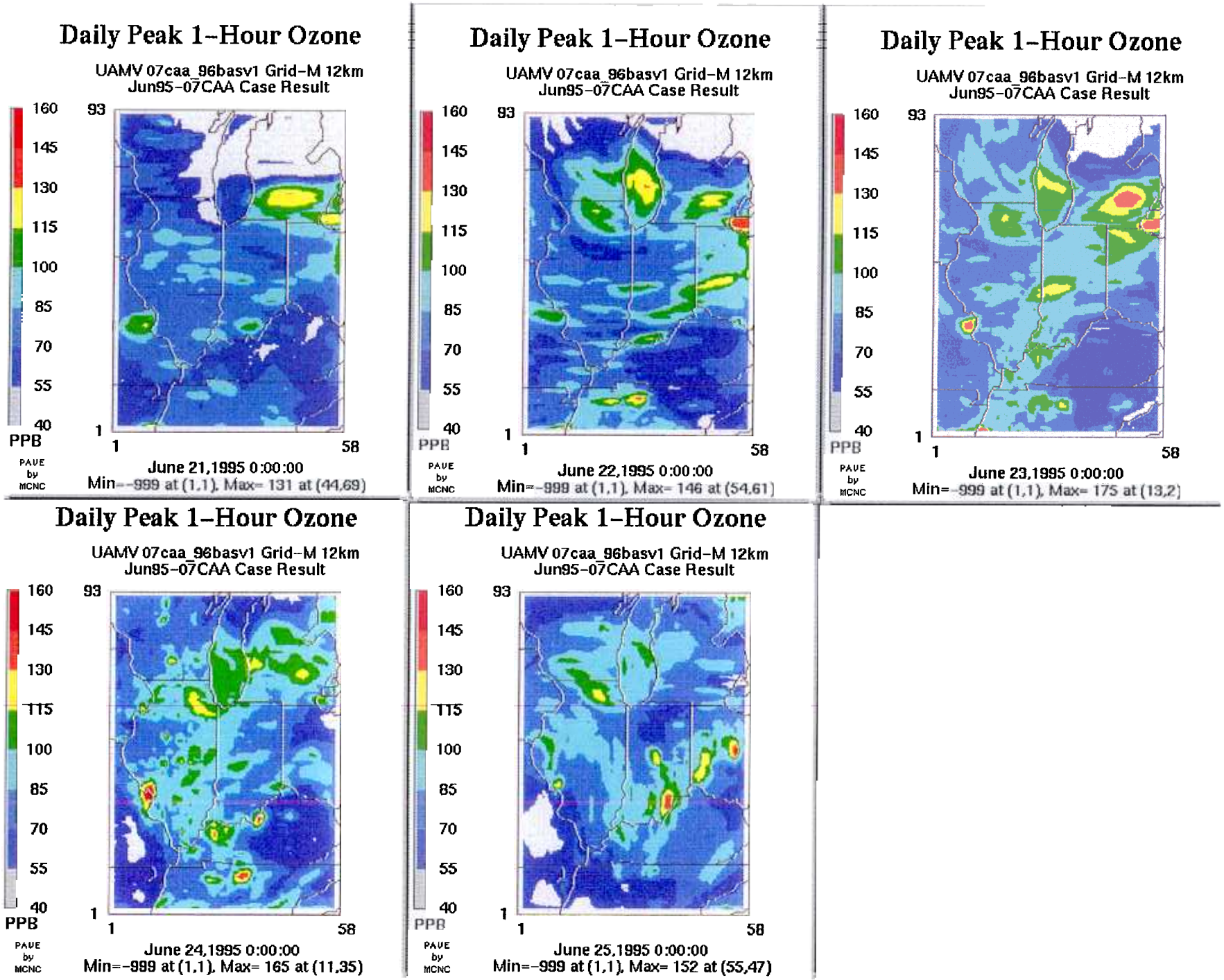

Daily Peak 1-Hour Ozone
UAMV 07caa_96basv1 Grid-M 12km
Jun95-07CAA Case Result
160
145
130
115
100
85
70
55
40
PPB
PAVE by MCNC
93
1
1
58
June 21,1995 0:00:00
Min=-999 at (1,1), Max= 131 at (44,69)
Daily Peak 1-Hour Ozone
UAMV 07caa_96basv1 Grid-M 12km
Jun95-07CAA Case Result
June 22,1995 0:00:00
Min=-999 at (1,1), Max= 146 at (54,61)
Daily Peak 1-Hour Ozone
UAMV 07caa_96basv1 Grid-M 12km
Jun95-07CAA Case Result
June 23,1995 0:00:00
Min=-999 at (1,1), Max= 175 at (13,2)
Daily Peak 1-Hour Ozone
UAMV 07caa_96basv1 Grid-M 12km
Jun95-07CAA Case Result
June 24,1995 0:00:00
Min=-999 at (1,1), Max= 165 at (11,35)
Daily Peak 1-Hour Ozone
UAMV 07caa_96basv1 Grid-M 12km
Jun95-07CAA Case Result
June 25,1995 0:00:00
Min=-999 at (1,1), Max= 152 at (55,47)

Figure 9e

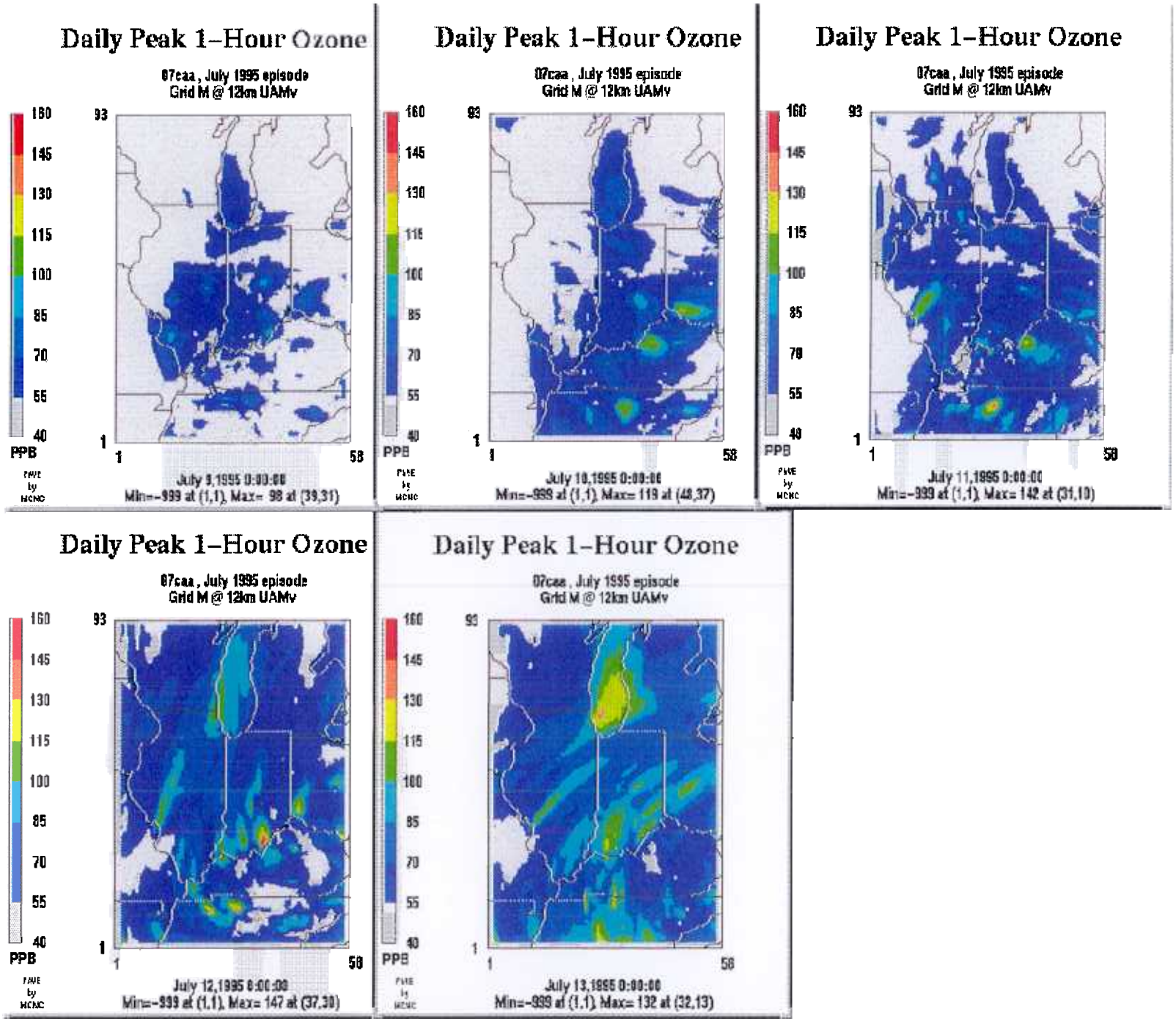

Daily Peak 1-Hour Ozone
07caa, July 1995 episode
Grid M @ 12km UAMv
160
145
130
115
100
85
70
55
40
PPB
93
1
1
58
July 9,1995 0:00:00
Min=-999 at (1,1), Max= 98 at (39,31)
Daily Peak 1-Hour Ozone
07caa, July 1995 episode
Grid M @ 12km UAMv
July 10,1995 0:00:00
Min=-999 at (1,1), Max= 119 at (48,37)
Daily Peak 1-Hour Ozone
07caa, July 1995 episode
Grid M @ 12km UAMv
July 11,1995 0:00:00
Min=-999 at (1,1), Max= 142 at (31,10)
Daily Peak 1-Hour Ozone
07caa, July 1995 episode
Grid M @ 12km UAMv
July 12,1995 0:00:00
Min=-999 at (1,1), Max= 147 at (37,30)
Daily Peak 1-Hour Ozone
07caa, July 1995 episode
Grid M @ 12km UAMv
July 13,1995 0:00:00
Min=-999 at (1,1), Max= 132 at (32,13)

Figure 9f

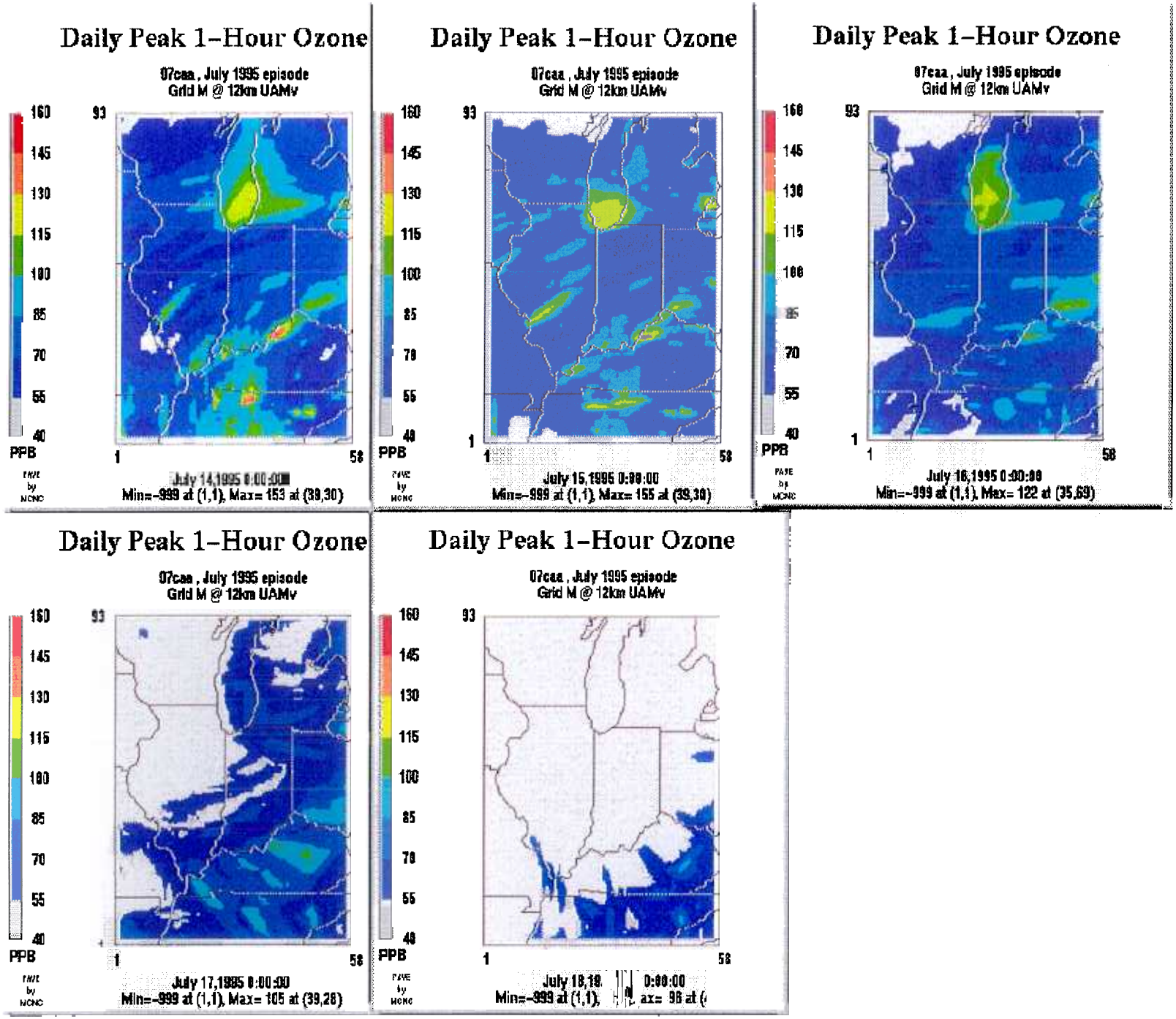

Daily Peak 1-Hour Ozone
07caa , July 1995 episode
Grid M @ 12km UAMv
160
145
130
115
100
85
70
55
40
PPB
93
1
58
July 14,1995 0:00:00
Min=-999 at (1,1), Max= 153 at (39,30)
Daily Peak 1-Hour Ozone
07caa , July 1995 episode
Grid M @ 12km UAMv
July 15,1995 0:00:00
Min=-999 at (1,1), Max= 155 at (39,30)
Daily Peak 1-Hour Ozone
07caa , July 1995 episode
Grid M @ 12km UAMv
July 16,1995 0:00:00
Min=-999 at (1,1), Max= 122 at (35,69)
Daily Peak 1-Hour Ozone
07caa , July 1995 episode
Grid M @ 12km UAMv
July 17,1995 0:00:00
Min=-999 at (1,1), Max= 105 at (39,28)
Daily Peak 1-Hour Ozone
07caa , July 1995 episode
Grid M @ 12km UAMv
0:00:00

FIGURE 10

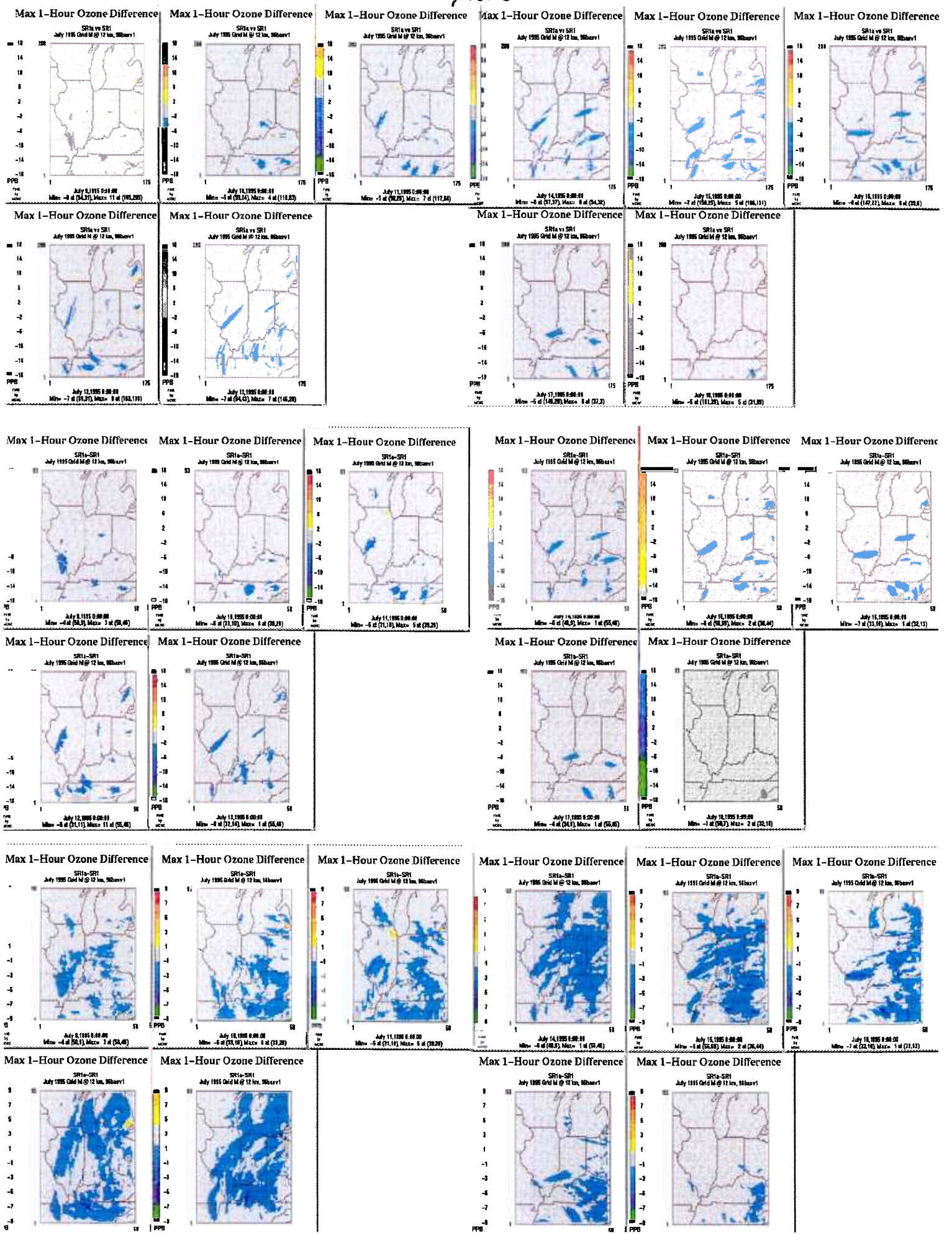
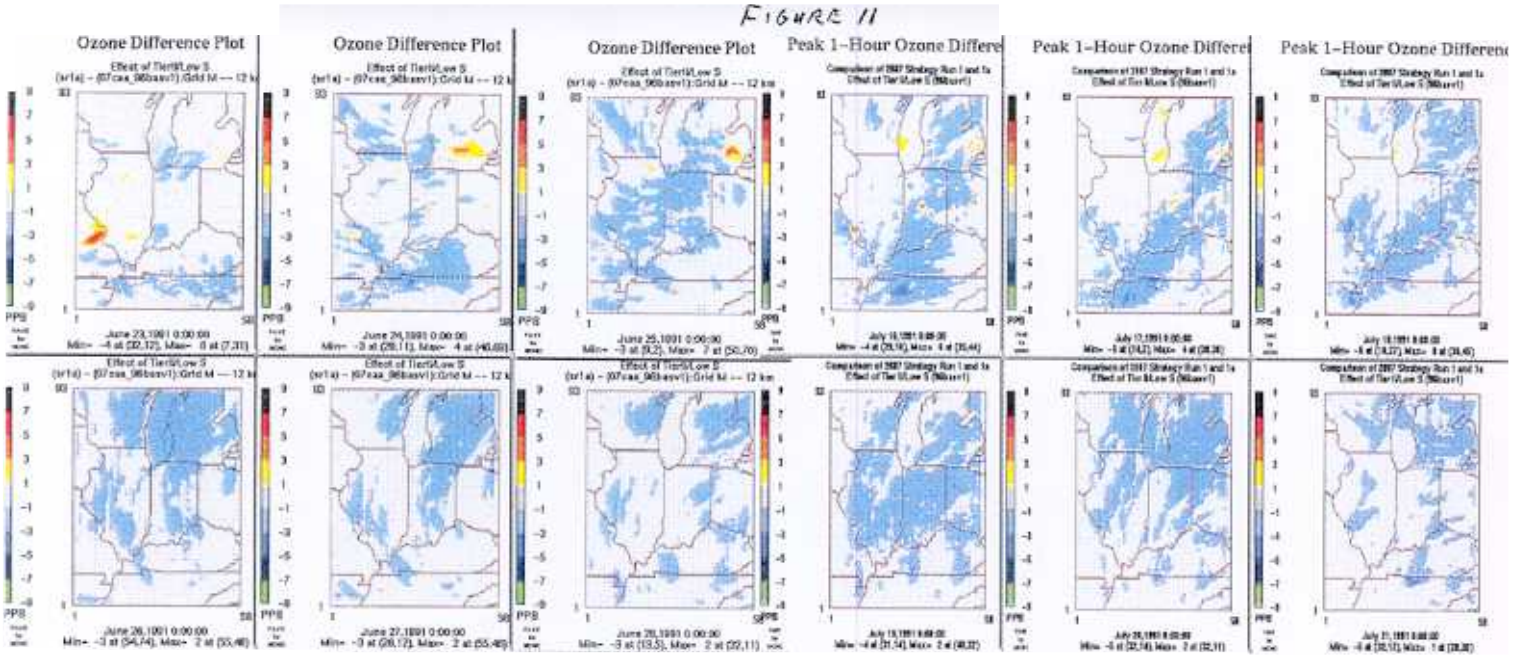
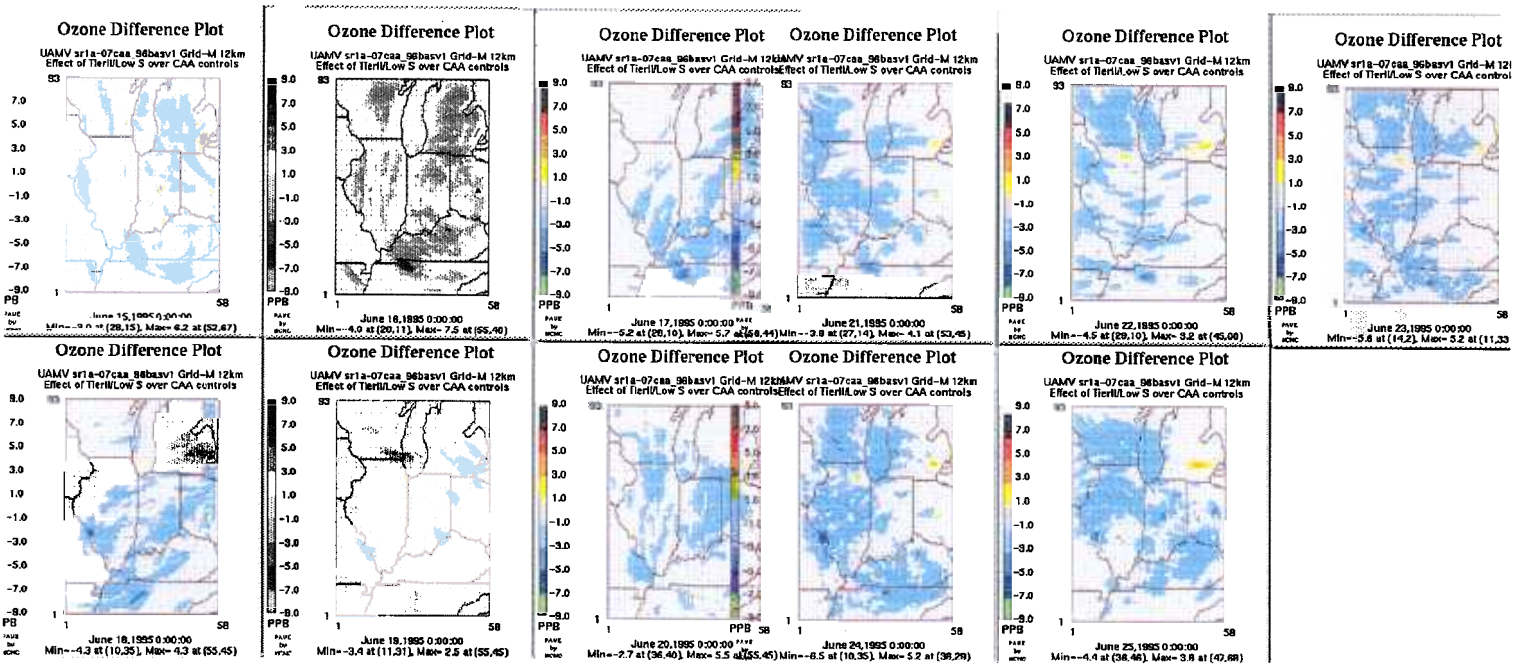

Max 1-Hour Ozone Difference
SR1a vs SR1
July 1995 Grid M @ 12 km, 96bsrv1
PPB

FIGURE 11


Ozone Difference Plot
Ozone Difference Plot
Ozone Difference Plot
Peak 1-Hour Ozone Differe
Peak 1-Hour Ozone Differe
Peak 1-Hour Ozone Differe


Ozone Difference Plot
UAMV sr1a-07caa_96basv1 Grid-M 12km
Effect of TierII/Low S over CAA controls
Ozone Difference Plot
Ozone Difference Plot
Ozone Difference Plot
Ozone Difference Plot
Ozone Difference Plot
Ozone Difference Plot
Ozone Difference Plot
Ozone Difference Plot
Ozone Difference Plot
Ozone Difference Plot

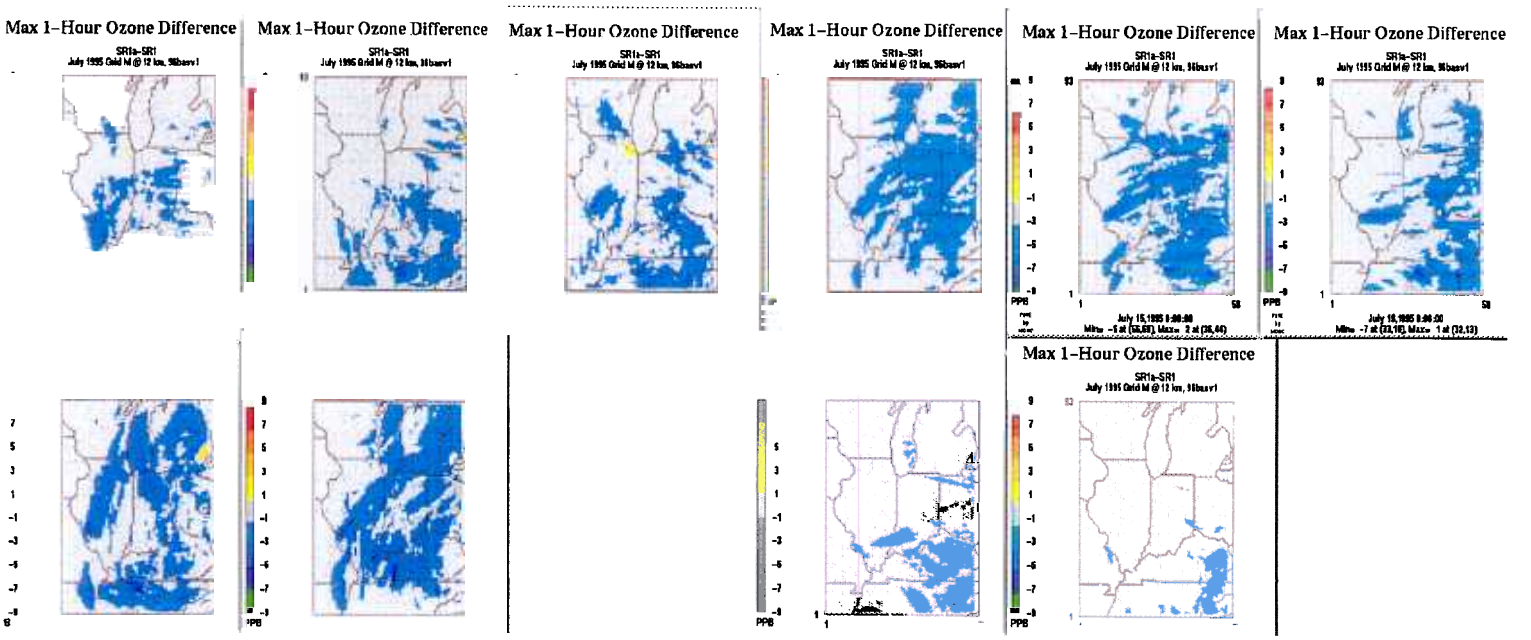

Max 1-Hour Ozone Difference
Max 1-Hour Ozone Difference
Max 1-Hour Ozone Difference
Max 1-Hour Ozone Difference
Max 1-Hour Ozone Difference
Max 1-Hour Ozone Difference
Max 1-Hour Ozone Difference

Figure 12a

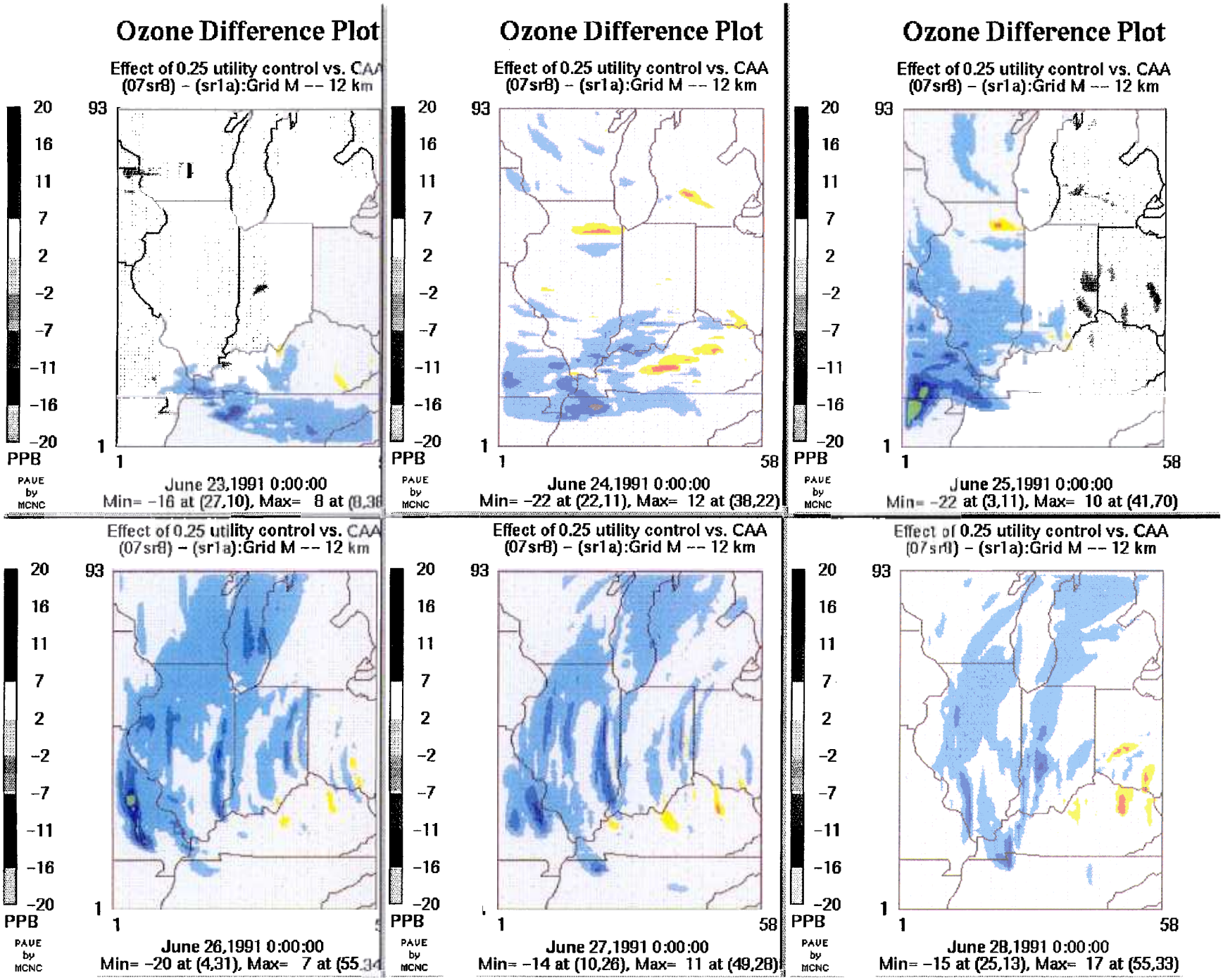

Ozone Difference Plot
Effect of 0.25 utility control vs. CAA
(07sr8) – (sr1a):Grid M -- 12 km
20
16
11
7
2
-2
-7
-11
-16
-20
PPB
PAVE by MCNC
93
1
1
58
June 23,1991 0:00:00
Min= -16 at (27,10), Max= 8 at (8,36
June 24,1991 0:00:00
Min= -22 at (22,11), Max= 12 at (38,22)
June 25,1991 0:00:00
Min= -22 at (3,11), Max= 10 at (41,70)
June 26,1991 0:00:00
Min= -20 at (4,31), Max= 7 at (55,34
June 27,1991 0:00:00
Min= -14 at (10,26), Max= 11 at (49,28)
June 28,1991 0:00:00
Min= -15 at (25,13), Max= 17 at (55,33)

Figure 12b

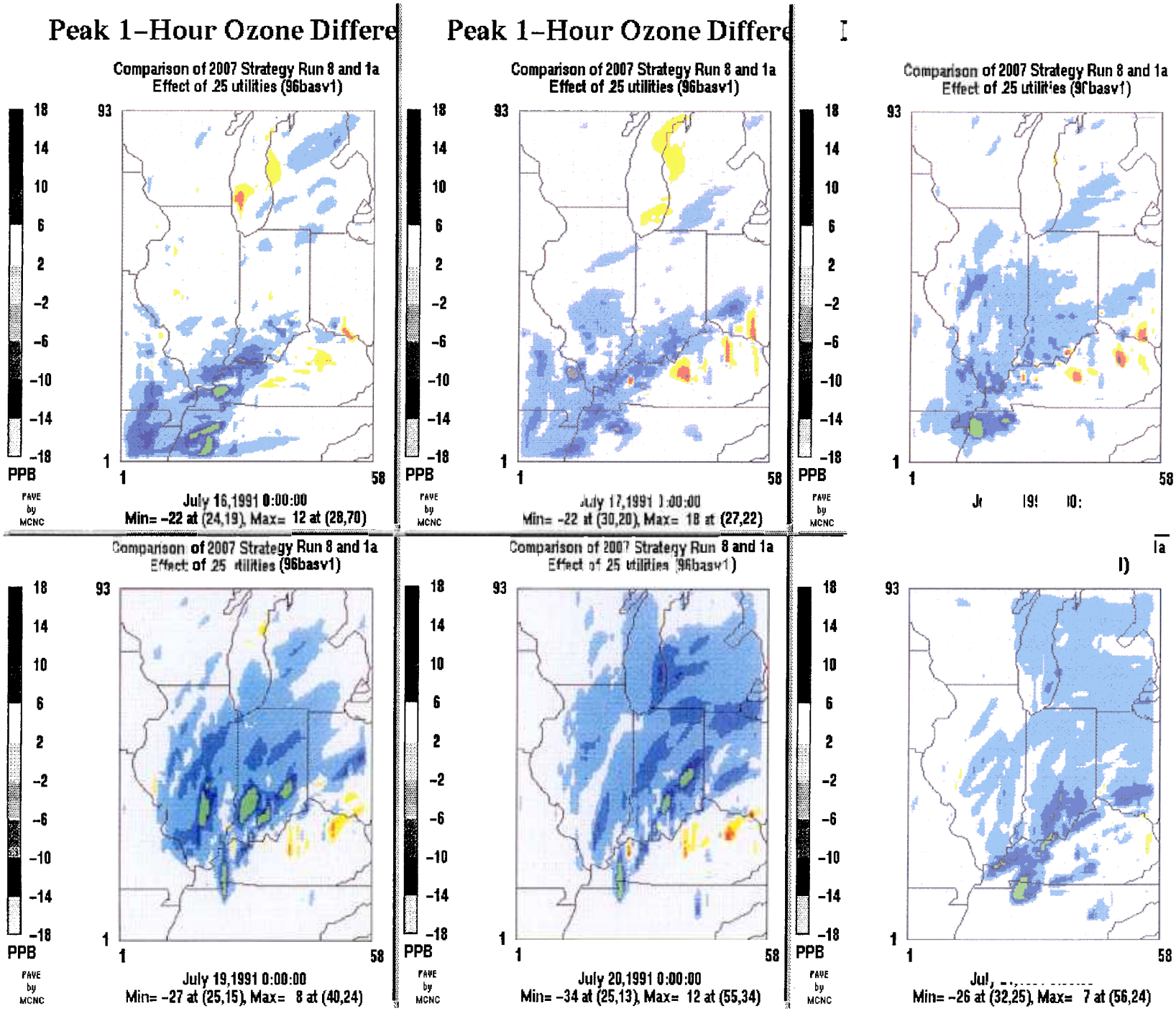

Peak 1-Hour Ozone Differe
Comparison of 2007 Strategy Run 8 and 1a
Effect of .25 utilities (96basv1)
18
14
10
6
2
-2
-6
-10
-14
-18
PPB
93
1
1
58
PAVE by MCNC
July 16,1991 0:00:00
Min= -22 at (24,19), Max= 12 at (28,70)
Peak 1-Hour Ozone Differe
Comparison of 2007 Strategy Run 8 and 1a
Effect of .25 utilities (96basv1)
July 17,1991 0:00:00
Min= -22 at (30,20), Max= 18 at (27,22)
Comparison of 2007 Strategy Run 8 and 1a
Effect of .25 utilities (96basv1)
Comparison of 2007 Strategy Run 8 and 1a
Effect of .25 utilities (96basv1)
July 19,1991 0:00:00
Min= -27 at (25,15), Max= 8 at (40,24)
Comparison of 2007 Strategy Run 8 and 1a
Effect of .25 utilities (96basv1)
July 20,1991 0:00:00
Min= -34 at (25,13), Max= 12 at (55,34)
Min= -26 at (32,25), Max= 7 at (56,24)

Figure 12c

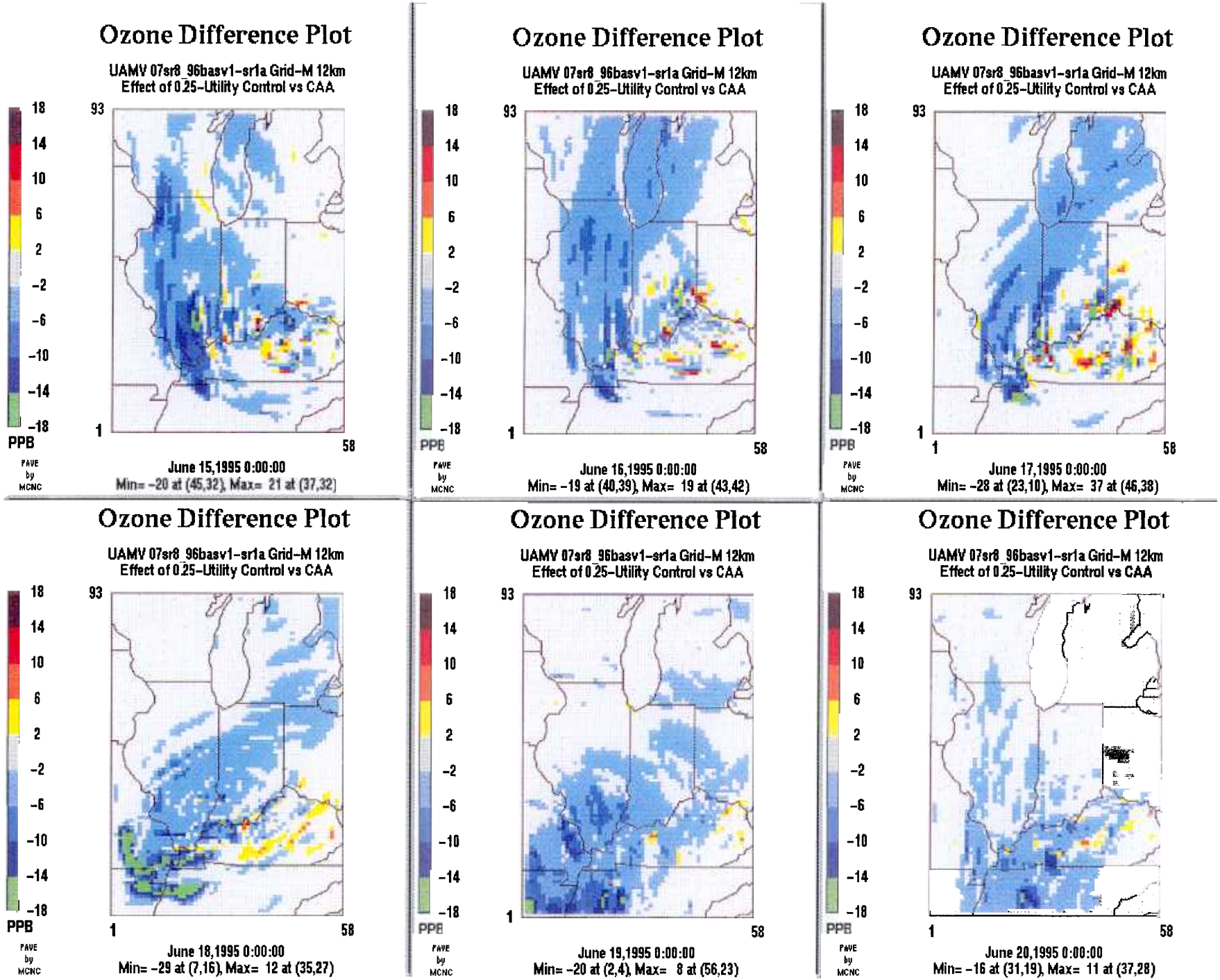

Ozone Difference Plot
UAMV 07sr8_96basv1-sr1a Grid-M 12km
Effect of 0.25-Utility Control vs CAA
18
14
10
6
2
-2
-6
-10
-14
-18
PPB
PAVE by MCNC
93
1
58
June 15,1995 0:00:00
Min= -20 at (45,32), Max= 21 at (37,32)
June 16,1995 0:00:00
Min= -19 at (40,39), Max= 19 at (43,42)
June 17,1995 0:00:00
Min= -28 at (23,10), Max= 37 at (46,38)
June 18,1995 0:00:00
Min= -29 at (7,16), Max= 12 at (35,27)
June 19,1995 0:00:00
Min= -20 at (2,4), Max= 8 at (56,23)
June 20,1995 0:00:00
Min= -16 at (31,19), Max= 11 at (37,28)

Figure 12d

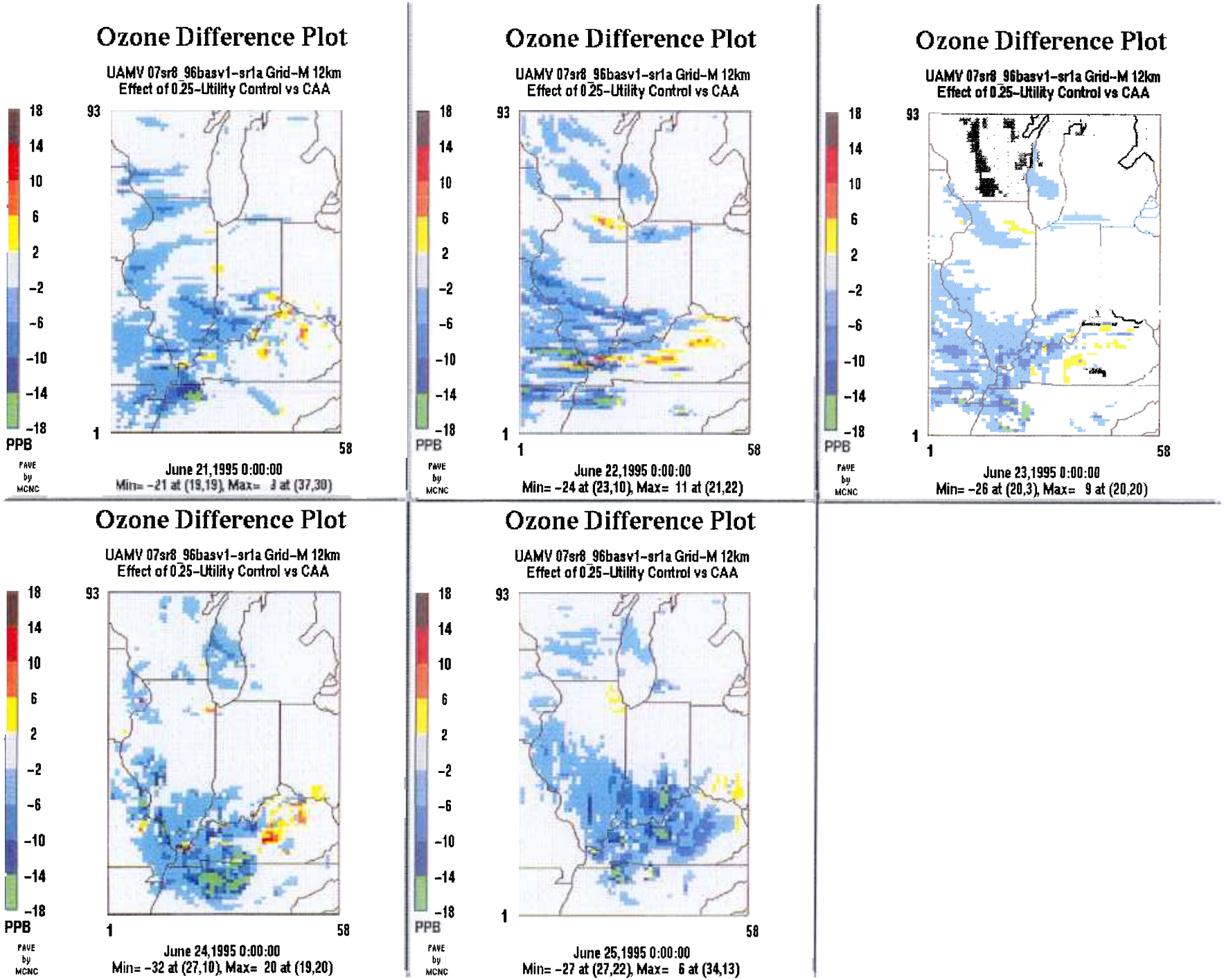

Ozone Difference Plot
UAMV 07sr8_96basv1-sr1a Grid-M 12km
Effect of 0.25-Utility Control vs CAA
18
14
10
6
2
-2
-6
-10
-14
-18
PPB
PAVE by MCNC
93
1
58
June 21,1995 0:00:00
Min= -21 at (19,19), Max= 3 at (37,30)
Ozone Difference Plot
UAMV 07sr8_96basv1-sr1a Grid-M 12km
Effect of 0.25-Utility Control vs CAA
June 22,1995 0:00:00
Min= -24 at (23,10), Max= 11 at (21,22)
Ozone Difference Plot
UAMV 07sr8_96basv1-sr1a Grid-M 12km
Effect of 0.25-Utility Control vs CAA
June 23,1995 0:00:00
Min= -26 at (20,3), Max= 9 at (20,20)
Ozone Difference Plot
UAMV 07sr8_96basv1-sr1a Grid-M 12km
Effect of 0.25-Utility Control vs CAA
June 24,1995 0:00:00
Min= -32 at (27,10), Max= 20 at (19,20)
Ozone Difference Plot
UAMV 07sr8_96basv1-sr1a Grid-M 12km
Effect of 0.25-Utility Control vs CAA
June 25,1995 0:00:00
Min= -27 at (27,22), Max= 6 at (34,13)

Figure 12e

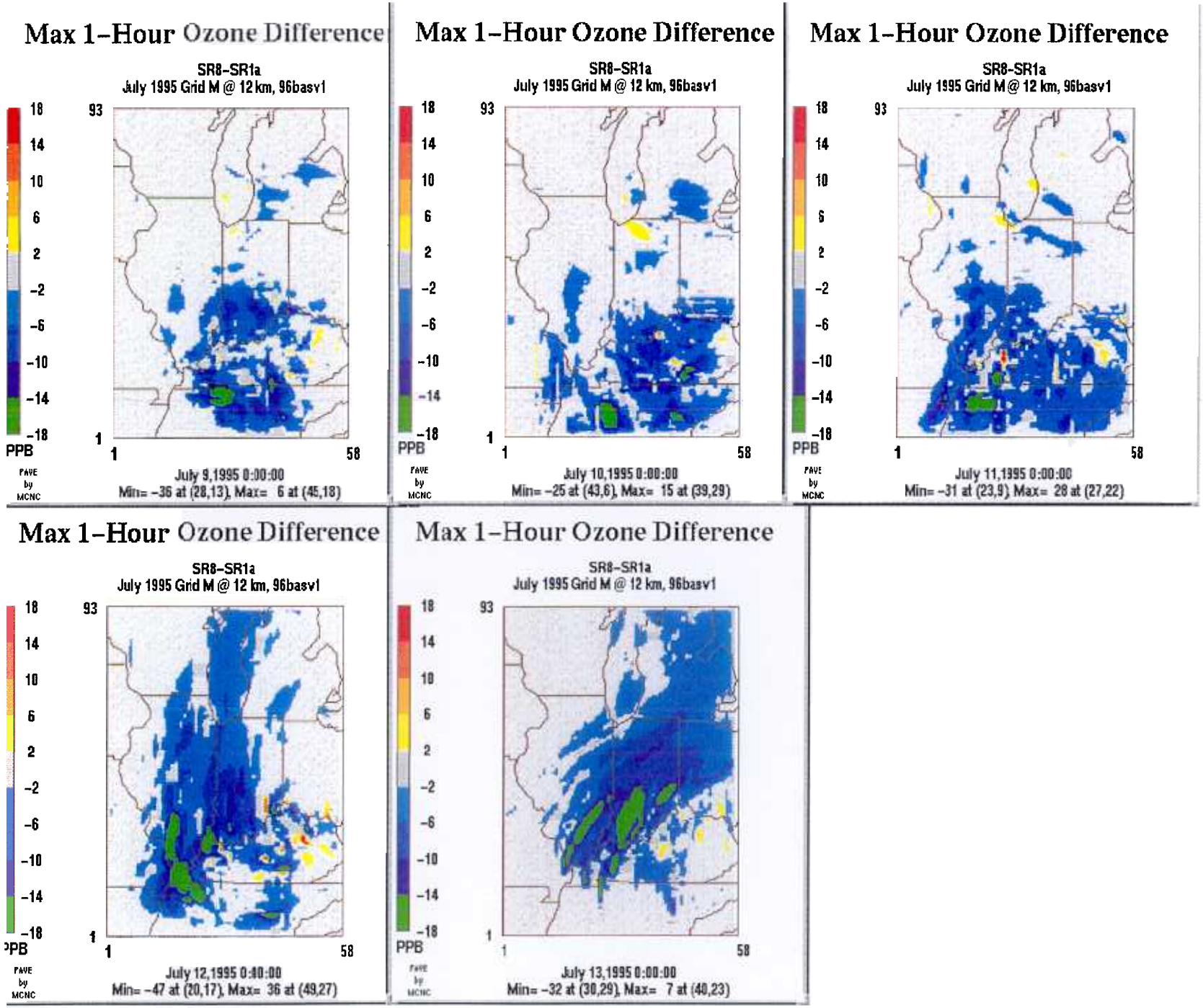

Max 1-Hour Ozone Difference
SR8-SR1a
July 1995 Grid M @ 12 km, 96basv1
18
14
10
6
2
-2
-6
-10
-14
-18
PPB
93
1
1
58
PAVE by MCNC
July 9,1995 0:00:00
Min= -36 at (28,13), Max= 6 at (45,18)
Max 1-Hour Ozone Difference
SR8-SR1a
July 1995 Grid M @ 12 km, 96basv1
PPB
July 10,1995 0:00:00
Min= -25 at (43,6), Max= 15 at (39,29)
Max 1-Hour Ozone Difference
SR8-SR1a
July 1995 Grid M @ 12 km, 96basv1
PPB
July 11,1995 0:00:00
Min= -31 at (23,9), Max= 28 at (27,22)
Max 1-Hour Ozone Difference
SR8-SR1a
July 1995 Grid M @ 12 km, 96basv1
PPB
July 12,1995 0:00:00
Min= -47 at (20,17), Max= 36 at (49,27)
Max 1-Hour Ozone Difference
SR8-SR1a
July 1995 Grid M @ 12 km, 96basv1
PPB
July 13,1995 0:00:00
Min= -32 at (30,29), Max= 7 at (40,23)

Figure 12f

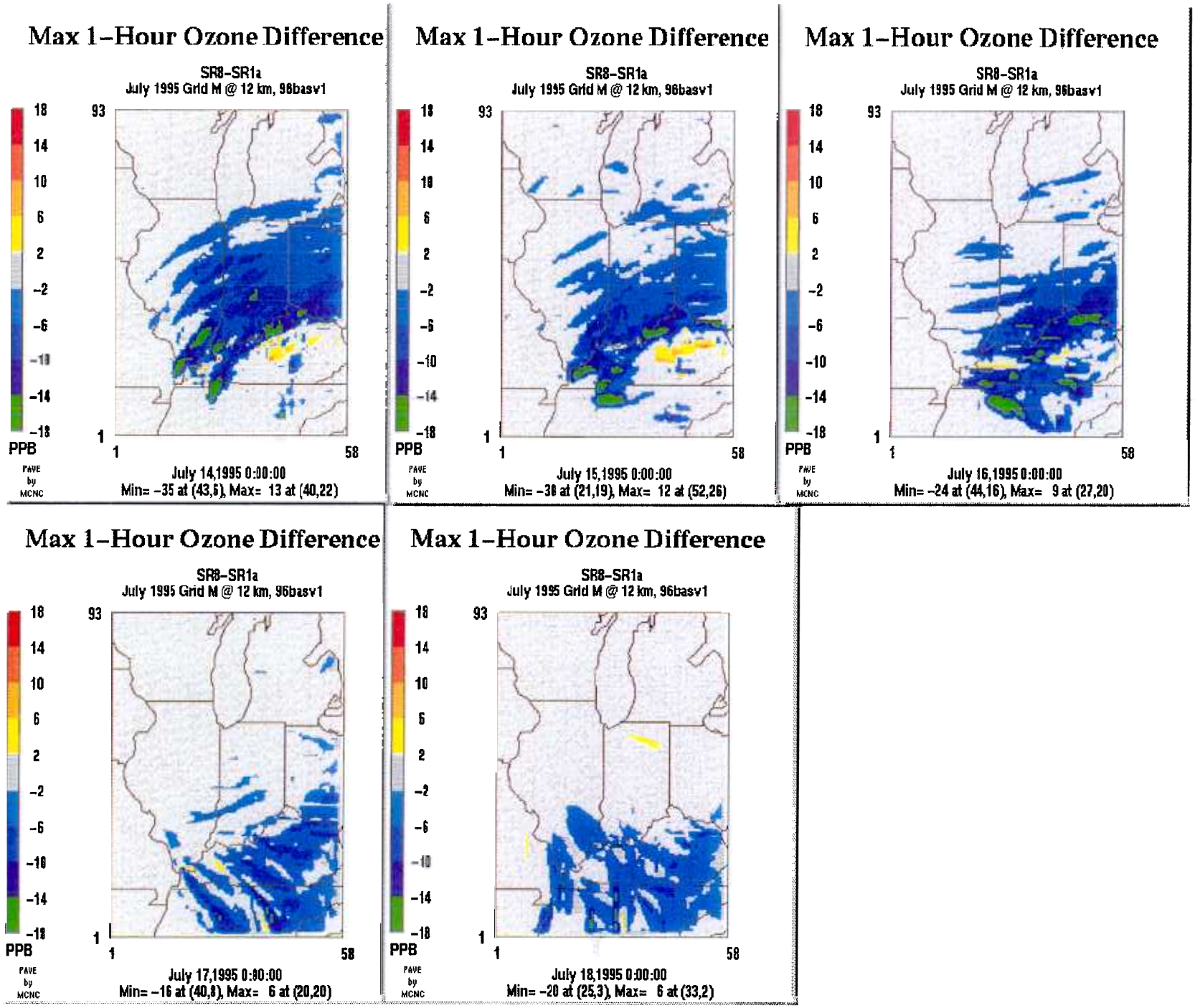

Max 1-Hour Ozone Difference
SR8-SR1a
July 1995 Grid M @ 12 km, 96basv1
18
14
10
6
2
-2
-6
-10
-14
-18
PPB
PAVE by MCNC
93
1
1
58
July 14,1995 0:00:00
Min= -35 at (43,6), Max= 13 at (40,22)
Max 1-Hour Ozone Difference
SR8-SR1a
July 1995 Grid M @ 12 km, 96basv1
July 15,1995 0:00:00
Min= -38 at (21,19), Max= 12 at (52,26)
Max 1-Hour Ozone Difference
SR8-SR1a
July 1995 Grid M @ 12 km, 96basv1
July 16,1995 0:00:00
Min= -24 at (44,16), Max= 9 at (27,20)
Max 1-Hour Ozone Difference
SR8-SR1a
July 1995 Grid M @ 12 km, 96basv1
July 17,1995 0:00:00
Min= -16 at (40,8), Max= 6 at (20,20)
Max 1-Hour Ozone Difference
SR8-SR1a
July 1995 Grid M @ 12 km, 96basv1
July 18,1995 0:00:00
Min= -20 at (25,3), Max= 6 at (33,2)

Figure 13a

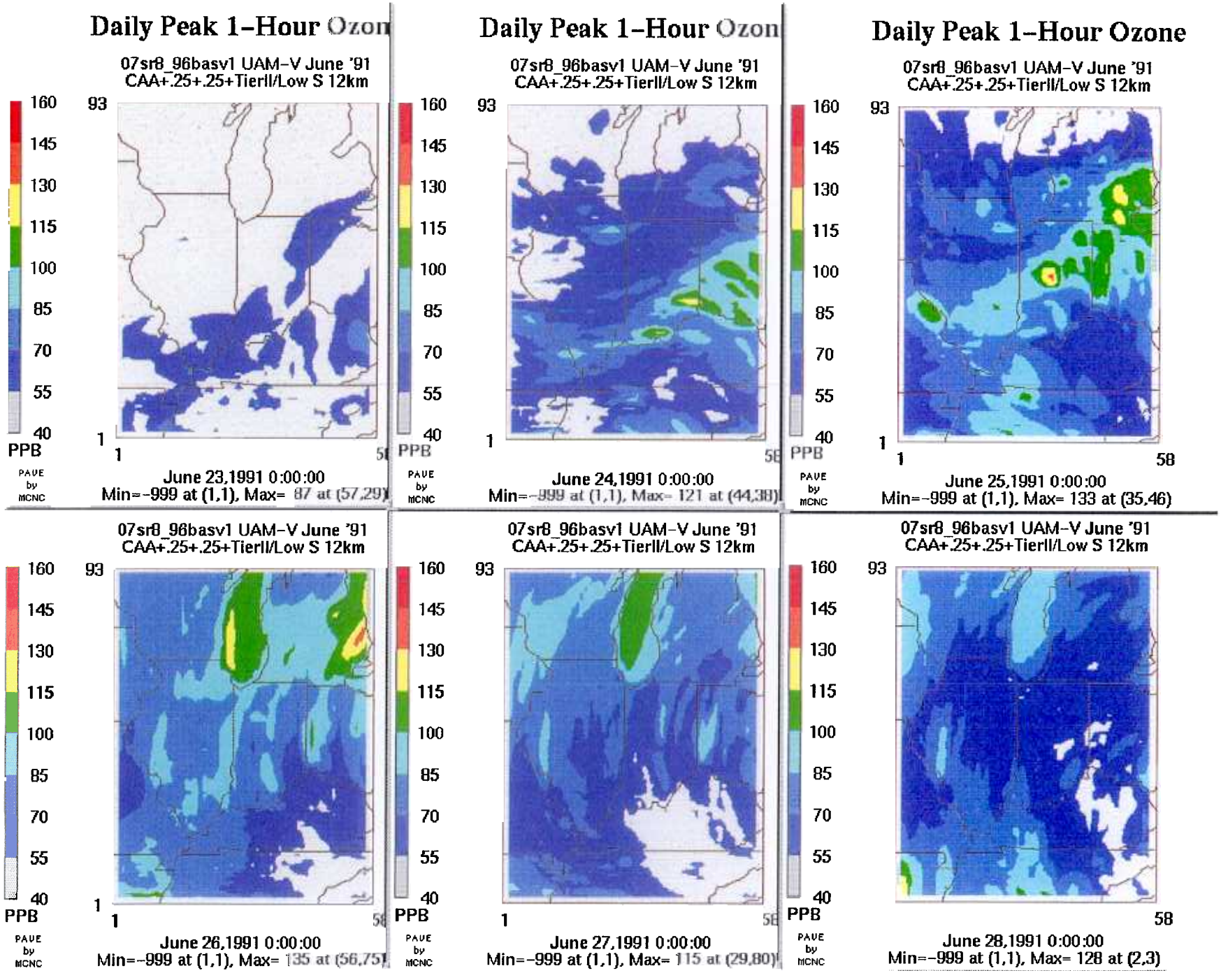

Daily Peak 1-Hour Ozone
07sr8_96basv1 UAM-V June '91
CAA+.25+.25+TierII/Low S 12km
160
145
130
115
100
85
70
55
40
PPB
PAVE by MCNC
93
1
1
58
June 23,1991 0:00:00
Min=-999 at (1,1), Max= 87 at (57,29)
June 24,1991 0:00:00
Min=-999 at (1,1), Max= 121 at (44,38)
June 25,1991 0:00:00
Min=-999 at (1,1), Max= 133 at (35,46)
June 26,1991 0:00:00
Min=-999 at (1,1), Max= 135 at (56,75)
June 27,1991 0:00:00
Min=-999 at (1,1), Max= 115 at (29,80)
June 28,1991 0:00:00
Min=-999 at (1,1), Max= 128 at (2,3)

Figure 13b

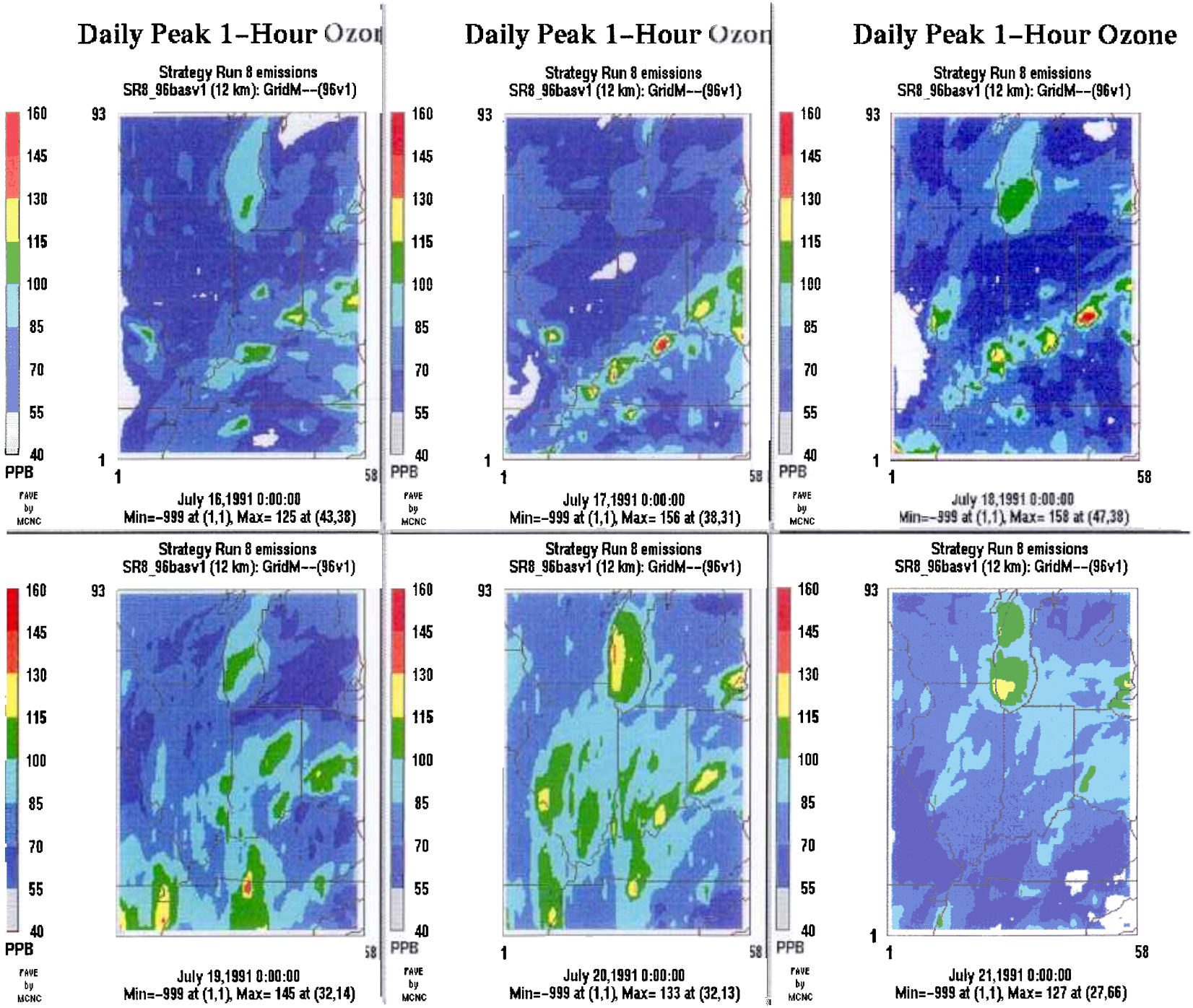

Daily Peak 1-Hour Ozone
Strategy Run 8 emissions
SR8_96basv1 (12 km): GridM--(96v1)
160
145
130
115
100
85
70
55
40
PPB
93
1
1
58
July 16,1991 0:00:00
Min=-999 at (1,1), Max= 125 at (43,38)
July 17,1991 0:00:00
Min=-999 at (1,1), Max= 156 at (38,31)
July 18,1991 0:00:00
Min=-999 at (1,1), Max= 158 at (47,38)
July 19,1991 0:00:00
Min=-999 at (1,1), Max= 145 at (32,14)
July 20,1991 0:00:00
Min=-999 at (1,1), Max= 133 at (32,13)
July 21,1991 0:00:00
Min=-999 at (1,1), Max= 127 at (27,66)

Figure 13c

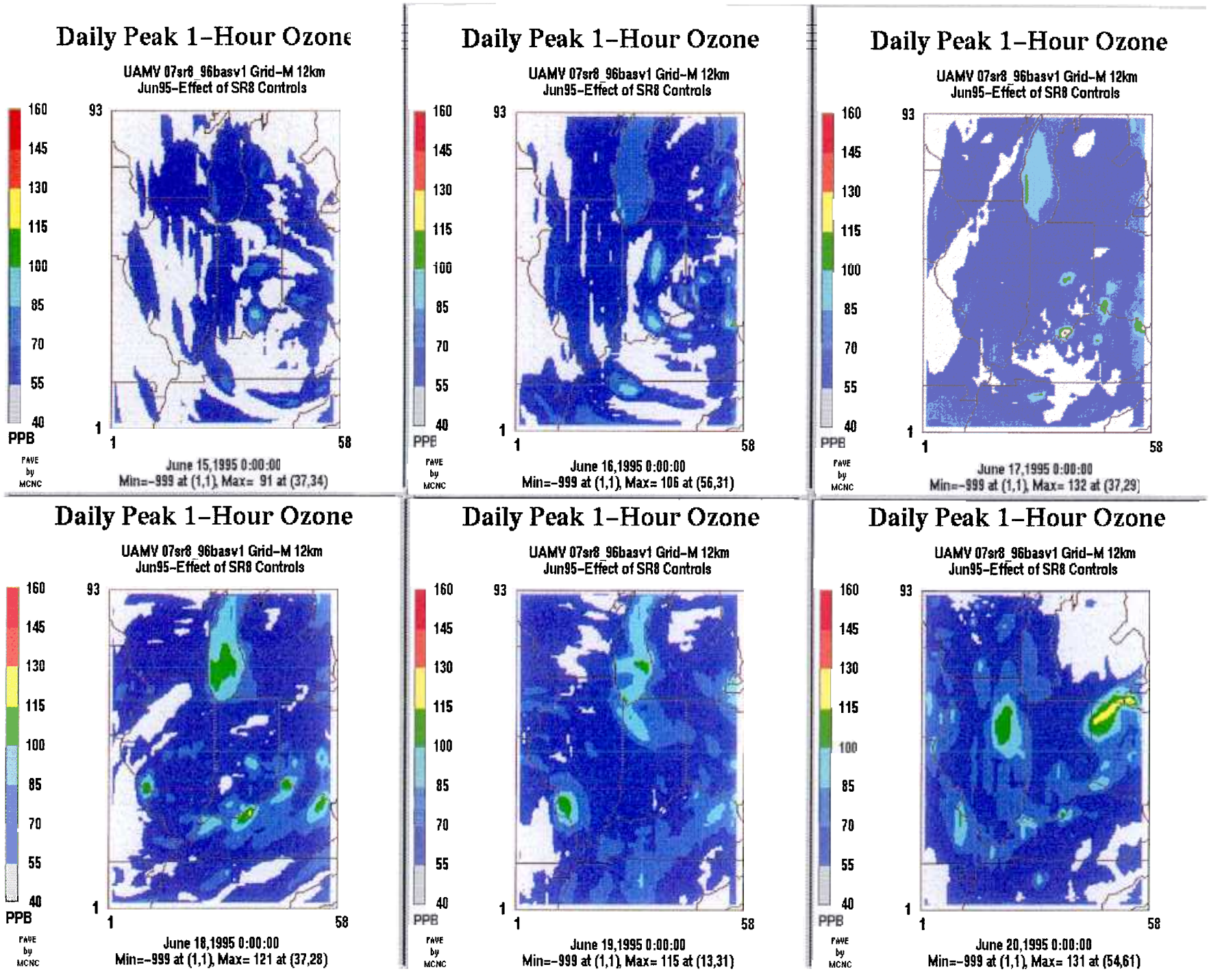

Daily Peak 1-Hour Ozone
UAMV 07sr8_96basv1 Grid-M 12km
Jun95-Effect of SR8 Controls
160
145
130
115
100
85
70
55
40
PPB
93
1
1
58
PAVE by MCNC
June 15,1995 0:00:00
Min=-999 at (1,1), Max= 91 at (37,34)
June 16,1995 0:00:00
Min=-999 at (1,1), Max= 106 at (56,31)
June 17,1995 0:00:00
Min=-999 at (1,1), Max= 132 at (37,29)
June 18,1995 0:00:00
Min=-999 at (1,1), Max= 121 at (37,28)
June 19,1995 0:00:00
Min=-999 at (1,1), Max= 115 at (13,31)
June 20,1995 0:00:00
Min=-999 at (1,1), Max= 131 at (54,61)

Figure 13d

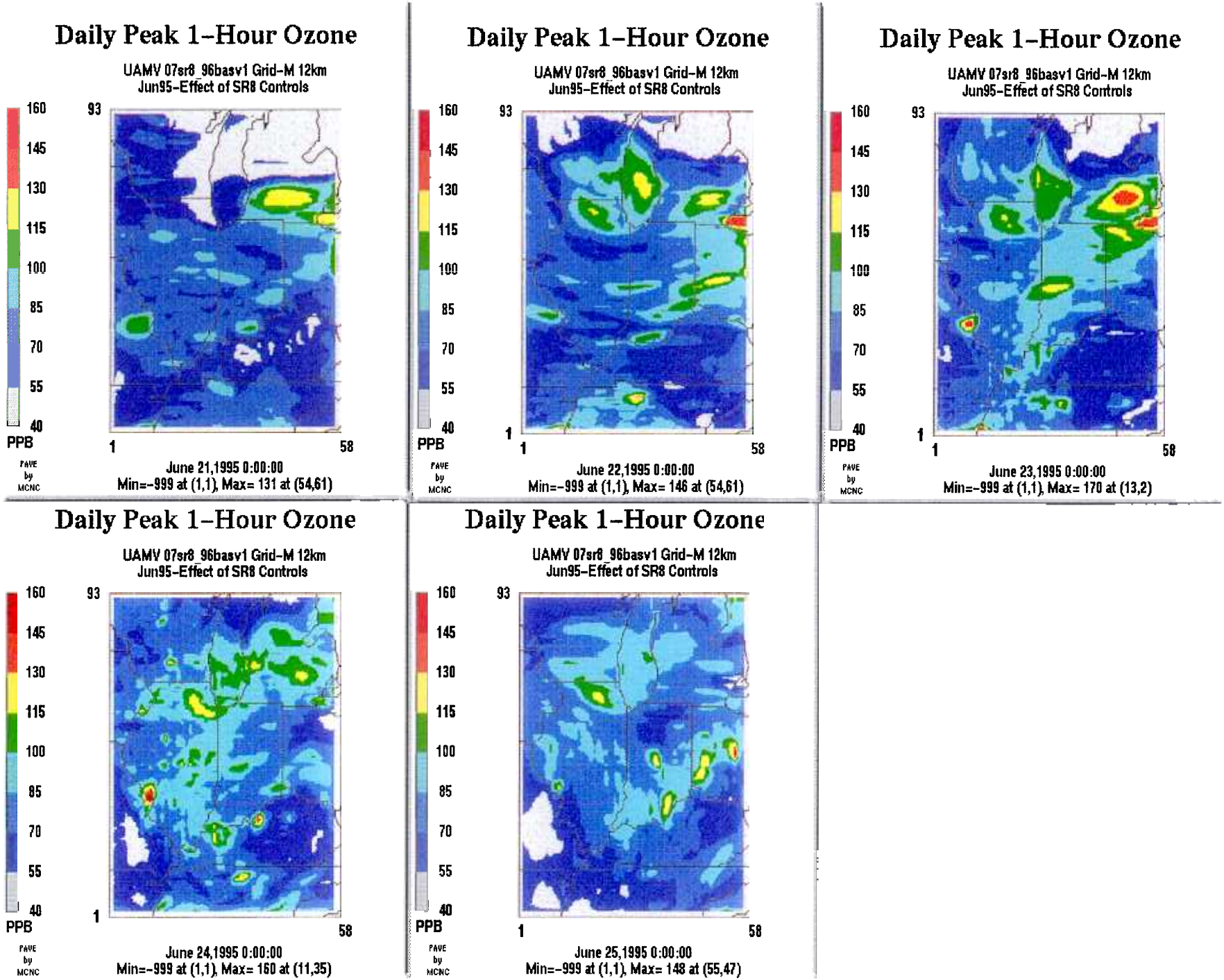

Daily Peak 1-Hour Ozone
UAMV 07sr8_96basv1 Grid-M 12km
Jun95-Effect of SR8 Controls
160
145
130
115
100
85
70
55
40
PPB
93
1
58
PAVE by MCNC
June 21,1995 0:00:00
Min=-999 at (1,1), Max= 131 at (54,61)
Daily Peak 1-Hour Ozone
UAMV 07sr8_96basv1 Grid-M 12km
Jun95-Effect of SR8 Controls
June 22,1995 0:00:00
Min=-999 at (1,1), Max= 146 at (54,61)
Daily Peak 1-Hour Ozone
UAMV 07sr8_96basv1 Grid-M 12km
Jun95-Effect of SR8 Controls
June 23,1995 0:00:00
Min=-999 at (1,1), Max= 170 at (13,2)
Daily Peak 1-Hour Ozone
UAMV 07sr8_96basv1 Grid-M 12km
Jun95-Effect of SR8 Controls
June 24,1995 0:00:00
Min=-999 at (1,1), Max= 160 at (11,35)
Daily Peak 1-Hour Ozone
UAMV 07sr8_96basv1 Grid-M 12km
Jun95-Effect of SR8 Controls
June 25,1995 0:00:00
Min=-999 at (1,1), Max= 148 at (55,47)

Figure 13e

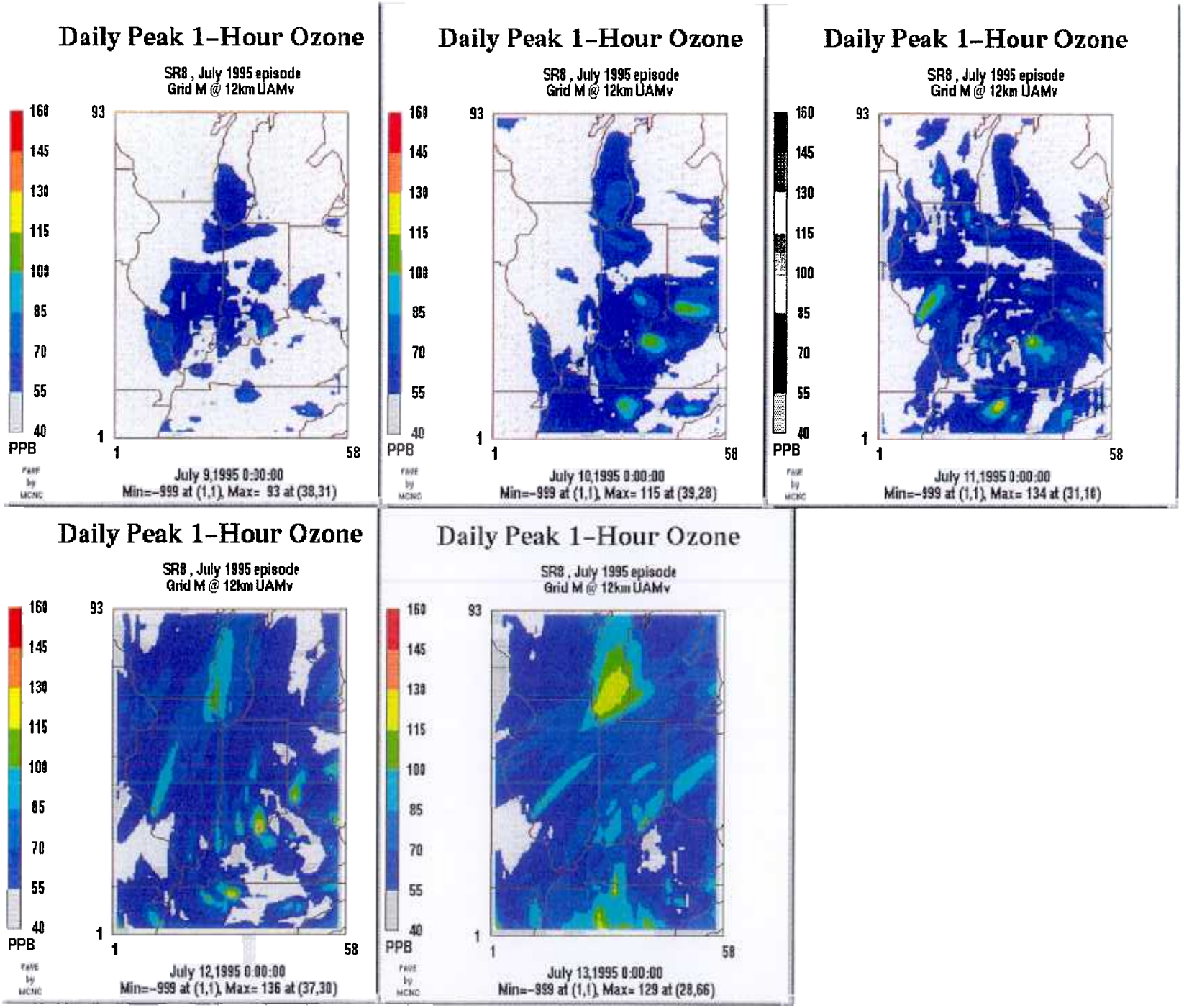
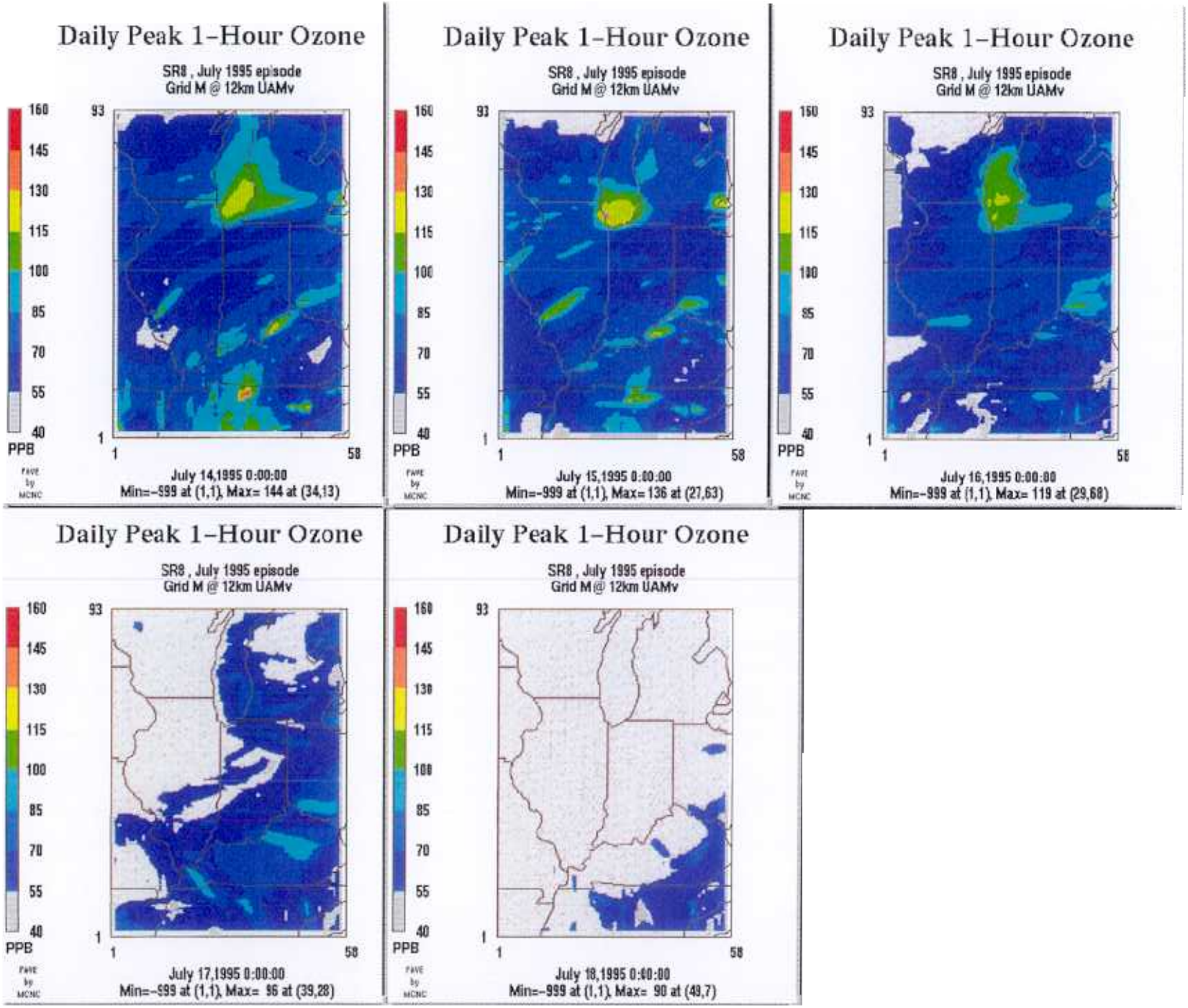

Daily Peak 1-Hour Ozone
SR8 , July 1995 episode
Grid M @ 12km UAMv
160
145
130
115
100
85
70
55
40
PPB
93
1
1
58
July 9,1995 0:00:00
Min=-999 at (1,1), Max= 93 at (38,31)
Daily Peak 1-Hour Ozone
SR8 , July 1995 episode
Grid M @ 12km UAMv
July 10,1995 0:00:00
Min=-999 at (1,1), Max= 115 at (39,28)
Daily Peak 1-Hour Ozone
SR8 , July 1995 episode
Grid M @ 12km UAMv
July 11,1995 0:00:00
Min=-999 at (1,1), Max= 134 at (31,16)
Daily Peak 1-Hour Ozone
SR8 , July 1995 episode
Grid M @ 12km UAMv
July 12,1995 0:00:00
Min=-999 at (1,1), Max= 136 at (37,30)
Daily Peak 1-Hour Ozone
SR8 , July 1995 episode
Grid M @ 12km UAMv
July 13,1995 0:00:00
Min=-999 at (1,1), Max= 129 at (28,66)

Figure 13f


Daily Peak 1-Hour Ozone
SR8 , July 1995 episode
Grid M @ 12km UAMv
160
145
130
115
100
85
70
55
40
PPB
93
1
1
58
July 14,1995 0:00:00
Min=-999 at (1,1), Max= 144 at (34,13)
Daily Peak 1-Hour Ozone
SR8 , July 1995 episode
Grid M @ 12km UAMv
July 15,1995 0:00:00
Min=-999 at (1,1), Max= 136 at (27,63)
Daily Peak 1-Hour Ozone
SR8 , July 1995 episode
Grid M @ 12km UAMv
July 16,1995 0:00:00
Min=-999 at (1,1), Max= 119 at (29,68)
Daily Peak 1-Hour Ozone
SR8 , July 1995 episode
Grid M @ 12km UAMv
July 17,1995 0:00:00
Min=-999 at (1,1), Max= 96 at (39,28)
Daily Peak 1-Hour Ozone
SR8 , July 1995 episode
Grid M @ 12km UAMv
July 18,1995 0:00:00
Min=-999 at (1,1), Max= 90 at (49,7)