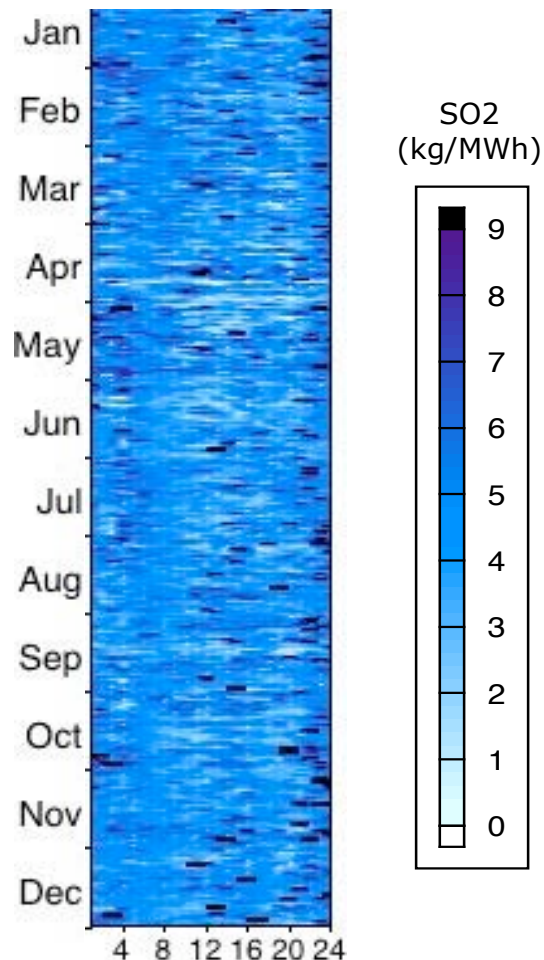


## Appendix B Section IIIa – SO2 Load Shape Following Emission Rates for 1998 to 2002

Figure BIIIa - 1. NEWE-SO2 Load Shape Following Emission Rate Profiles .....	2
Figure BIIIa - 2. NYAS-SO2 Load Shape Following Emission Rate Profiles .....	3
Figure BIIIa - 3. MAAC-SO2 Load Shape Following Emission Rate Profiles.....	4
Figure BIIIa - 4. ECOV-SO2 Load Shape Following Emission Rate Profiles .....	5
Figure BIIIa - 5. ECMI-SO2 Load Shape Following Emission Rate Profiles.....	6
Figure BIIIa - 6. SRVC-SO2 Load Shape Following Emission Rate Profiles .....	7
Figure BIIIa - 7. SRTV-SO2 Load Shape Following Emission Rate Profiles .....	8
Figure BIIIa - 8. SRSO-SO2 Load Shape Following Emission Rate Profiles.....	9
Figure BIIIa - 9. SRMV-SO2 Load Shape Following Emission Rate Profiles.....	10
Figure BIIIa - 10. FRCC-SO2 Load Shape Following Emission Rate Profiles.....	11
Figure BIIIa - 11. MANN-SO2 Load Shape Following Emission Rate Profiles.....	12
Figure BIIIa - 12. MANS-SO2 Load Shape Following Emission Rate Profiles.....	13
Figure BIIIa - 13. SPNO-SO2 Load Shape Following Emission Rate Profiles .....	14
Figure BIIIa - 14. SPSO-SO2 Load Shape Following Emission Rate Profiles .....	15
Figure BIIIa - 15. ERCT-SO2 Load Shape Following Emission Rate Profiles.....	16
Figure BIIIa - 16. MAPP-SO2 Load Shape Following Emission Rate Profiles .....	17
Figure BIIIa - 17. ROCK-SO2 Load Shape Following Emission Rate Profiles .....	18
Figure BIIIa - 18. NWGB-SO2 Load Shape Following Emission Rate Profiles .....	19
Figure BIIIa - 19. NWPN-SO2 Load Shape Following Emission Rate Profiles .....	20
Figure BIIIa - 20. WSSW-SO2 Load Shape Following Emission Rate Profiles.....	21
Figure BIIIa - 21. CALI-SO2 Load Shape Following Emission Rate Profiles .....	22

## SO<sub>2</sub> Load Shape Following Emission Rate Profiles



**1998**

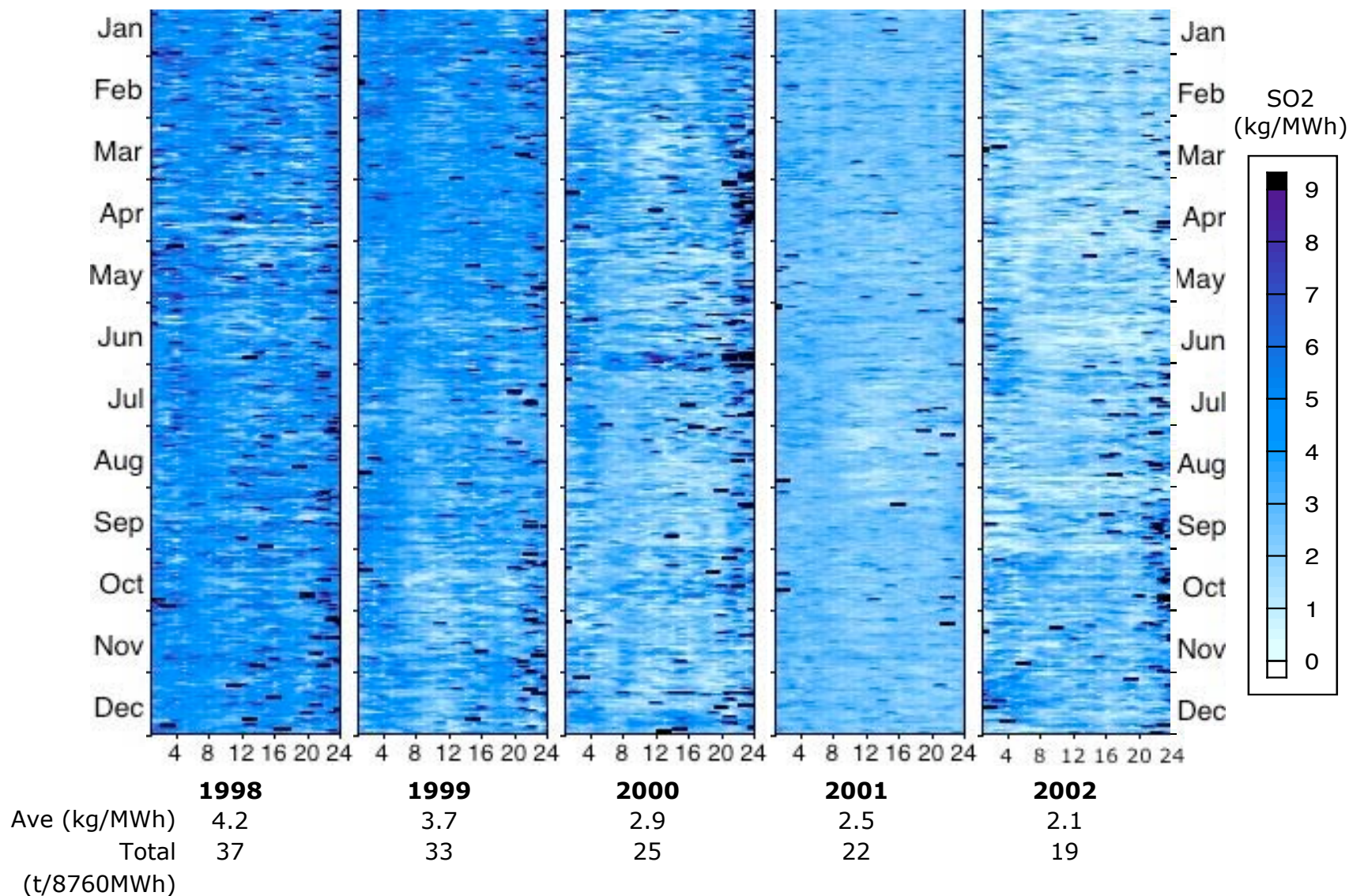
Ave (kg/MWh) 4.2  
Total 37  
(t/8760MWh)

Contour plots show emissions from 1MWh of load shape following generation in each hour of the year. Alternatively, this can be thought of as the emissions that would be avoided from applying 1MWh of non-emitting generation or demand side management in each hour of the year.

Below the contour plot is a chart that displays the average load shape following emission rate for the year and the total emissions from 8760 MWh of generation. That is, the total emissions from 1 MWh of load shape following generation in each hour of the year.

Five plots are shown for each subregion, one plot for each year from 1998 through 2002.

SO2 Load Shape Following Emission Rate Profiles – 1998 through 2002  
 NEWE (New England) – (365 days x 24 hours)

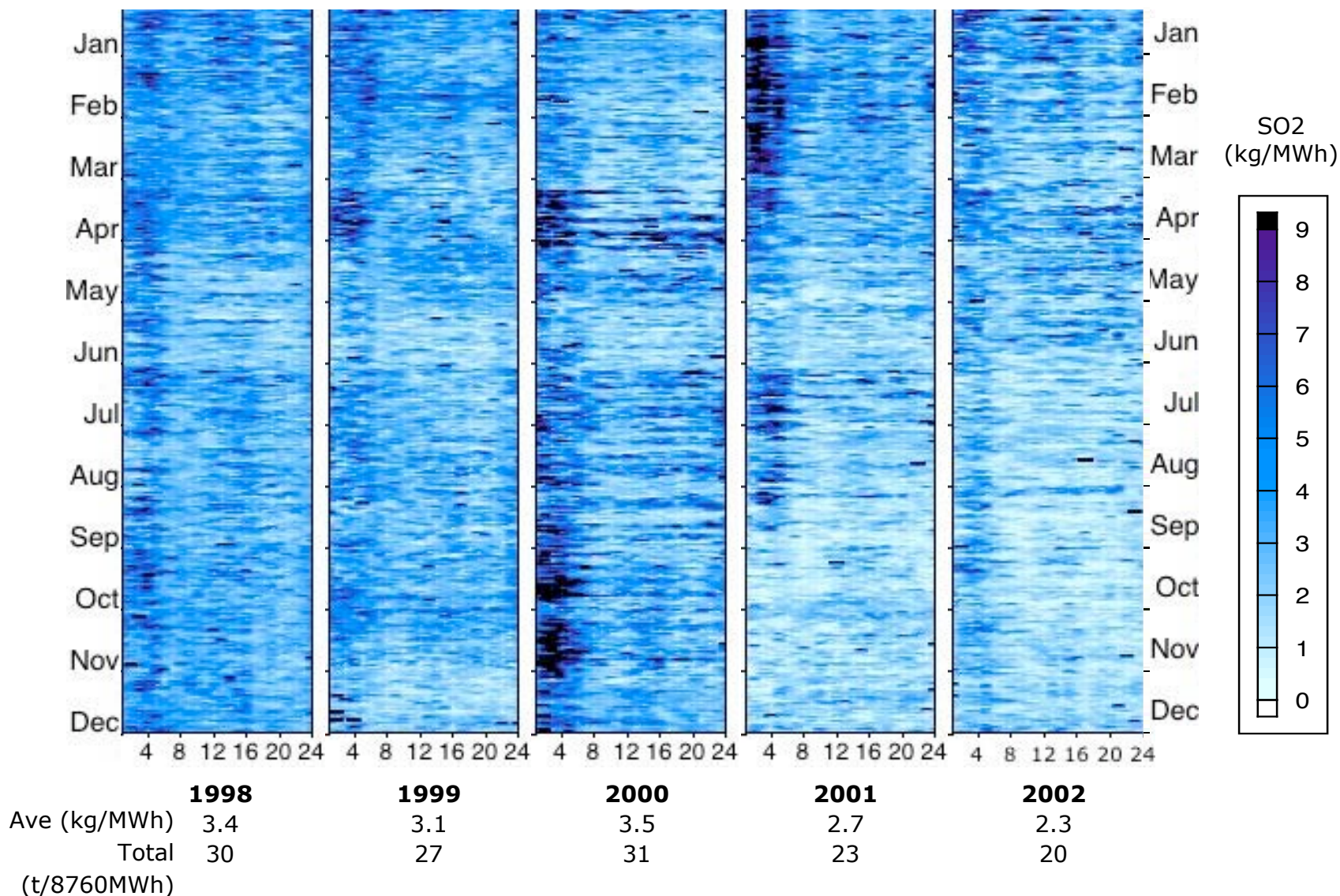


**Figure BIIIa - 1. NEWE-SO2 Load Shape Following Emission Rate Profiles**

Contour plots show SO2 emissions (kg) from 1MWh of load shape following generation in each hour in NEWE (New England) for the years 1998 through 2002. Total emissions from 1MWh generated in each hour of the year (8760 MWh) and average yearly emission rates are shown below the profiles.



SO2 Load Shape Following Emission Rate Profiles – 1998 through 2002  
 NYAS (New York) – (365 days x 24 hours)

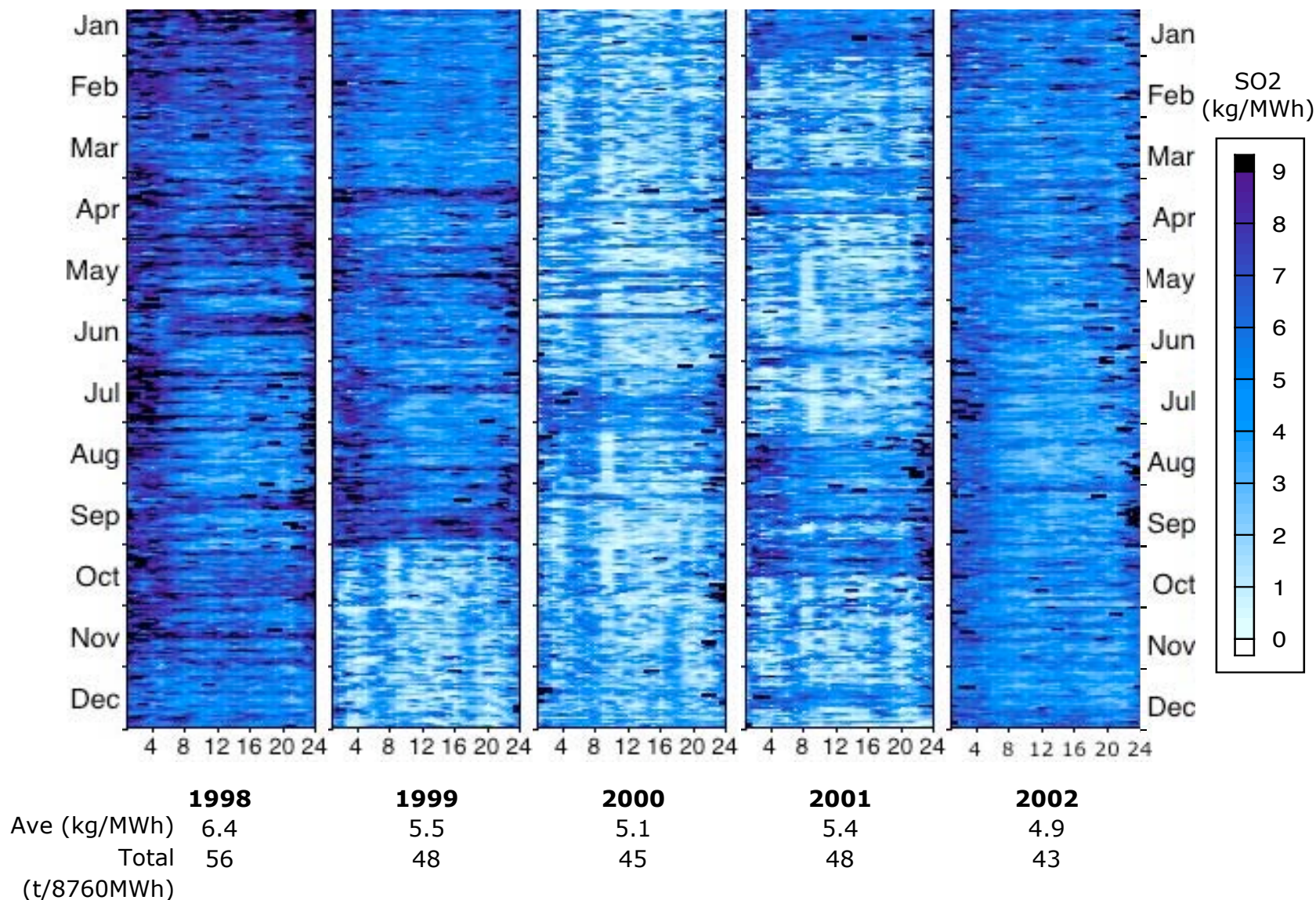


**Figure BIIIa - 2. NYAS-SO2 Load Shape Following Emission Rate Profiles**

Contour plots show SO2 emissions (kg) from 1MWh of load shape following generation in each hour in NYAS (New York) for the years 1998 through 2002. Total emissions from 1MWh generated in each hour of the year (8760 MWh) and average yearly emission rates are shown below the profiles.



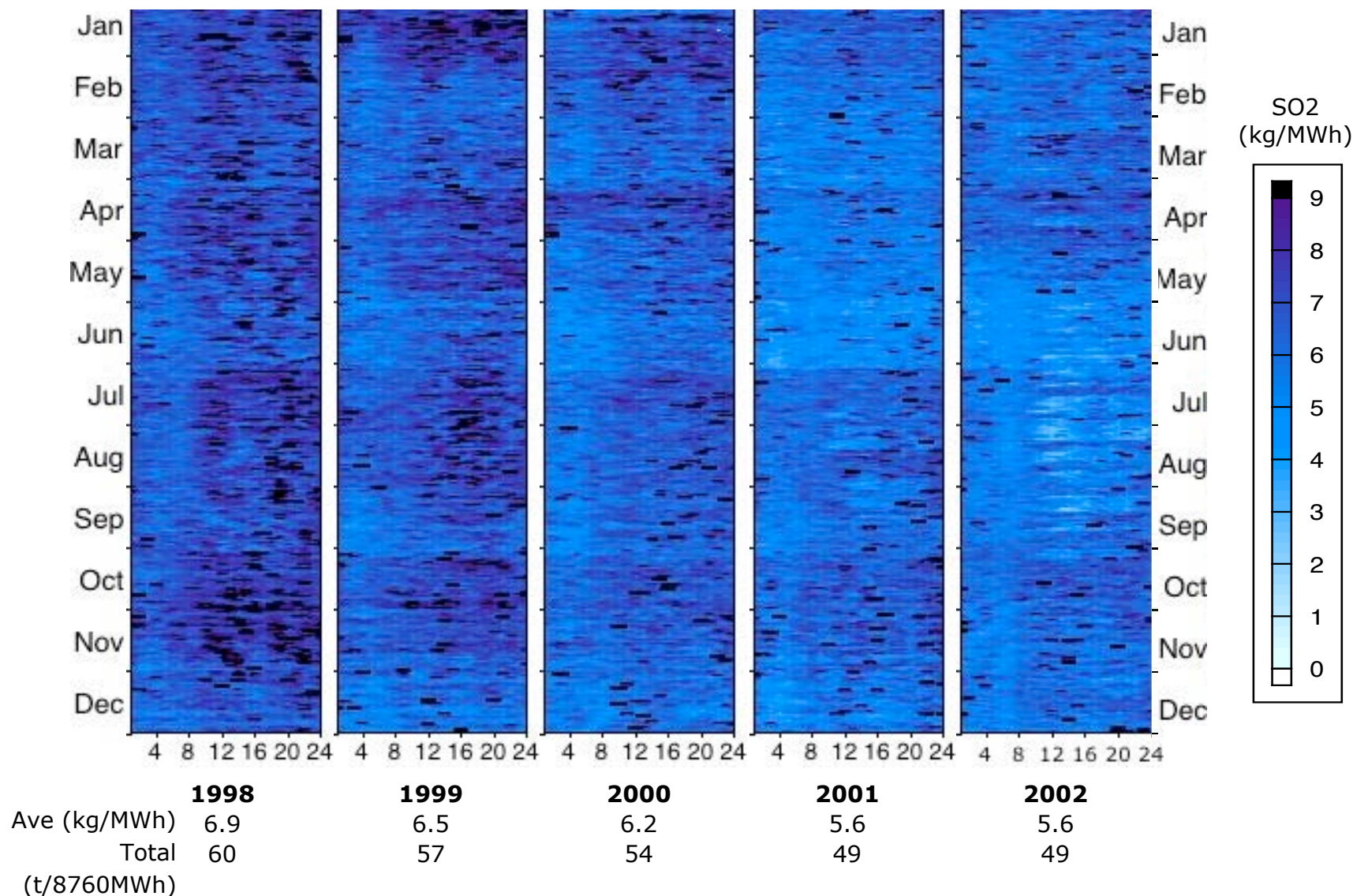
SO2 Load Shape Following Emission Rate Profiles – 1998 through 2002  
MAAC (Mid-Atlantic) – (365 days x 24 hours)



**Figure BIIIa - 3. MAAC-SO2 Load Shape Following Emission Rate Profiles**

Contour plots show SO2 emissions (kg) from 1MWh of load shape following generation in each hour in MAAC (Mid-Atlantic) for the years 1998 through 2002. Total emissions from 1MWh generated in each hour of the year (8760 MWh) and average yearly emission rates are shown below the profiles.

**SO2 Load Shape Following Emission Rate Profiles – 1998 through 2002**  
**ECOV (Ohio Valley) – (365 days x 24 hours)**

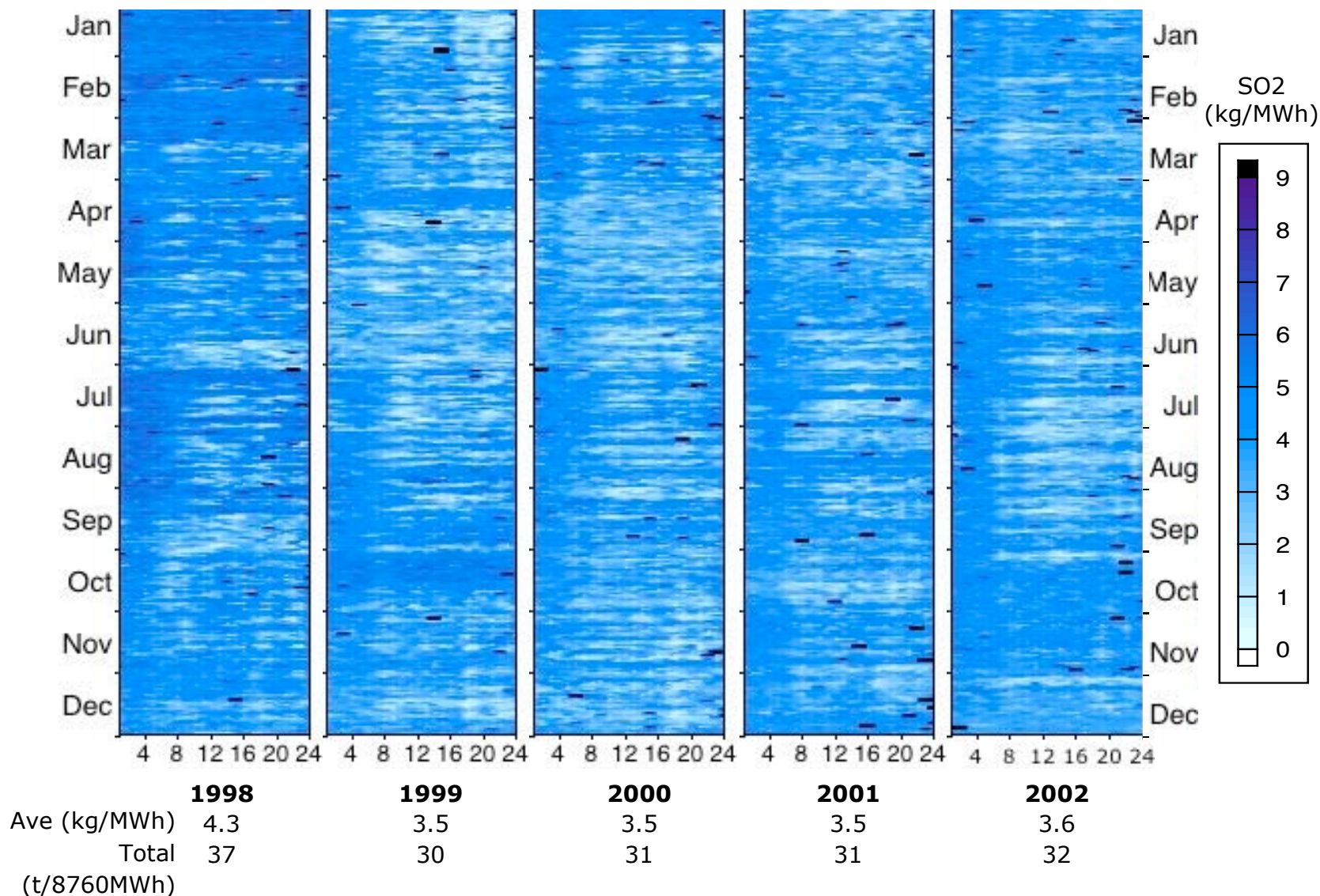


**Figure BIIIa - 4. ECOV-SO2 Load Shape Following Emission Rate Profiles**

Contour plots show SO2 emissions (kg) from 1MWh of load shape following generation in each hour in ECOV (Mid-Atlantic) for the years 1998 through 2002. Total emissions from 1MWh generated in each hour of the year (8760 MWh) and average yearly emission rates are shown below the profiles.



SO2 Load Shape Following Emission Rate Profiles – 1998 through 2002  
ECMI (Michigan) – (365 days x 24 hours)

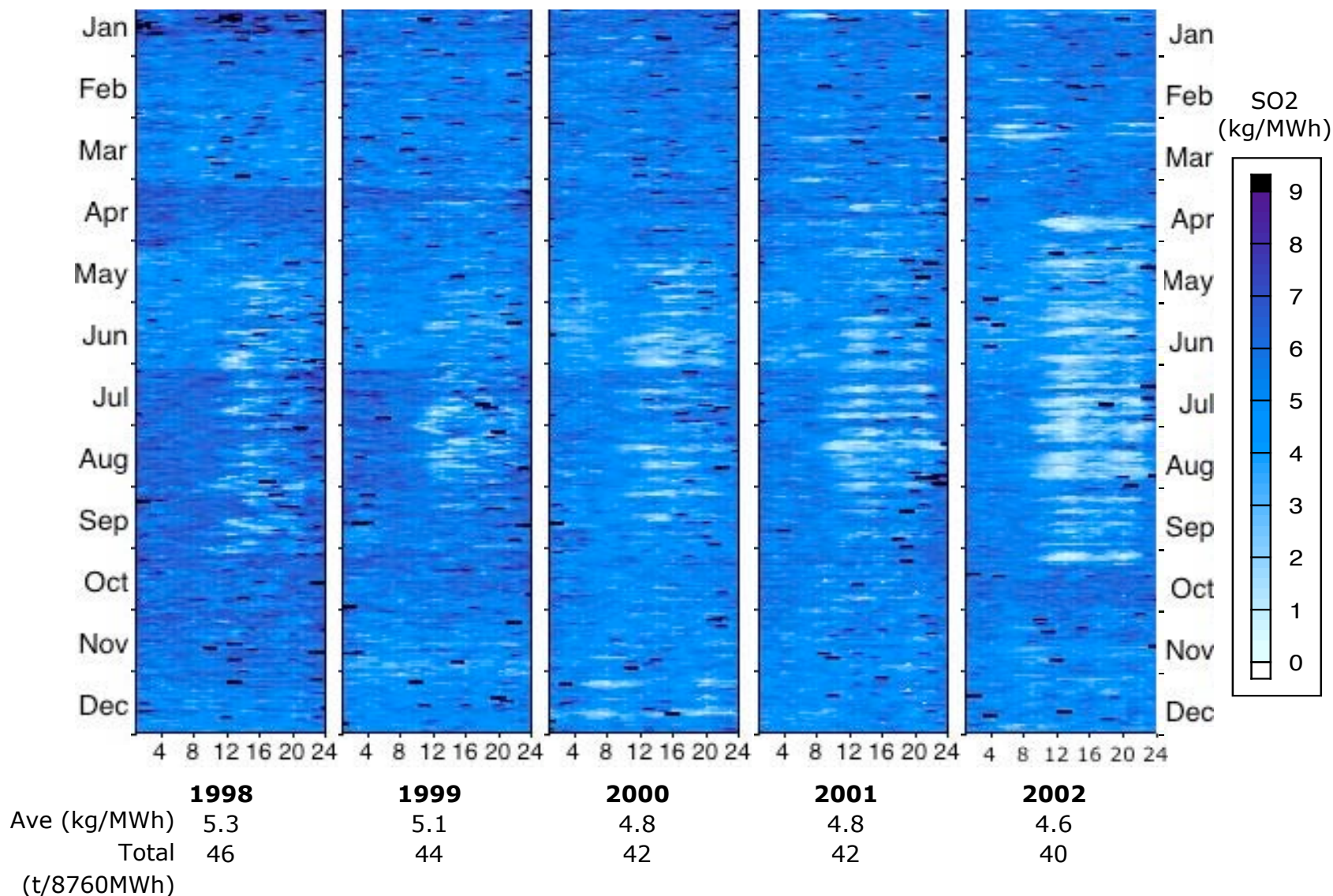


**Figure BIIIa - 5. ECMI-SO2 Load Shape Following Emission Rate Profiles**

Contour plots show SO2 emissions (kg) from 1MWh of load shape following generation in each hour in ECMI (Michigan) for the years 1998 through 2002. Total emissions from 1MWh generated in each hour of the year (8760 MWh) and average yearly emission rates are shown below the profiles.



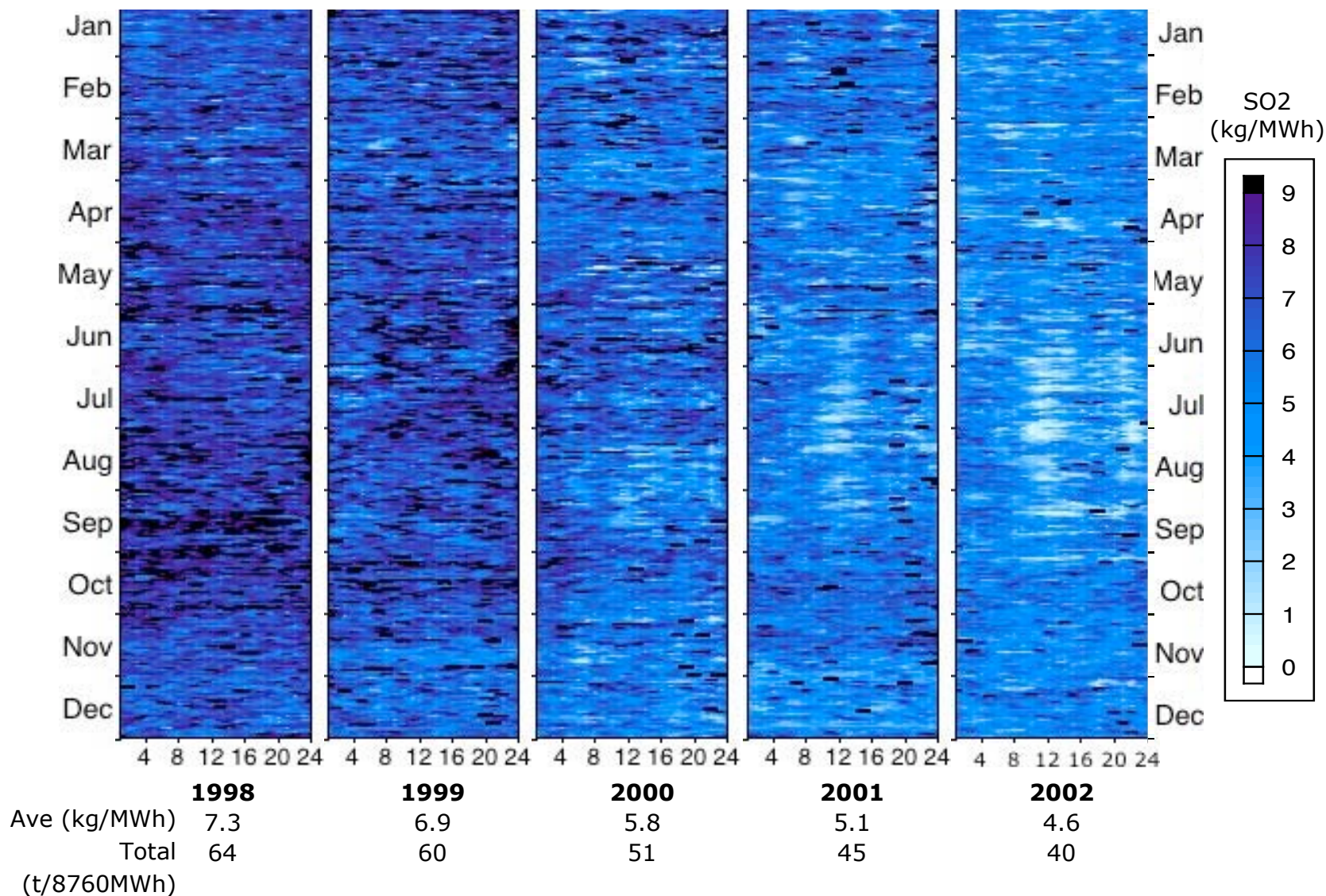
SO2 Load Shape Following Emission Rate Profiles – 1998 through 2002  
 SRVC (Virginia/Carolinas) – (365 days x 24 hours)



**Figure BIIIa - 6. SRVC-SO2 Load Shape Following Emission Rate Profiles**

Contour plots show SO2 emissions (kg) from 1MWh of load shape following generation in each hour in SRVC (Virginia/Carolinas) for the years 1998 through 2002. Total emissions from 1MWh generated in each hour of the year (8760 MWh) and average yearly emission rates are shown below the profiles.

SO2 Load Shape Following Emission Rate Profiles – 1998 through 2002  
SRTV (Tennessee Valley) – (365 days x 24 hours)

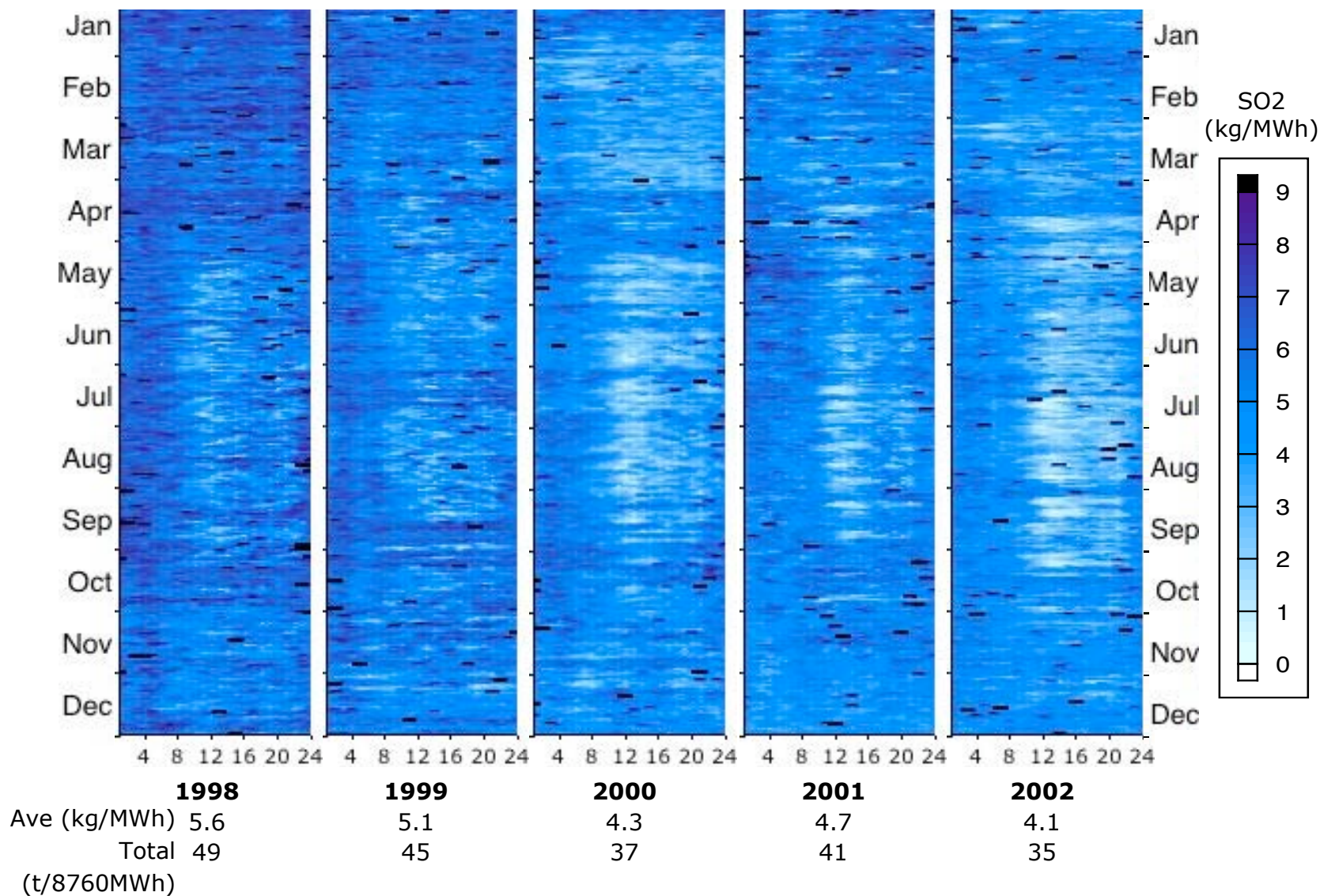


**Figure BIIIa - 7. SRTV-SO2 Load Shape Following Emission Rate Profiles**

Contour plots show SO2 emissions (kg) from 1MWh of load shape following generation in each hour in SRTV (Tennessee Valley) for the years 1998 through 2002. Total emissions from 1MWh generated in each hour of the year (8760 MWh) and average yearly emission rates are shown below the profiles.



SO2 Load Shape Following Emission Rate Profiles – 1998 through 2002  
 SRSO (Southeast) – (365 days x 24 hours)

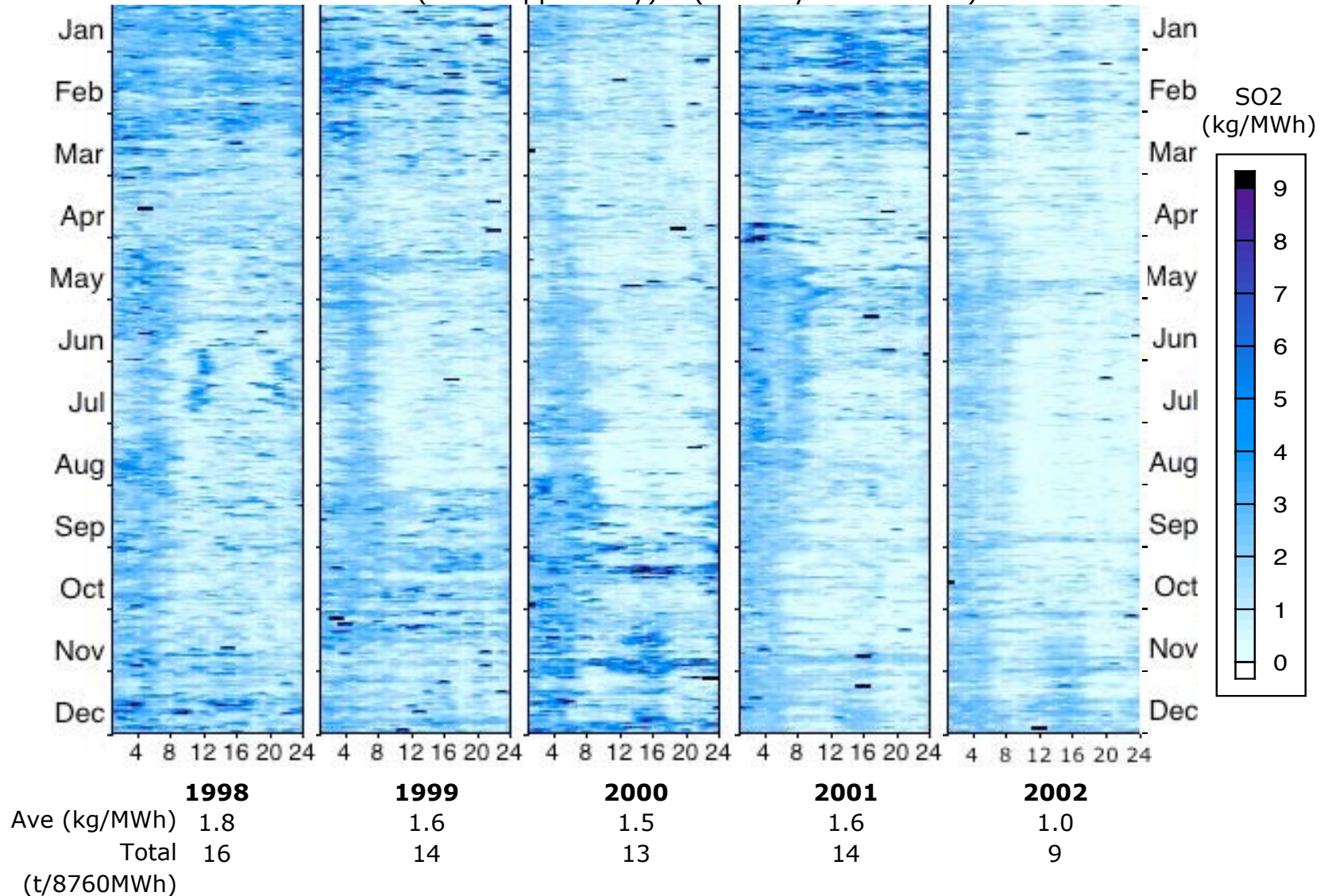


**Figure BIIIa - 8. SRSO-SO2 Load Shape Following Emission Rate Profiles**

Contour plots show SO2 emissions (kg) from 1MWh of load shape following generation in each hour in SRSO (Southeast) for the years 1998 through 2002. Total emissions from 1MWh generated in each hour of the year (8760 MWh) and average yearly emission rates are shown below the profiles.



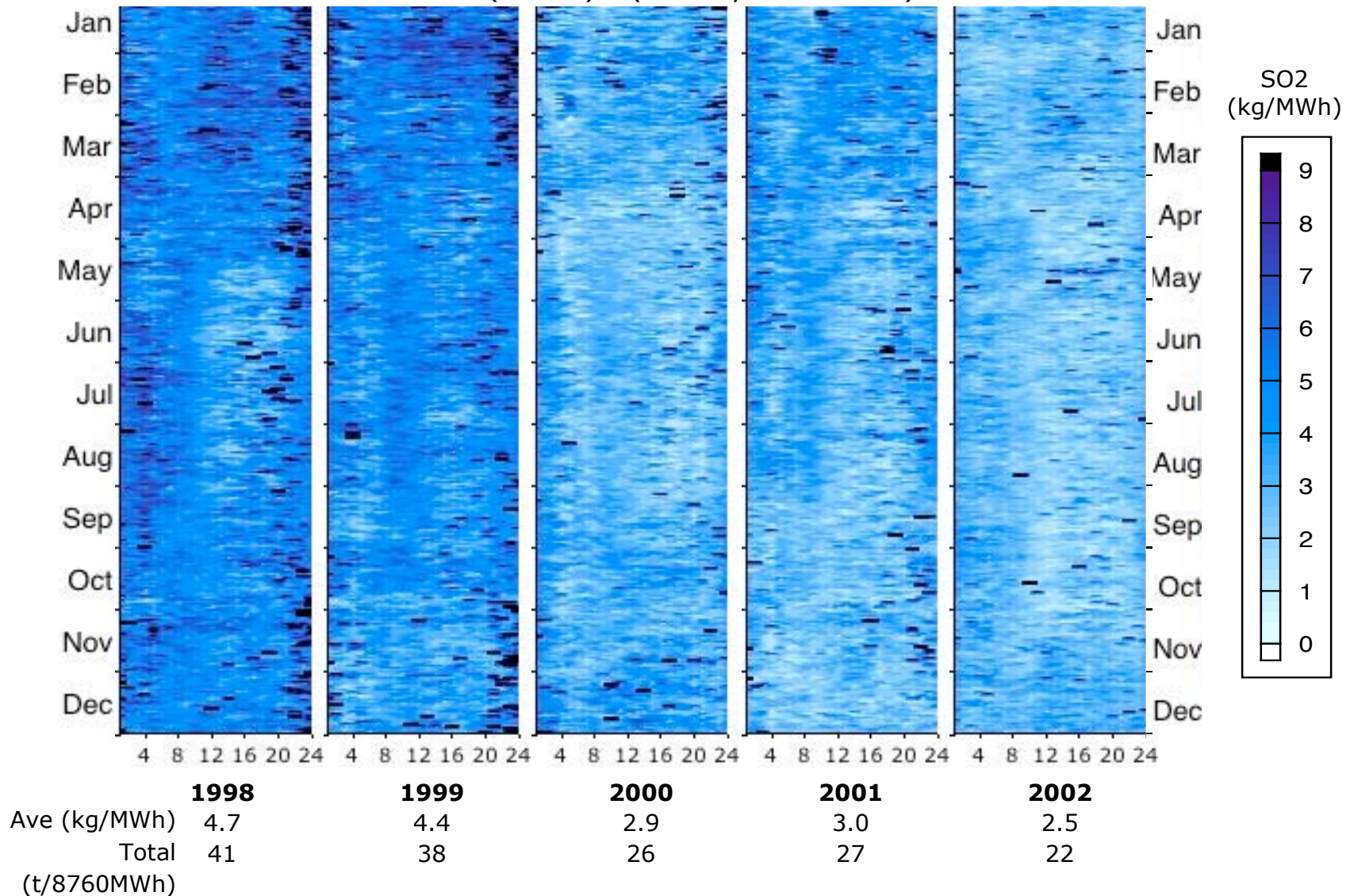
SO2 Load Shape Following Emission Rate Profiles – 1998 through 2002  
SRMV (Mississippi Valley) – (365 days x 24 hours)



**Figure BIIIa - 9. SRMV-SO2 Load Shape Following Emission Rate Profiles**

Contour plots show SO2 emissions (kg) from 1MWh of load shape following generation in each hour in SRMV (Mississippi Valley) for the years 1998 through 2002. Total emissions from 1MWh generated in each hour of the year (8760 MWh) and average yearly emission rates are shown below the profiles.

SO2 Load Shape Following Emission Rate Profiles – 1998 through 2002  
FRCC (Florida) – (365 days x 24 hours)

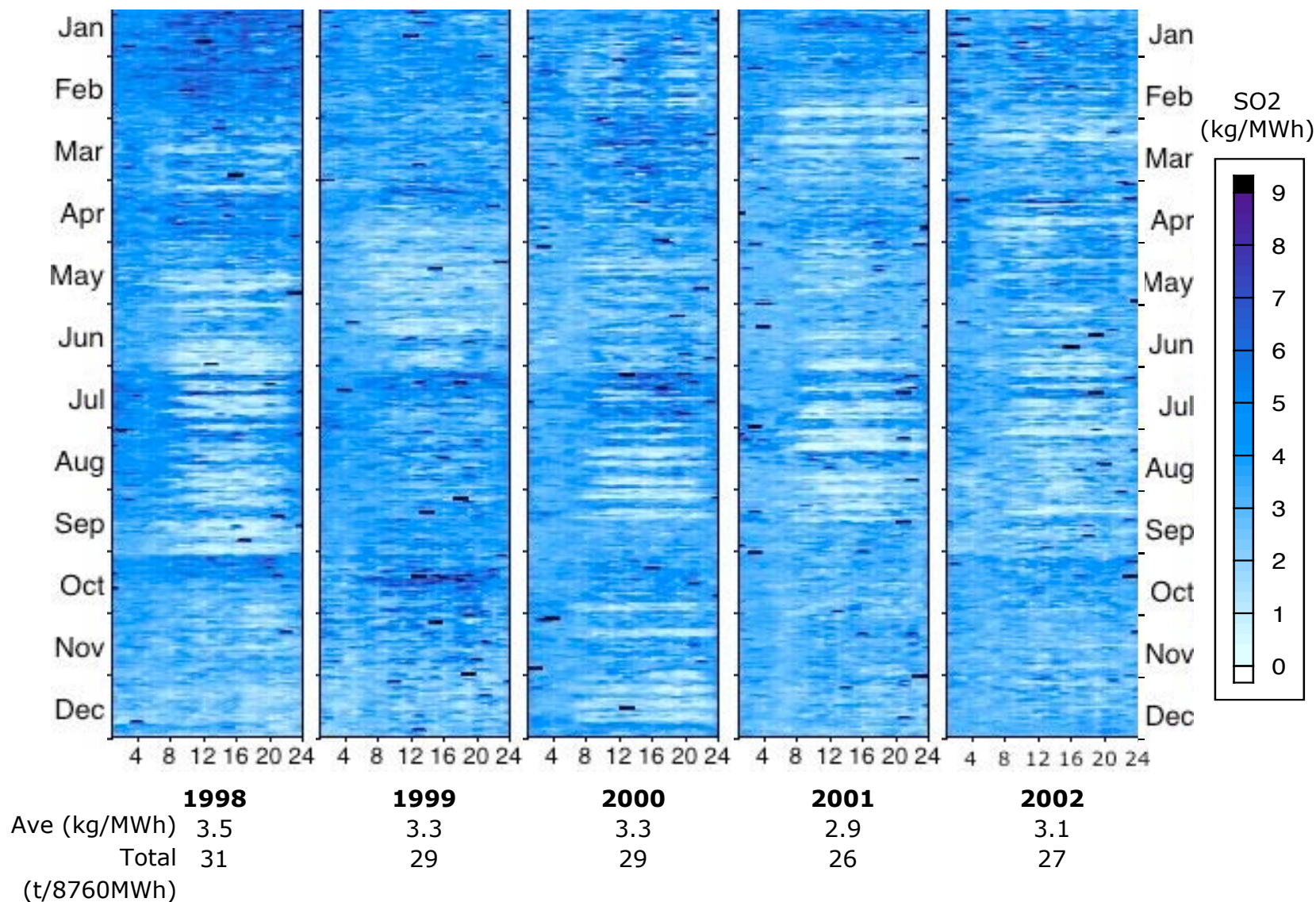


**Figure BIIIa - 10. FRCC-SO2 Load Shape Following Emission Rate Profiles**

Contour plots show SO2 emissions (kg) from 1MWh of load shape following generation in each hour in FRCC (Florida) for the years 1998 through 2002. Total emissions from 1MWh generated in each hour of the year (8760 MWh) and average yearly emission rates are shown below the profiles.



SO2 Load Shape Following Emission Rate Profiles – 1998 through 2002  
MANN (Wisconsin) – (365 days x 24 hours)

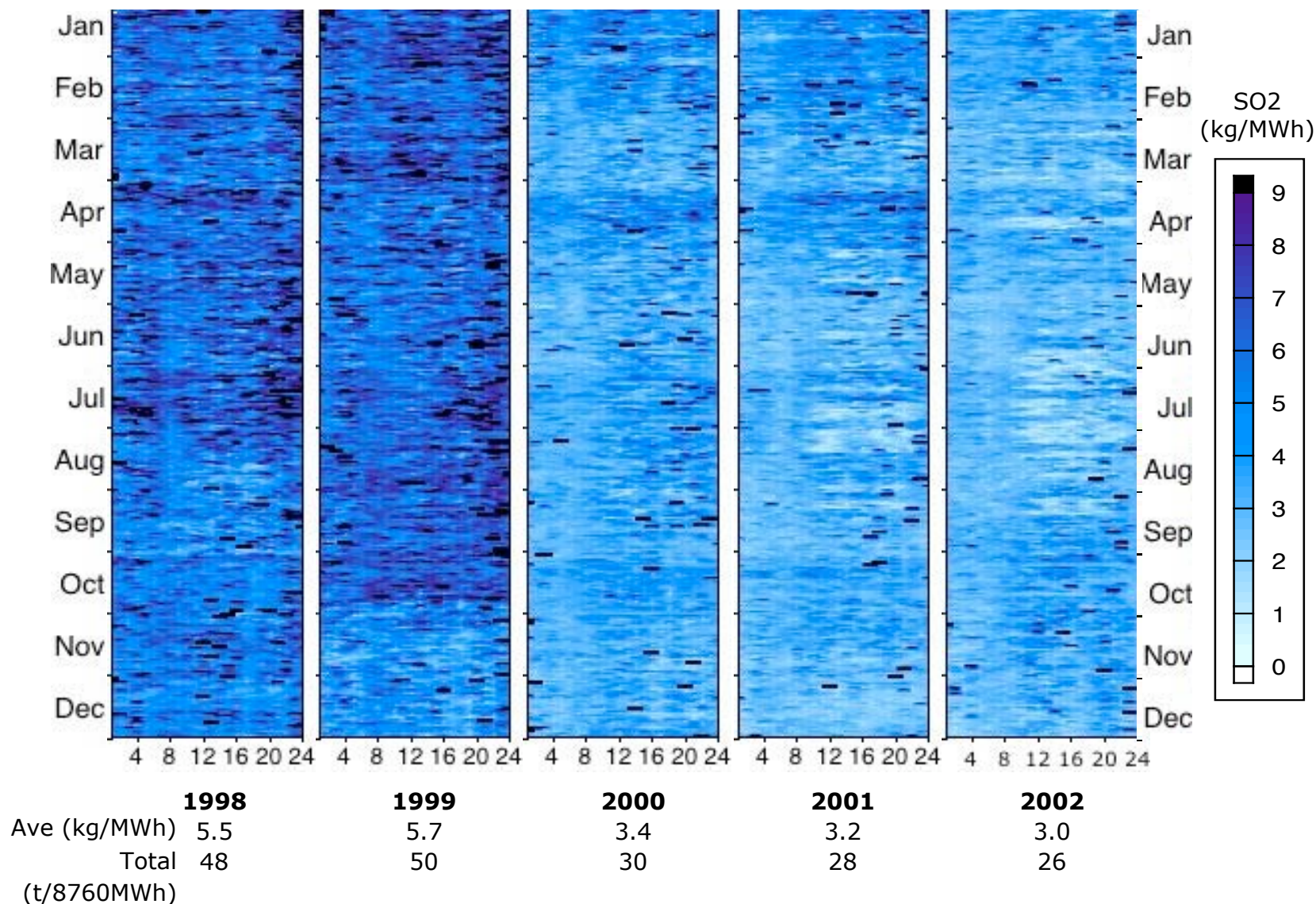


**Figure BIIIa - 11. MANN-SO2 Load Shape Following Emission Rate Profiles**

Contour plots show SO2 emissions (kg) from 1MWh of load shape following generation in each hour in MANN (Wisconsin) for the years 1998 through 2002. Total emissions from 1MWh generated in each hour of the year (8760 MWh) and average yearly emission rates are shown below the profiles.



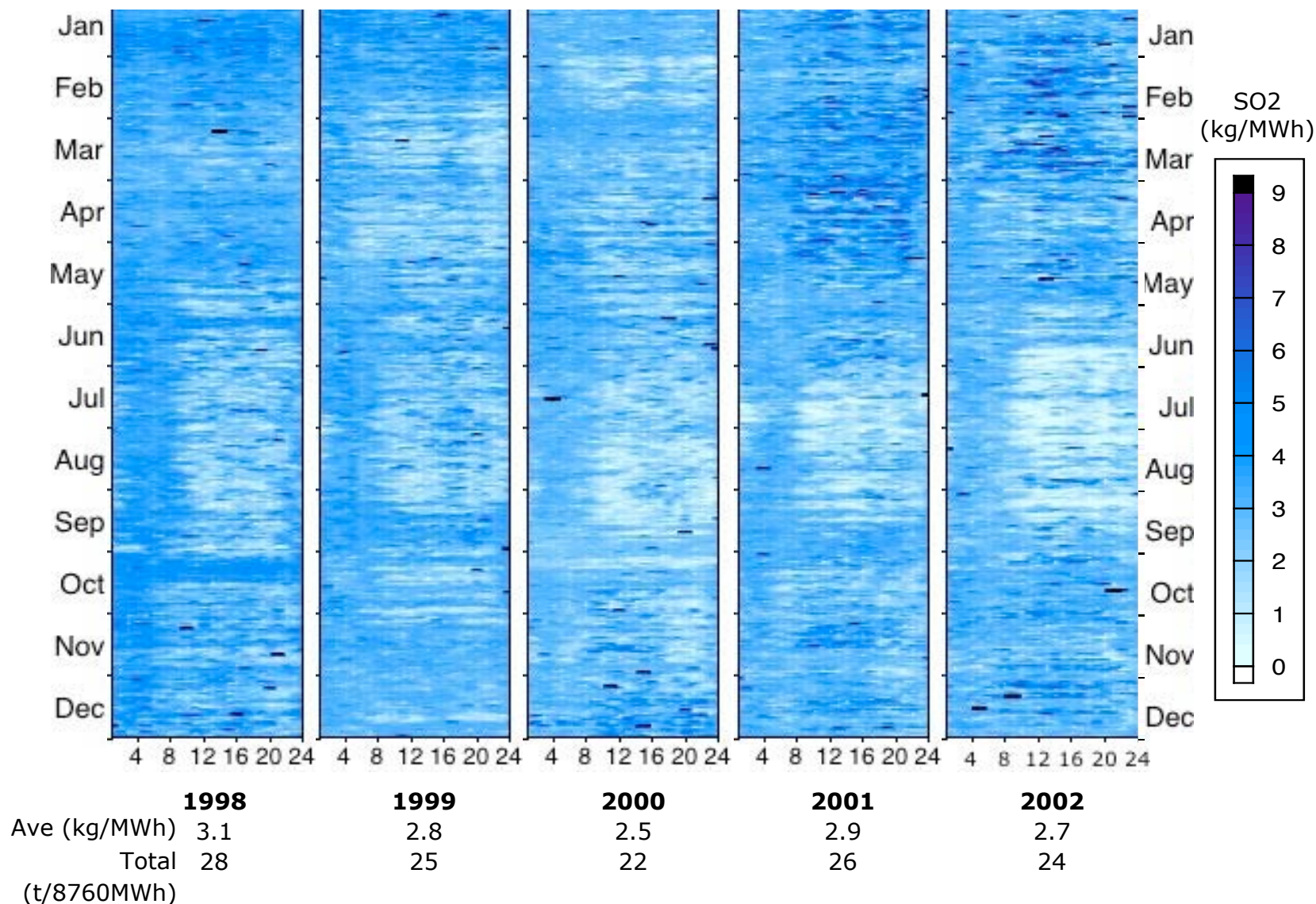
SO2 Load Shape Following Emission Rate Profiles – 1998 through 2002  
MANS (Illinois) – (365 days x 24 hours)



**Figure BIIIa - 12. MANS-SO2 Load Shape Following Emission Rate Profiles**

Contour plots show SO2 emissions (kg) from 1MWh of load shape following generation in each hour in MANS (Illinois) for the years 1998 through 2002. Total emissions from 1MWh generated in each hour of the year (8760 MWh) and average yearly emission rates are shown below the profiles.

SO2 Load Shape Following Emission Rate Profiles – 1998 through 2002  
 SPNO (Kansas) – (365 days x 24 hours)

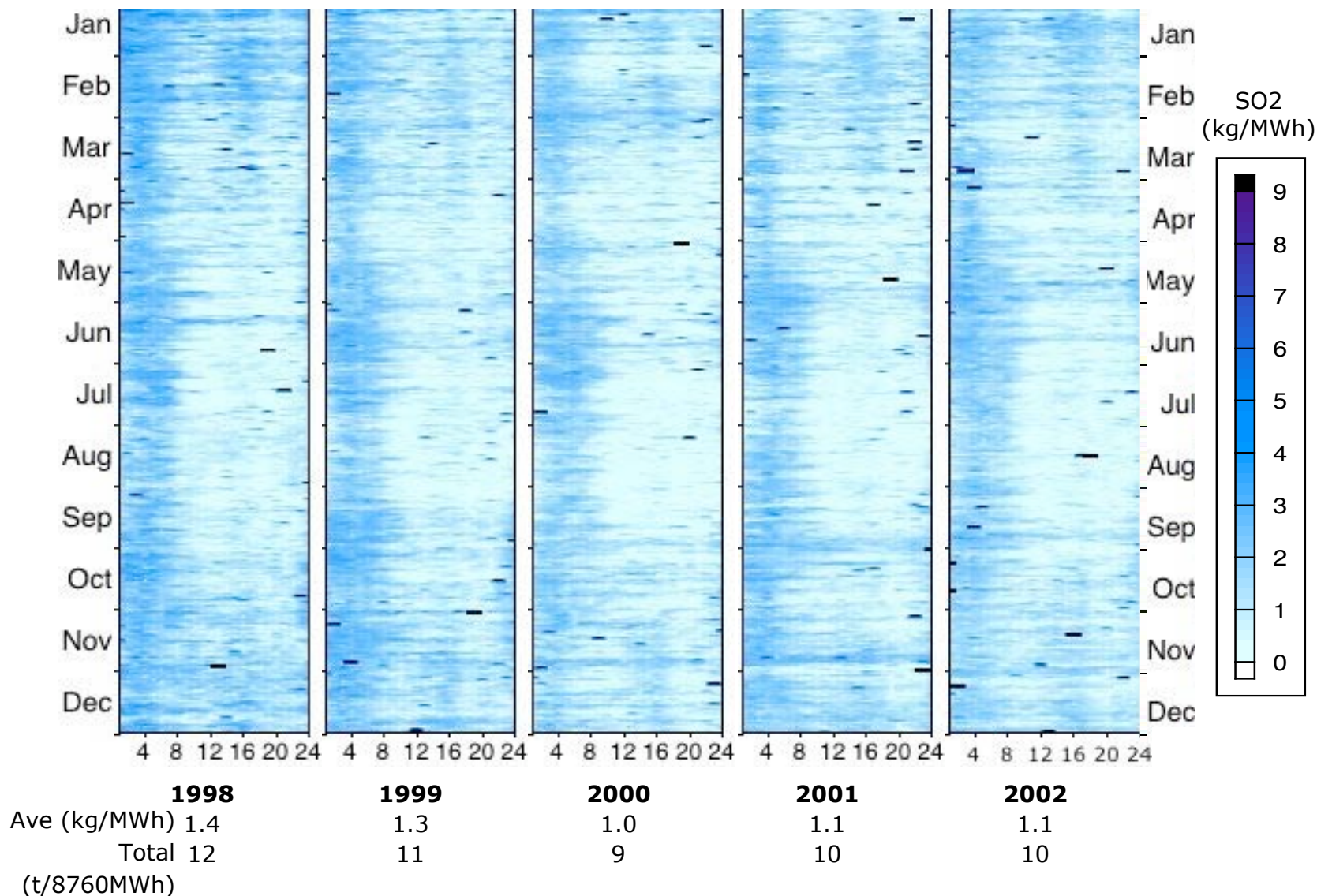


**Figure BIIIa - 13. SPNO–SO2 Load Shape Following Emission Rate Profiles**

Contour plots show SO2 emissions (kg) from 1MWh of load shape following generation in each hour in SPNO (Kansas) for the years 1998 through 2002. Total emissions from 1MWh generated in each hour of the year (8760 MWh) and average yearly emission rates are shown below the profiles.



SO2 Load Shape Following Emission Rate Profiles – 1998 through 2002  
 SPSO (Oklahoma) – (365 days x 24 hours)

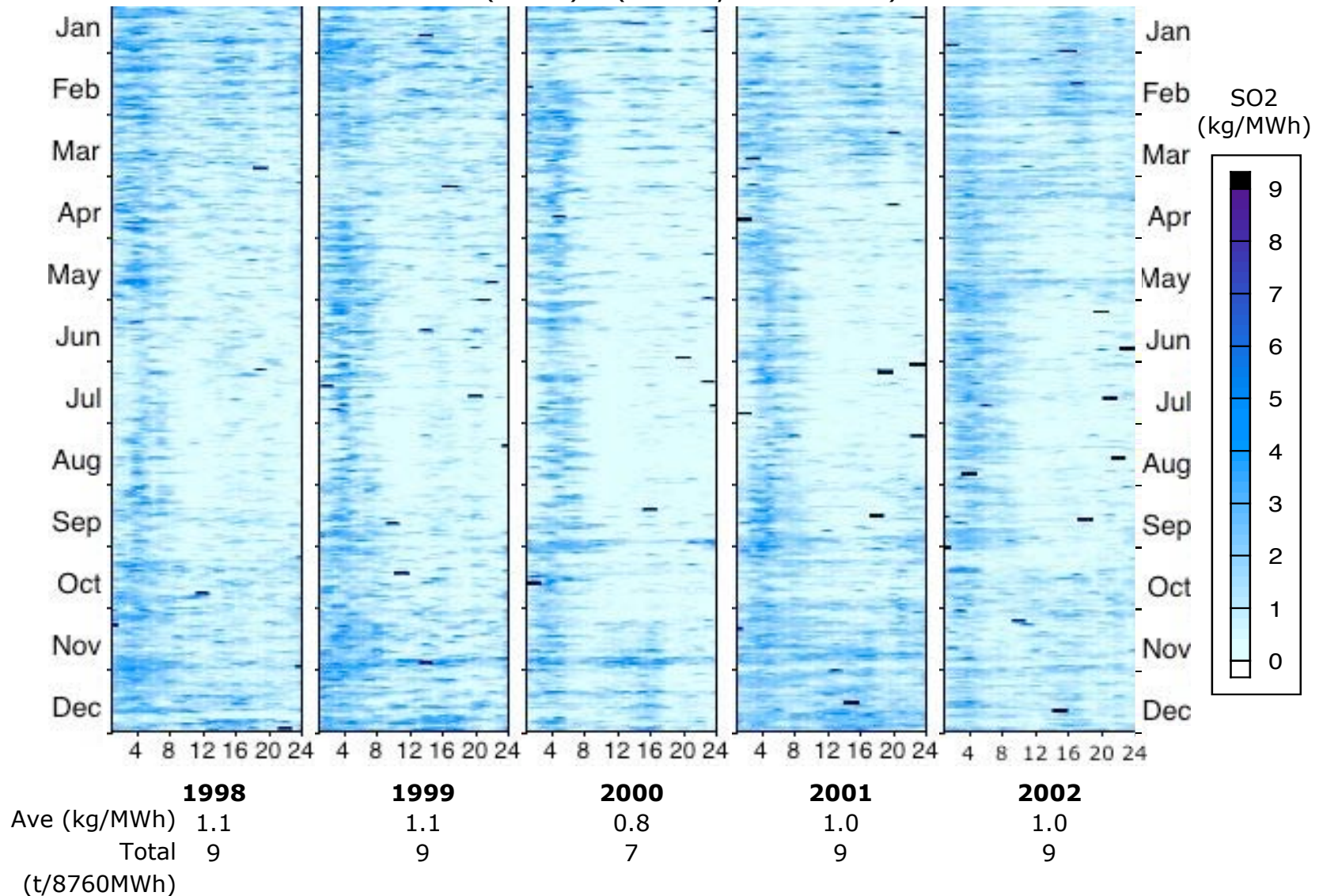


**Figure BIIIa - 14. SPSO–SO2 Load Shape Following Emission Rate Profiles**

Contour plots show SO2 emissions (kg) from 1MWh of load shape following generation in each hour in SPSO (Oklahoma) for the years 1998 through 2002. Total emissions from 1MWh generated in each hour of the year (8760 MWh) and average yearly emission rates are shown below the profiles.



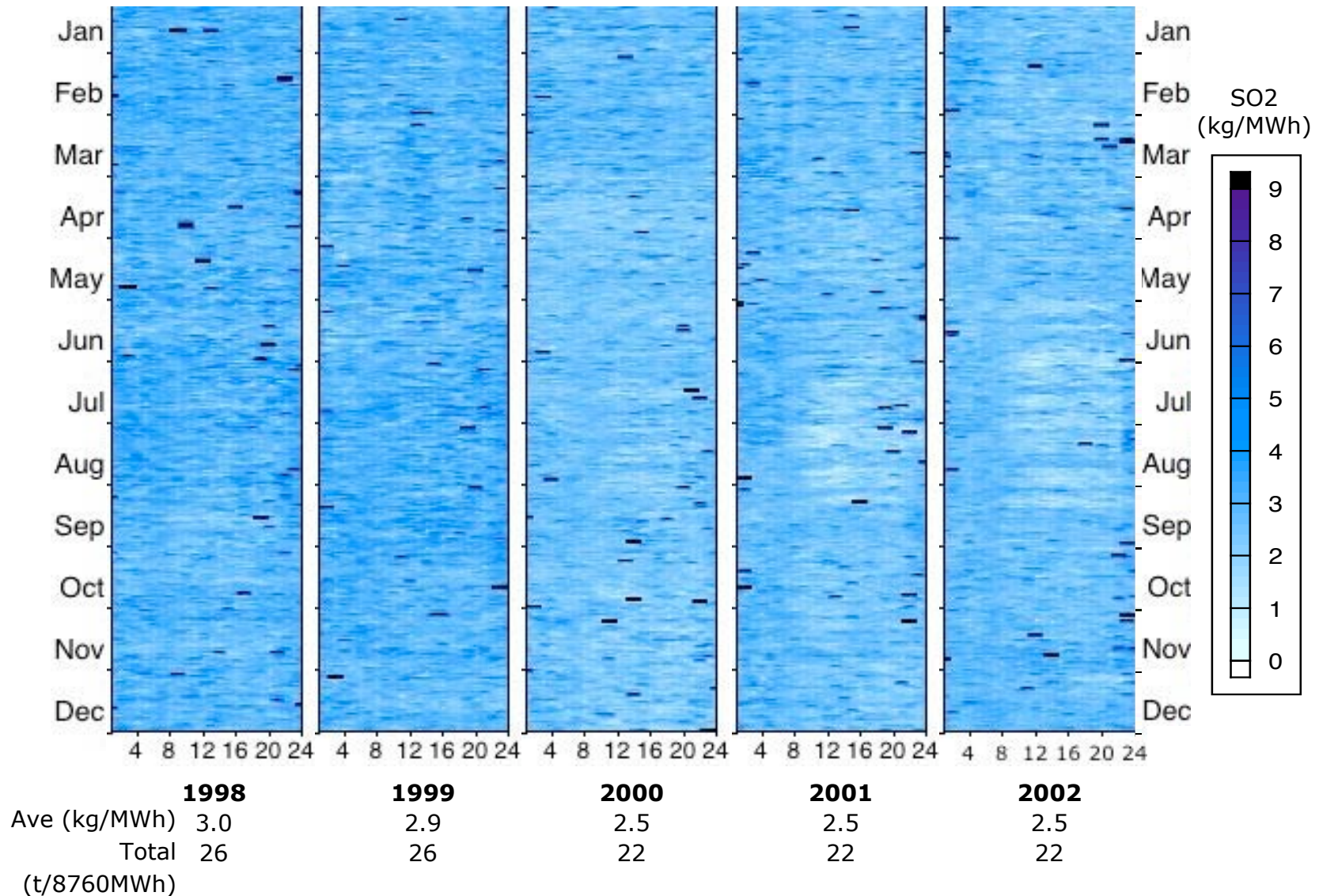
SO2 Load Shape Following Emission Rate Profiles – 1998 through 2002  
ERCT (Texas) – (365 days x 24 hours)



**Figure BIIIa - 15. ERCT-SO2 Load Shape Following Emission Rate Profiles**

Contour plots show SO2 emissions (kg) from 1MWh of load shape following generation in each hour in ERCT (Texas) for the years 1998 through 2002. Total emissions from 1MWh generated in each hour of the year (8760 MWh) and average yearly emission rates are shown below the profiles.

SO2 Load Shape Following Emission Rate Profiles – 1998 through 2002  
MAPP (Northern Plains) – (365 days x 24 hours)

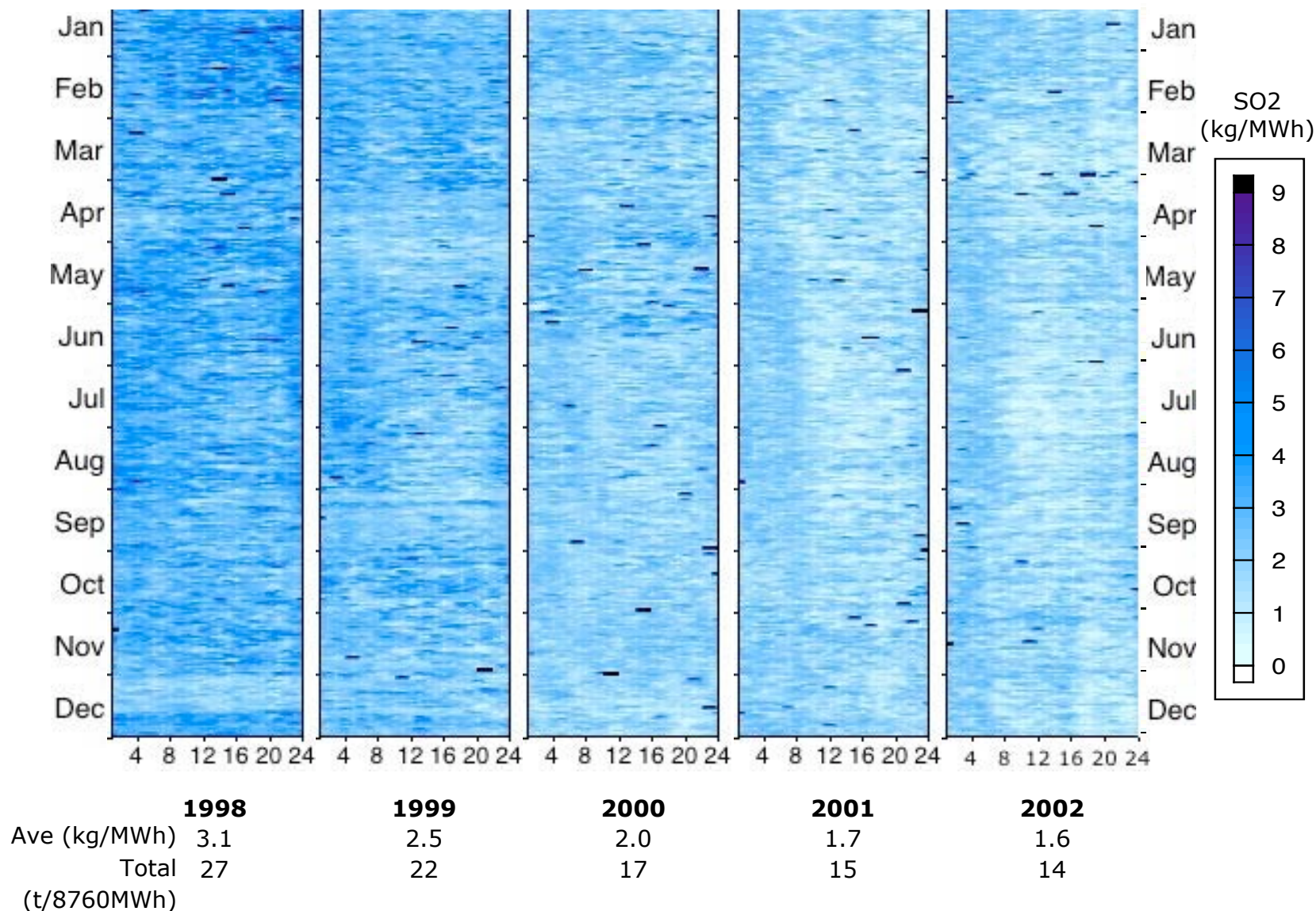


**Figure BIIIa - 16. MAPP-SO2 Load Shape Following Emission Rate Profiles**

Contour plots show SO2 emissions (kg) from 1MWh of load shape following generation in each hour in MAPP (Northern Plains) for the years 1998 through 2002. Total emissions from 1MWh generated in each hour of the year (8760 MWh) and average yearly emission rates are shown below the profiles



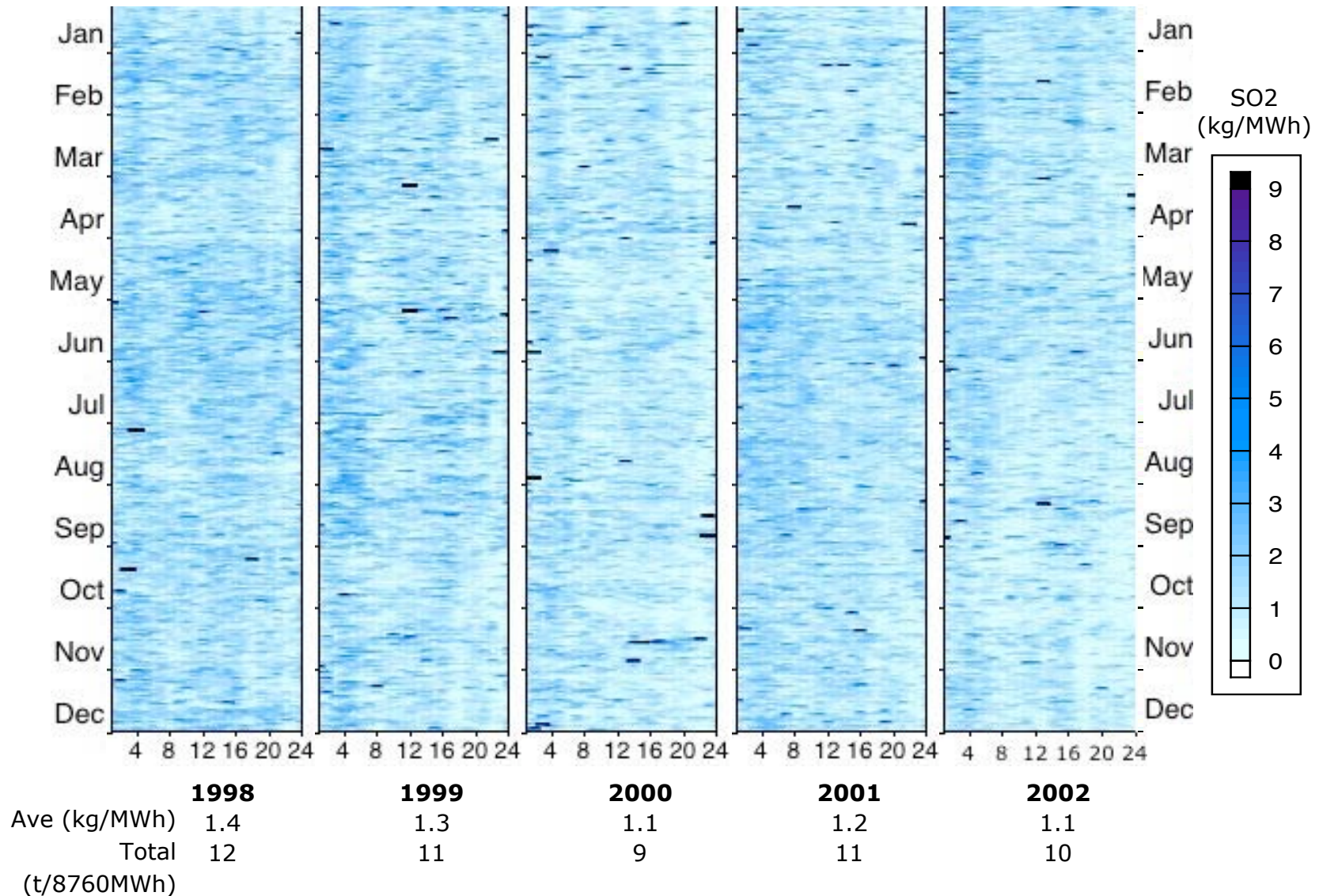
SO2 Load Shape Following Emission Rate Profiles – 1998 through 2002  
 ROCK (Colorado) – (365 days x 24 hours)



**Figure BIIIa - 17. ROCK-SO2 Load Shape Following Emission Rate Profiles**

Contour plots show SO2 emissions (kg) from 1MWh of load shape following generation in each hour in ROCK (Colorado) for the years 1998 through 2002. Total emissions from 1MWh generated in each hour of the year (8760 MWh) and average yearly emission rates are shown below the profiles.

SO2 Load Shape Following Emission Rate Profiles – 1998 through 2002  
NWGB (Great Basin) – (365 days x 24 hours)

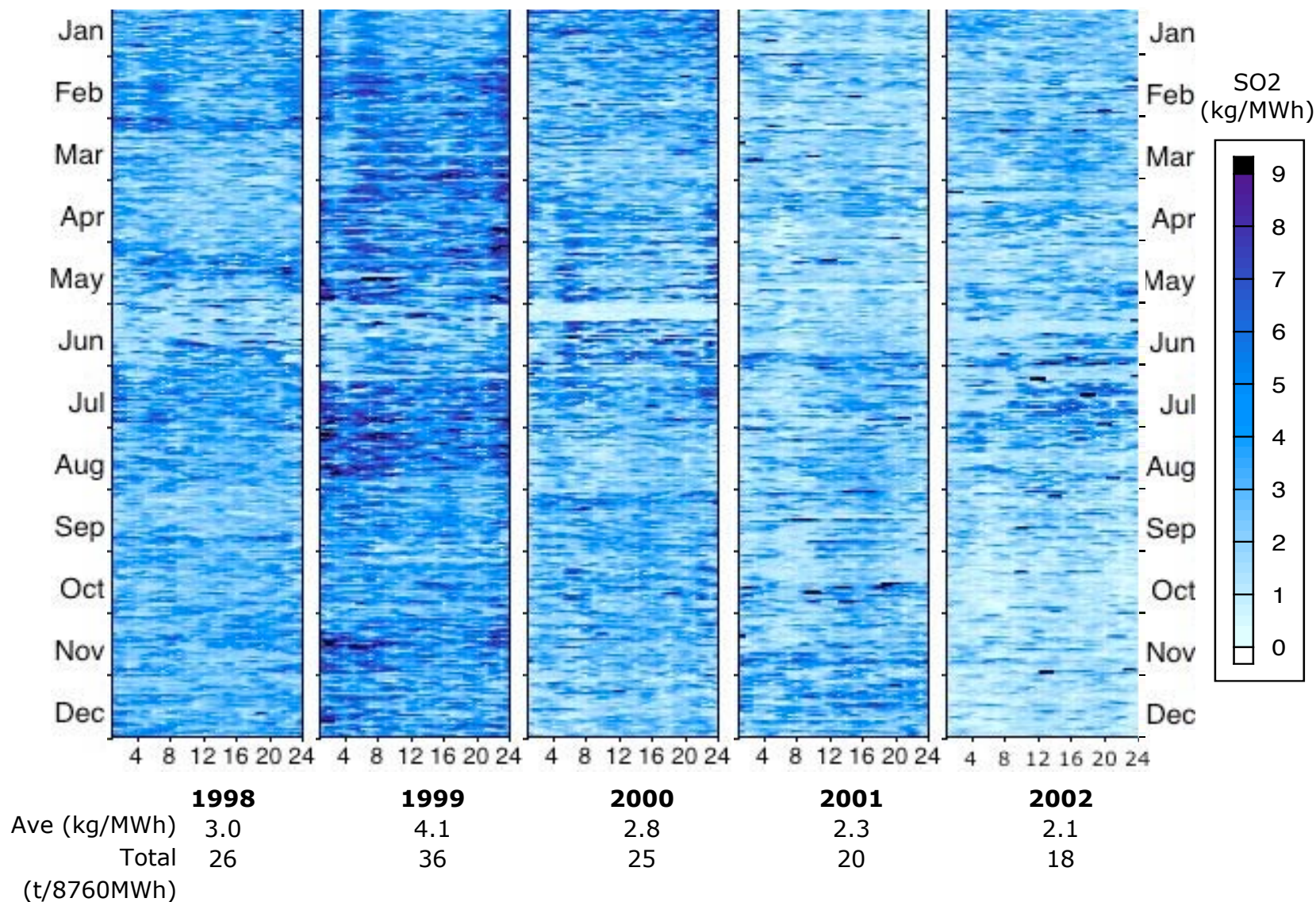


**Figure BIIIa - 18. NWGB-SO2 Load Shape Following Emission Rate Profiles**

Contour plots show SO2 emissions (kg) from 1MWh of load shape following generation in each hour in NWGB (Great Basin) for the years 1998 through 2002. Total emissions from 1MWh generated in each hour of the year (8760 MWh) and average yearly emission rates are shown below the profiles.



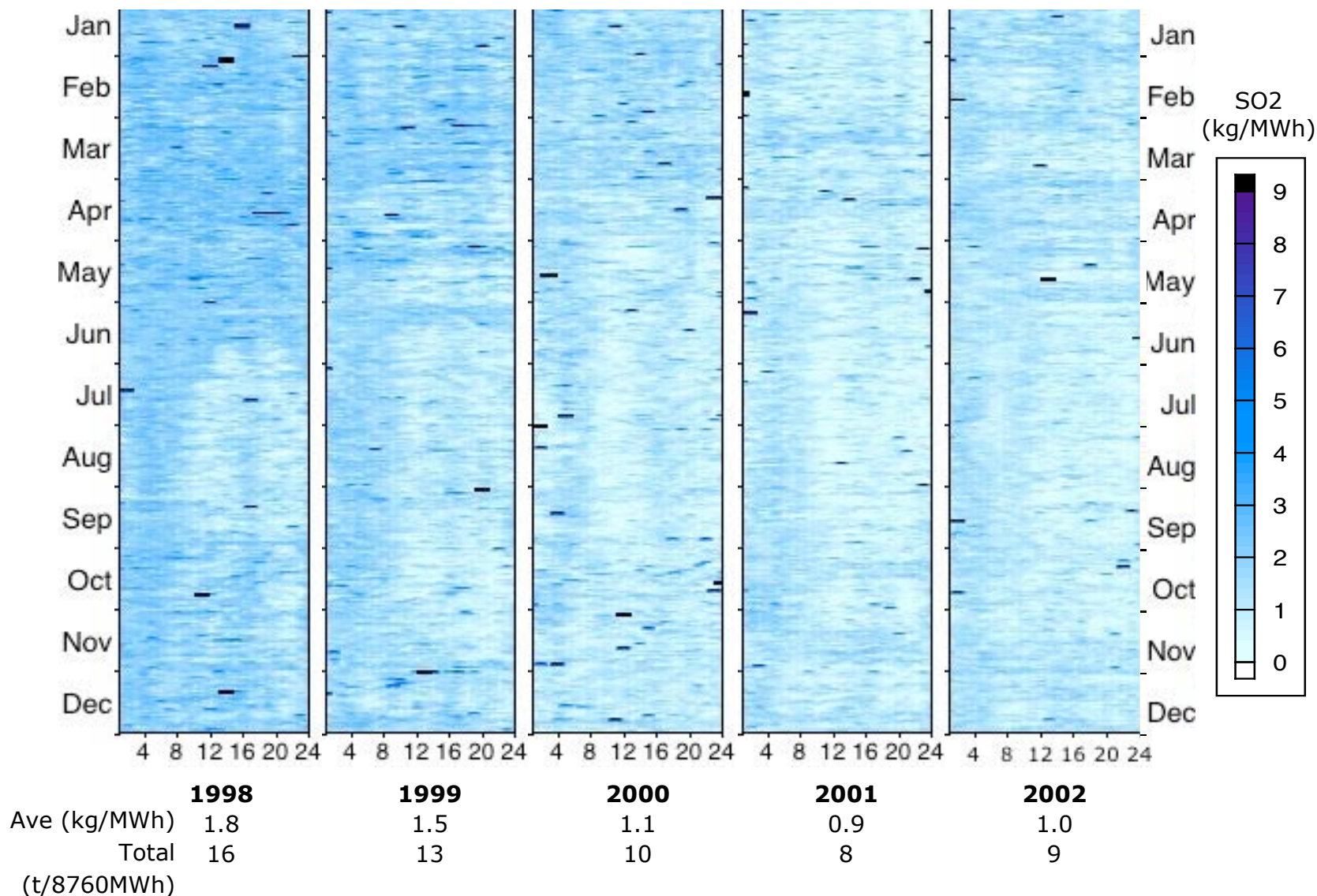
SO2 Load Shape Following Emission Rate Profiles – 1998 through 2002  
 NWPN (Pacific Northwest) – (365 days x 24 hours)



**Figure BIIIa - 19. NWPN-SO2 Load Shape Following Emission Rate Profiles**

Contour plots show SO2 emissions (kg) from 1MWh of load shape following generation in each hour in NWPN (Pacific Northwest) for the years 1998 through 2002. Total emissions from 1MWh generated in each hour of the year (8760 MWh) and average yearly emission rates are shown below the profiles.

SO2 Load Shape Following Emission Rate Profiles – 1998 through 2002  
WSSW (Southwest) – (365 days x 24 hours)

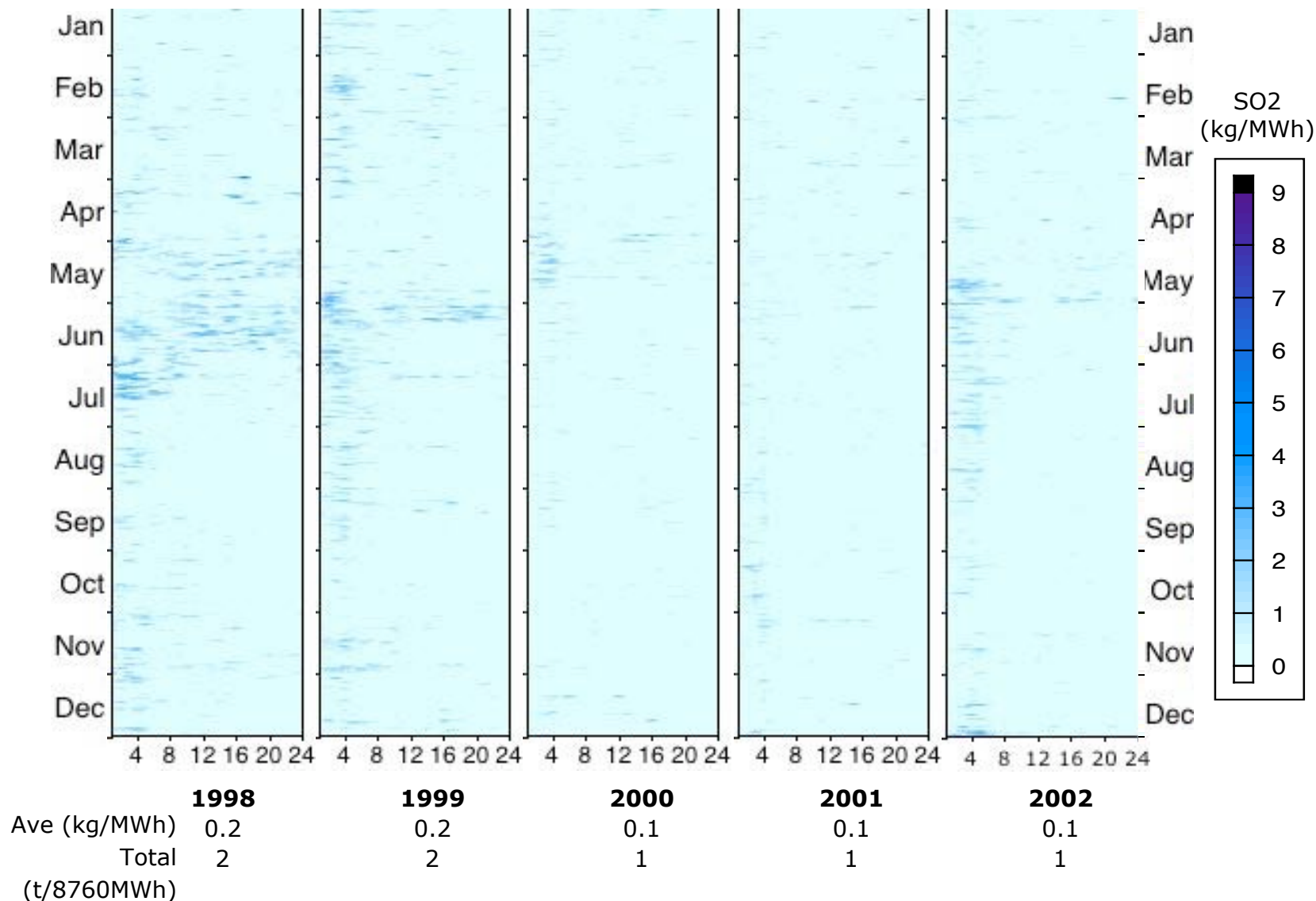


**Figure BIIIa - 20. WSSW-SO2 Load Shape Following Emission Rate Profiles**

Contour plots show SO2 emissions (kg) from 1MWh of load shape following generation in each hour in WSSW (Southwest) for the years 1998 through 2002. Total emissions from 1MWh generated in each hour of the year (8760 MWh) and average yearly emission rates are shown below the profiles.



SO2 Load Shape Following Emission Rate Profiles – 1998 through 2002  
 CALI (California) – (365 days x 24 hours)



**Figure BIIIa - 21. CALI-SO2 Load Shape Following Emission Rate Profiles**

Contour plots show SO2 emissions (kg) from 1MWh of load shape following generation in each hour in CALI (California) for the years 1998 through 2002. Total emissions from 1MWh generated in each hour of the year (8760 MWh) and average yearly emission rates are shown below the profiles.