



APPENDIX AVAILABLE ON THE HEI WEB SITE

Research Report 171

Multicity Study of Air Pollution and Mortality in Latin America

Isabelle Romieu et al.

Appendix G. Data Description Time-Series Figures and Tables

Note: Appendices Available on the Web may appear in a different order than in the original Investigators' Report, and some remnants of their original names may be apparent. HEI has not changed the content of these documents, only the letter identifier.*

Appendix G was originally Appendix I
Appendix H was originally Appendix II
Appendix I was originally Appendix III
Appendix J was originally Appendix IV

*Edited tables were moved from the Investigators' Report to Appendix G with the investigators' approval.

Correspondence may be addressed to Dr. Isabelle Romieu, Head, Section of Nutrition and Metabolism, International Agency for Research on Cancer, 150, cours Albert Thomas, F-69372 Lyon Cedex 08, France.

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This document was reviewed by the HEI Health Review Committee but did not undergo the HEI scientific editing and production process.

**Multi-city study of air pollution and health effects in Latin America
ESCALA**

Appendix G

Final report review

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1 Data Description

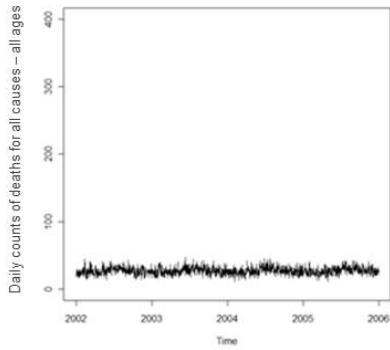
1.1 Mortality Data

ALL SEASONS

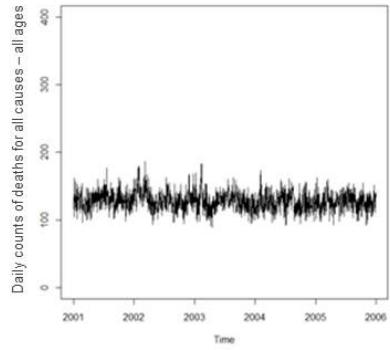
Figure 1. Daily count of deaths due to all causes in all ages by city.

Brazil

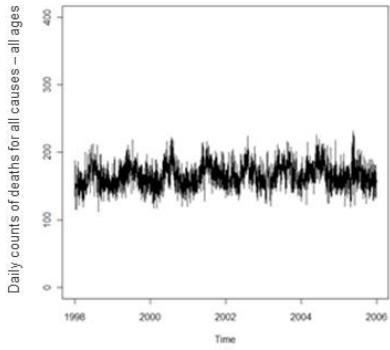
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Rio de Janeiro (2001 – 2006)

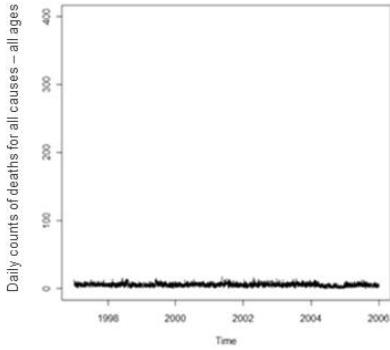


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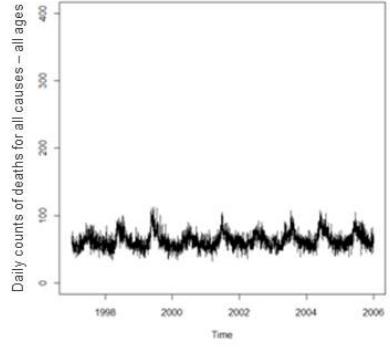


Chile

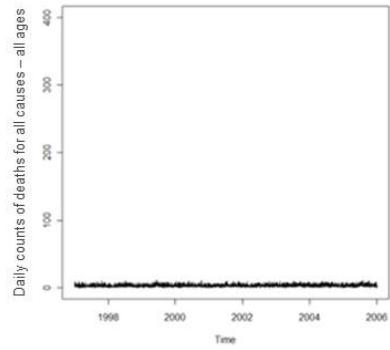
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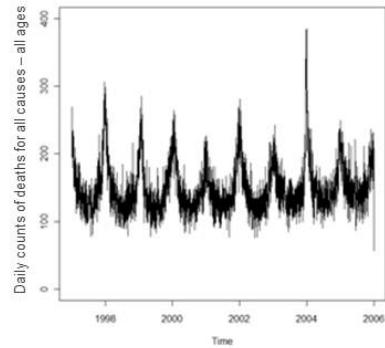


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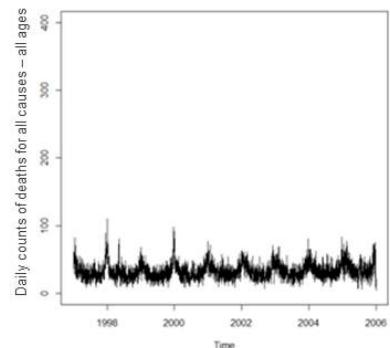


México

Mexico City (1997 – 2005)



Monterrey (1997 – 2005)



Toluca (1997 – 2005)

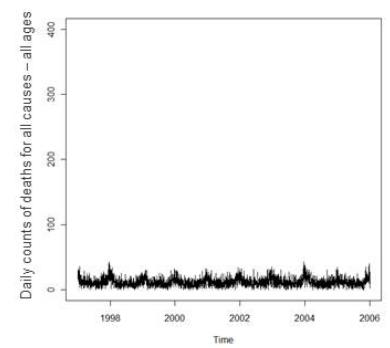
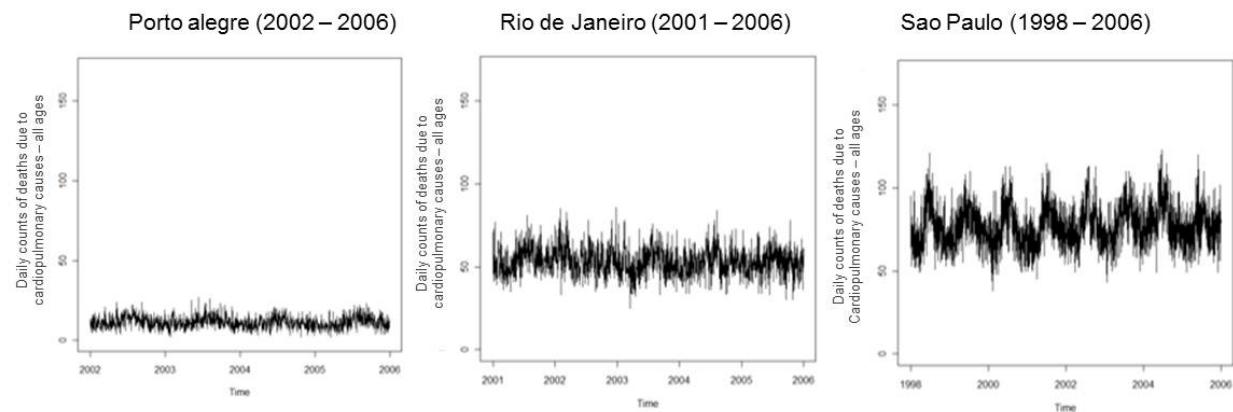
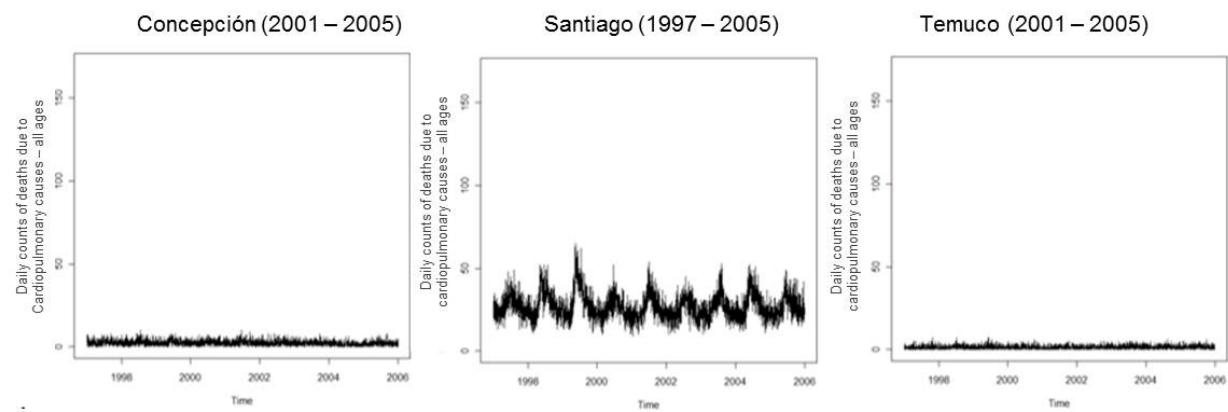


Figure 2. Daily count of deaths due to cardiopulmonary causes in all ages by city.

Brazil



Chile



México

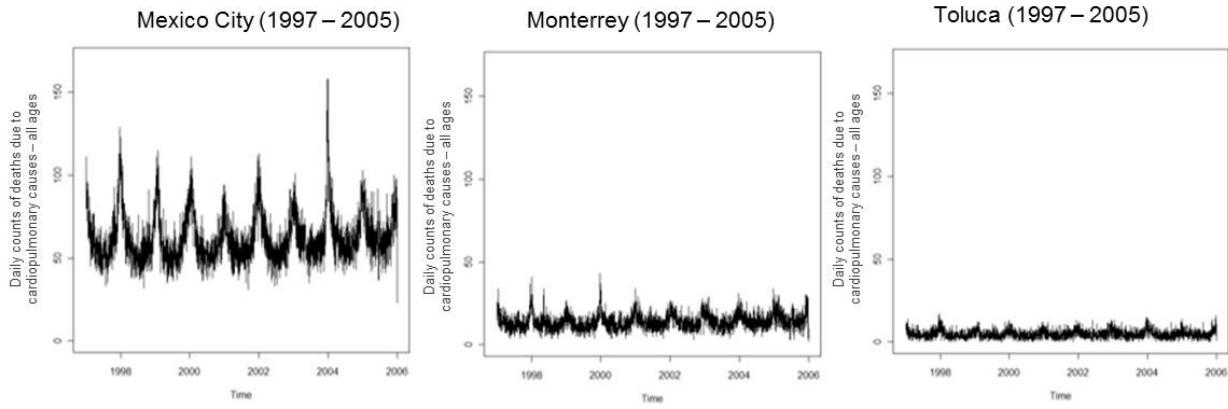


Figure 3. Daily count of deaths due to cardiopulmonary causes in individuals 65 years old and over by city.

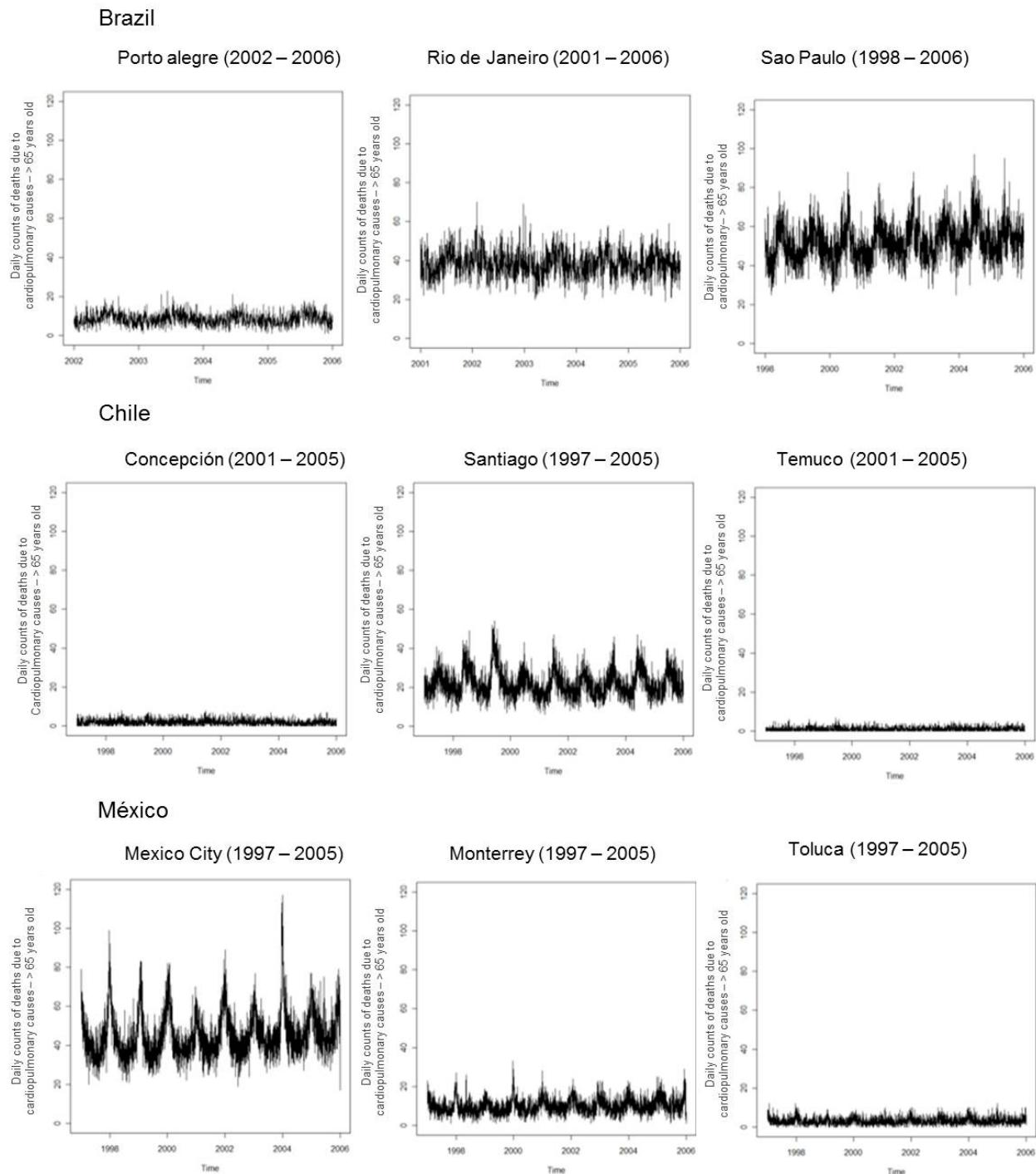
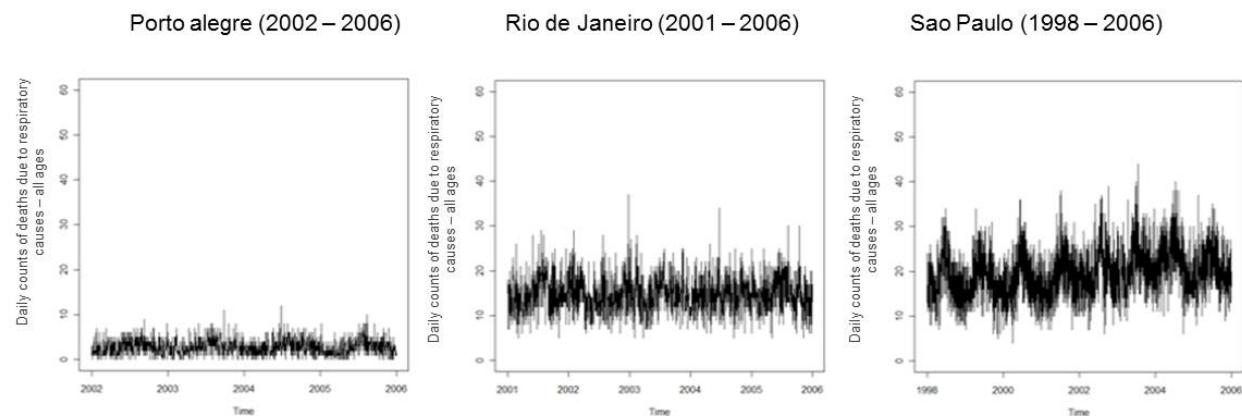
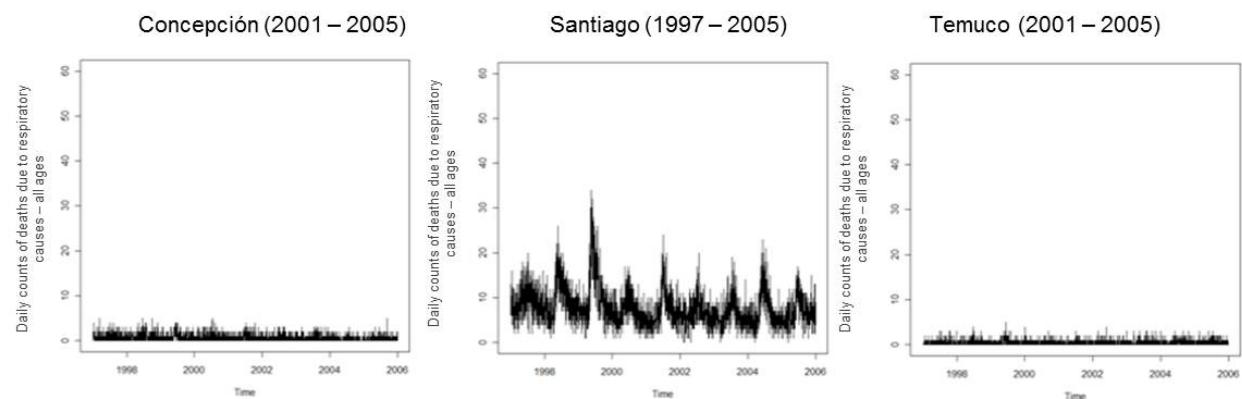


Figure 4. Daily count of deaths due to respiratory causes, all ages by city.

Brazil



Chile



México

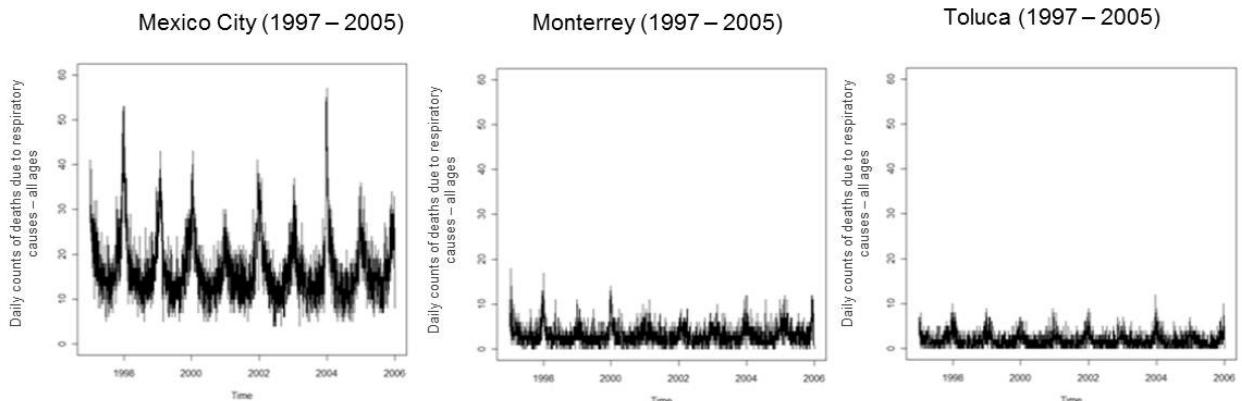
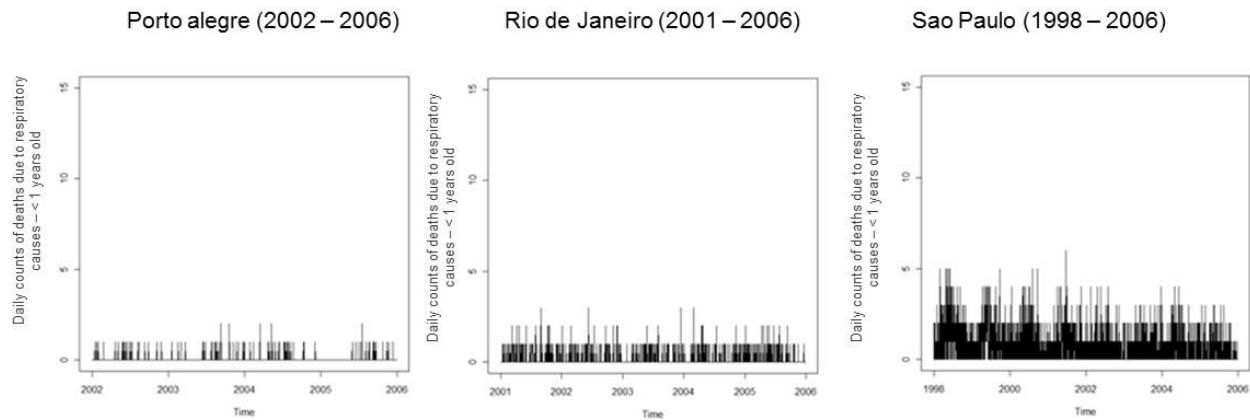
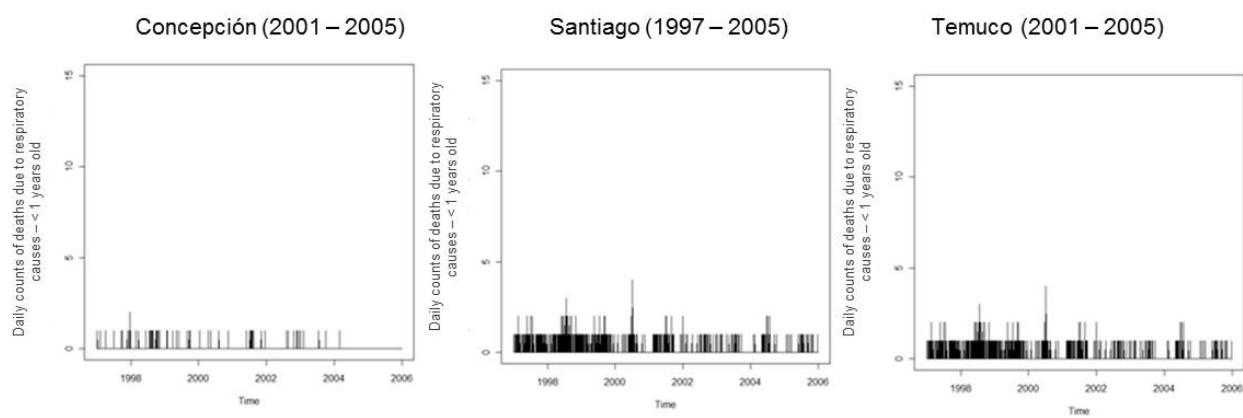


Figure 5. Daily count of deaths due to respiratory causes for infants under 1 year old by city.

Brazil



Chile



México

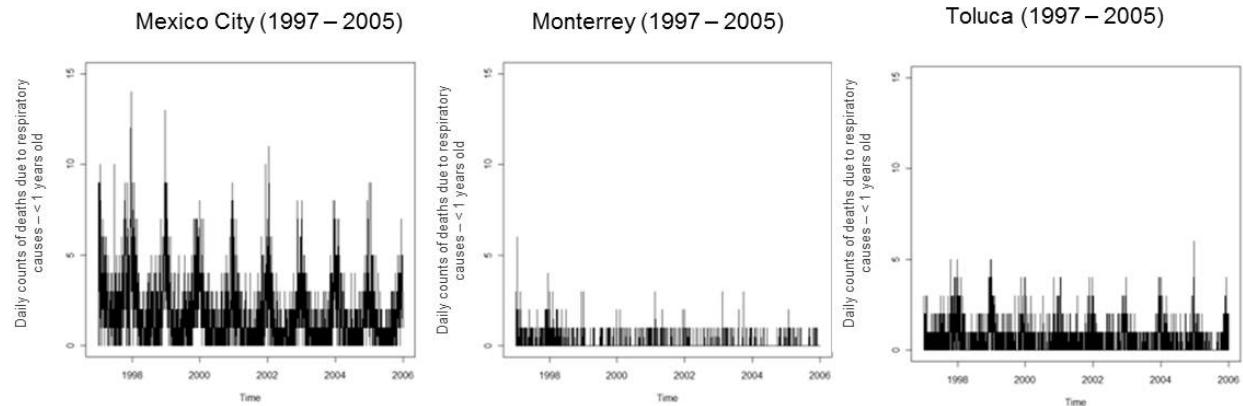


Figure 6. Daily count of deaths due to respiratory causes for children aged 1 to 5 years old by city.

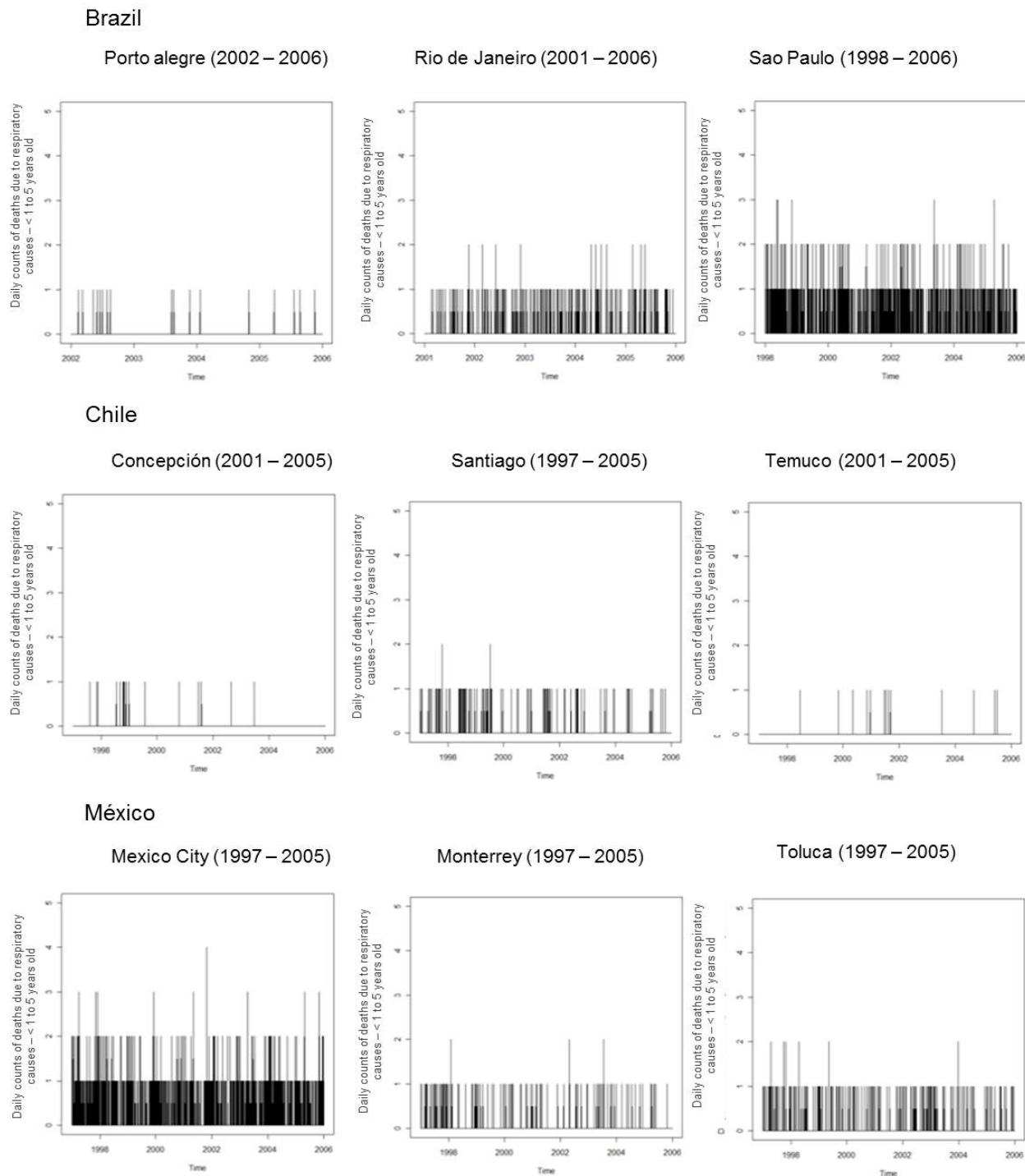


Figure 7. Daily count of deaths due to respiratory causes in individuals 65 years old and over by city.

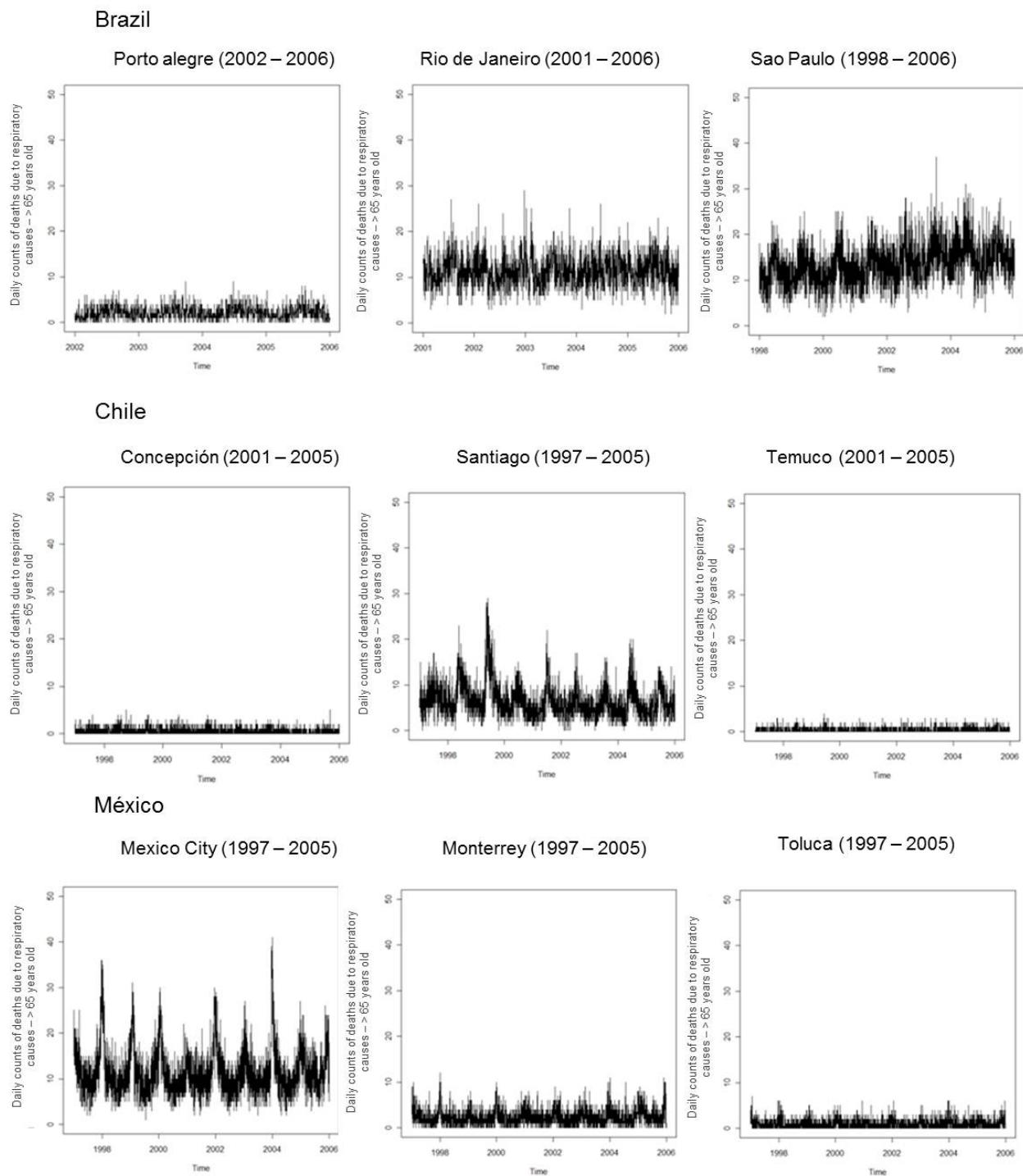


Figure 8. Daily count of deaths due to cardiovascular causes in all ages by city.

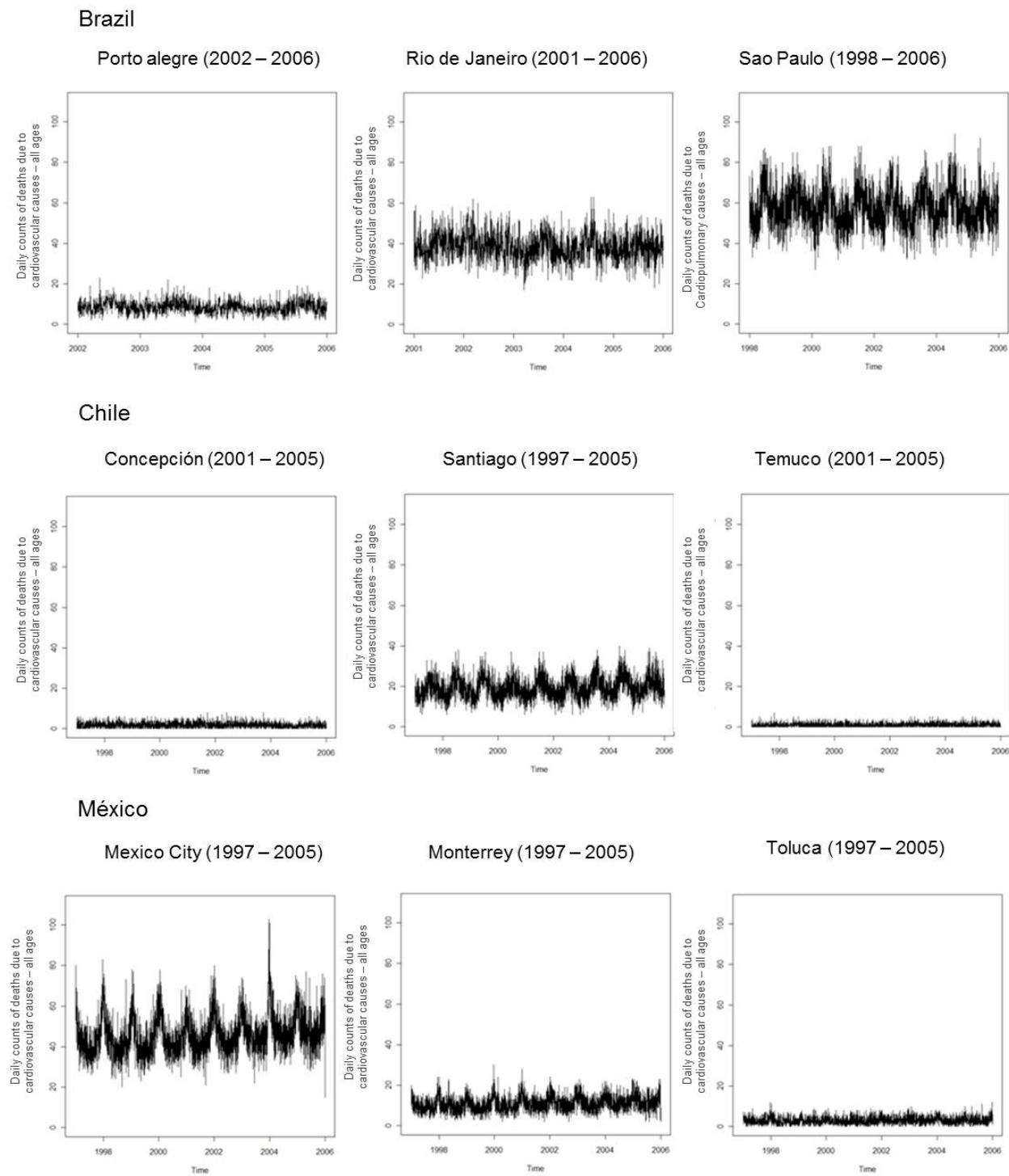


Figure 9. Daily count of deaths due to cardiovascular causes in individuals 65 years old and over by city.

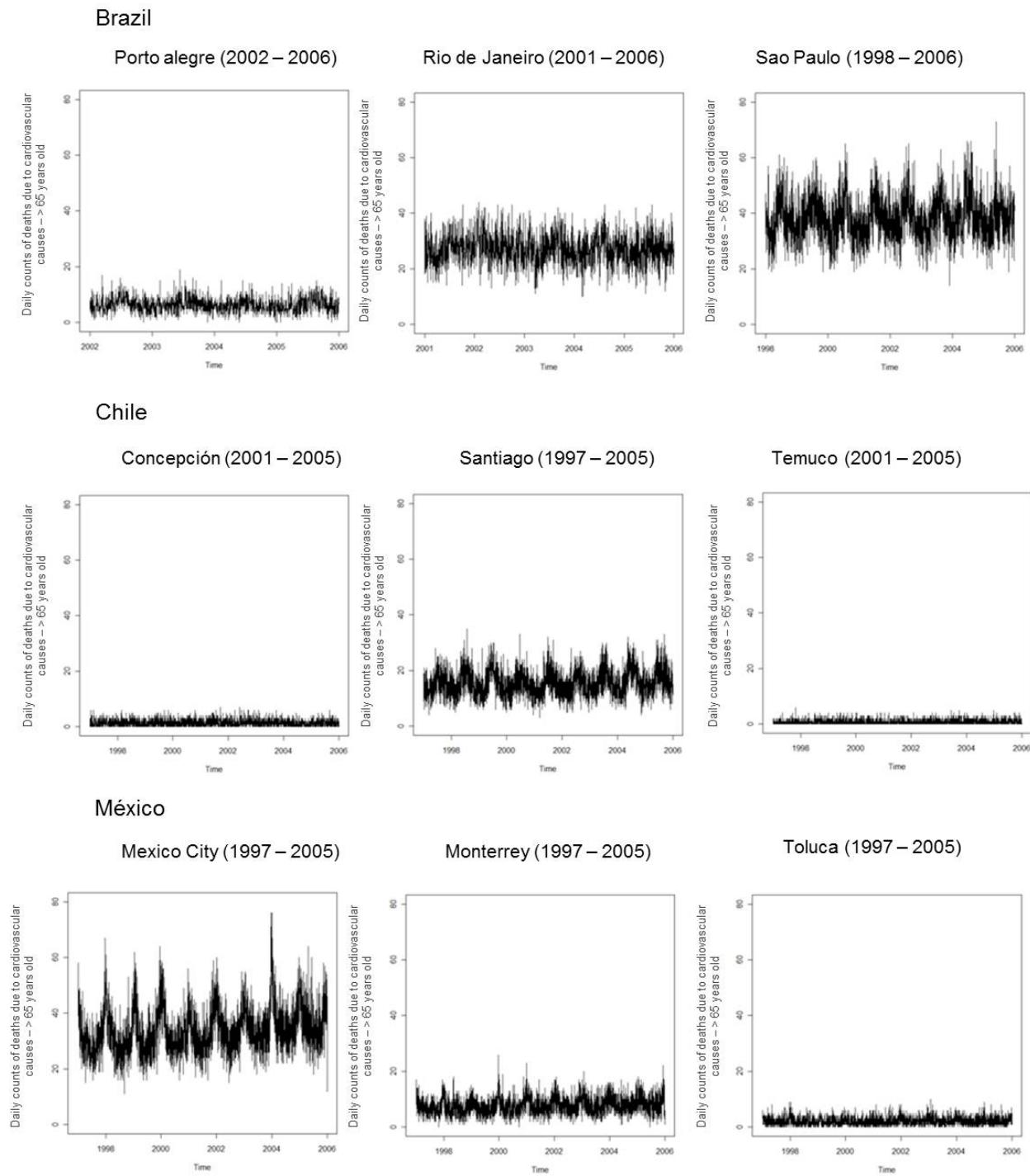


Figure 10. Daily count of deaths due to Cerebrovascular/stroke causes in all ages by city.

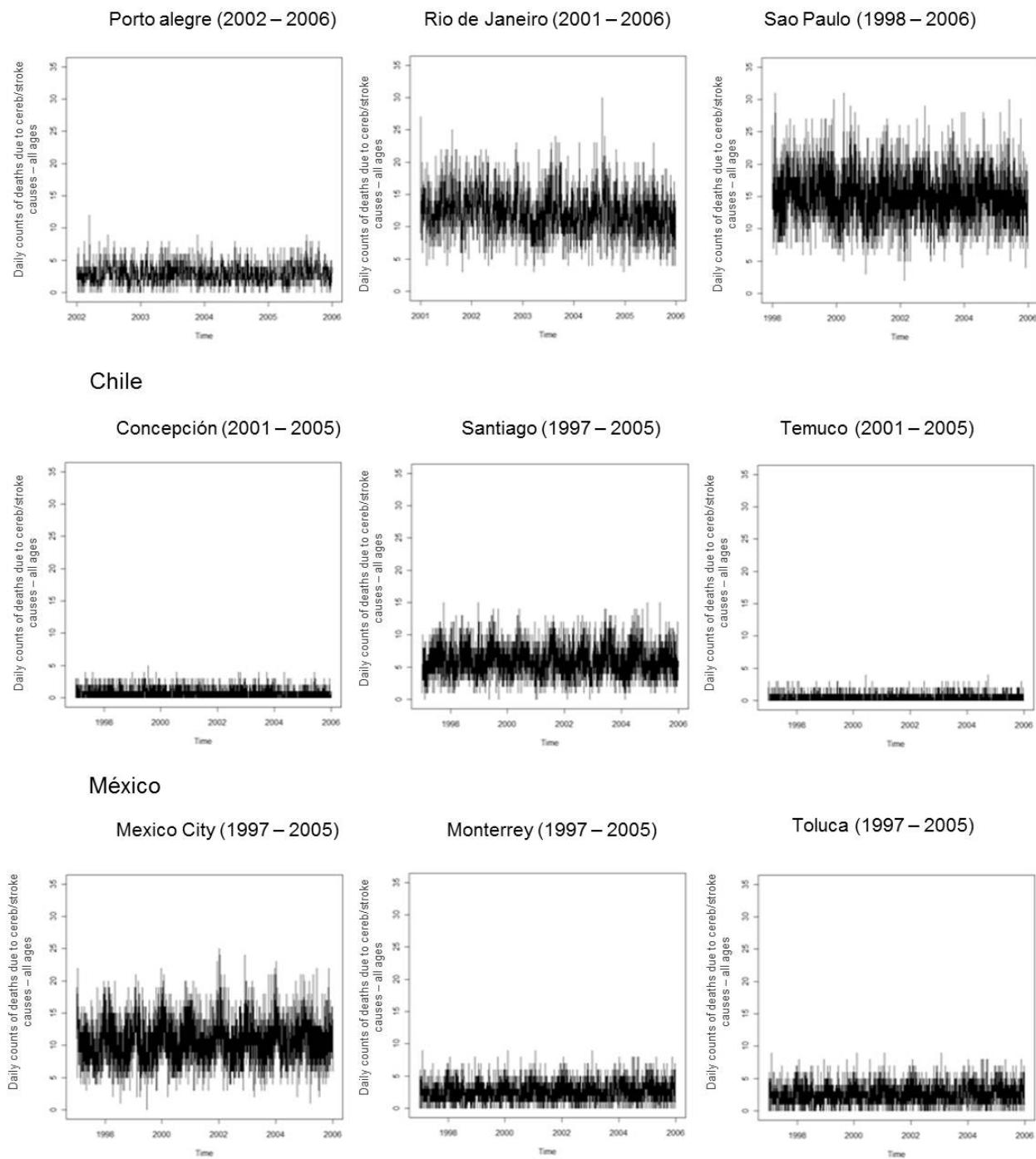
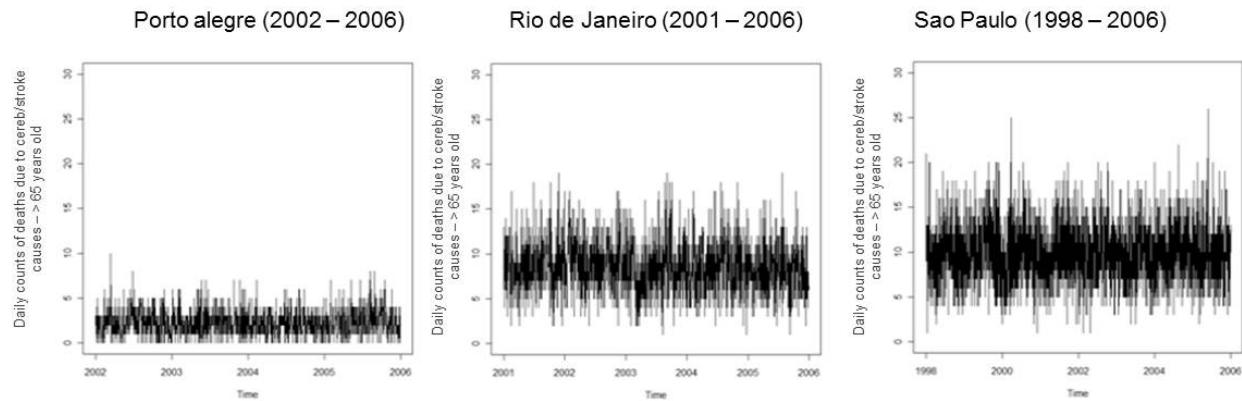
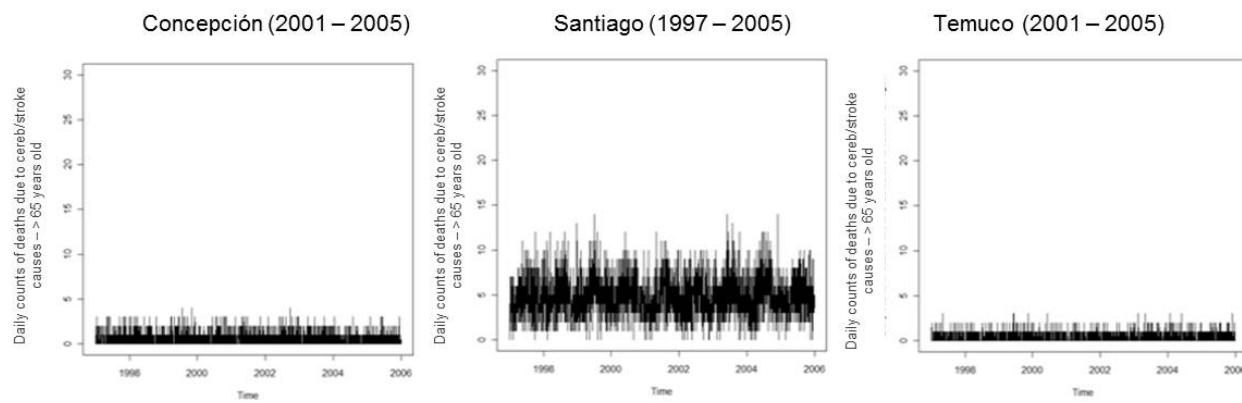


Figure 11. Daily count of deaths due to cerebrovascular / stroke causes in individuals 65 years old and over by city.

Brazil



Chile



México

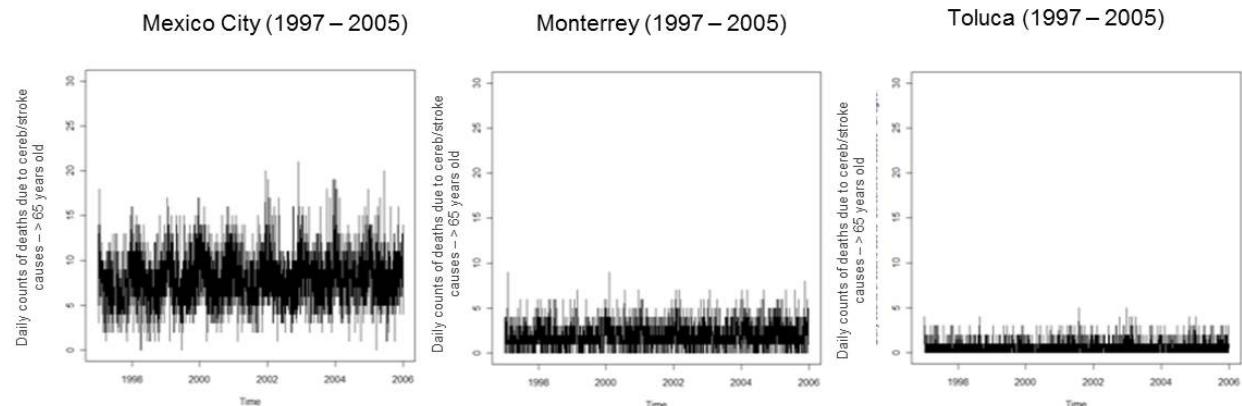
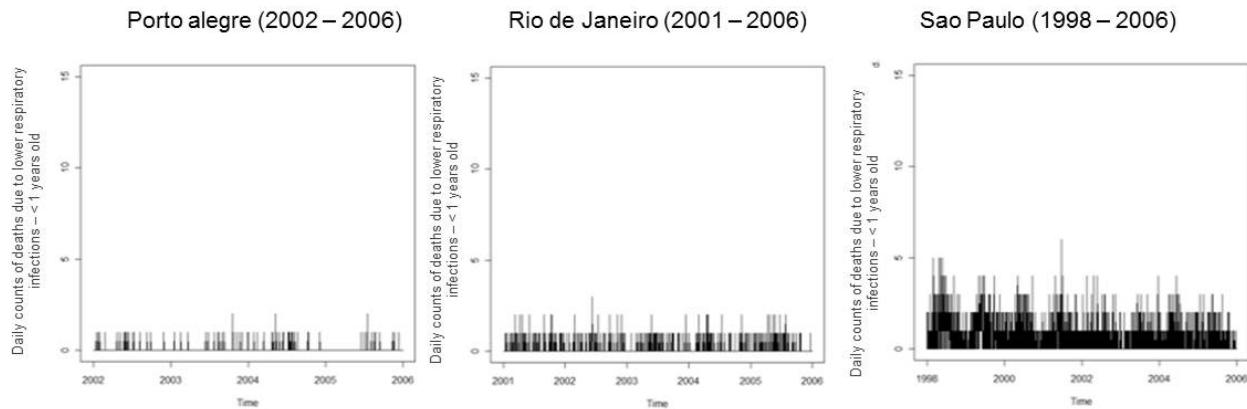
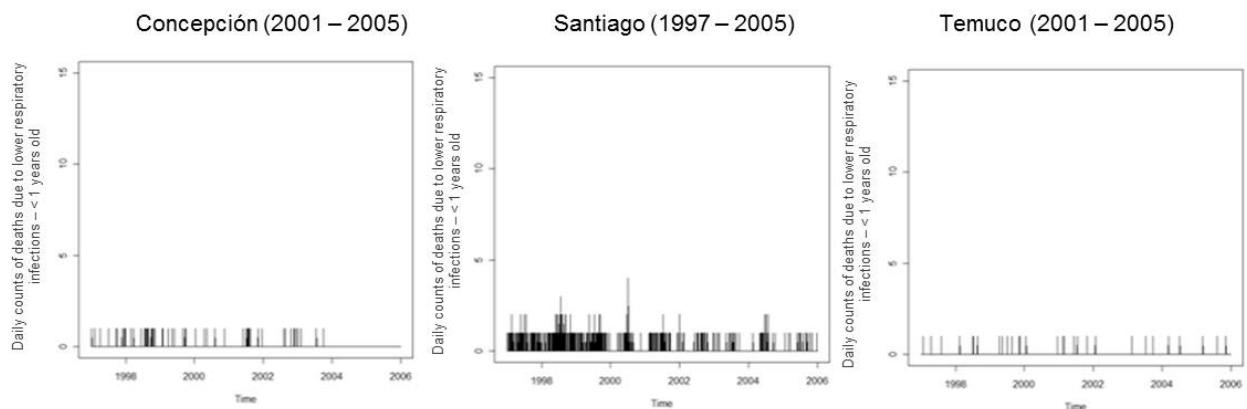


Figure 12. Daily count of deaths due to Lower Respiratory Infections for infants under 1 year old by city.

Brazil



Chile



México

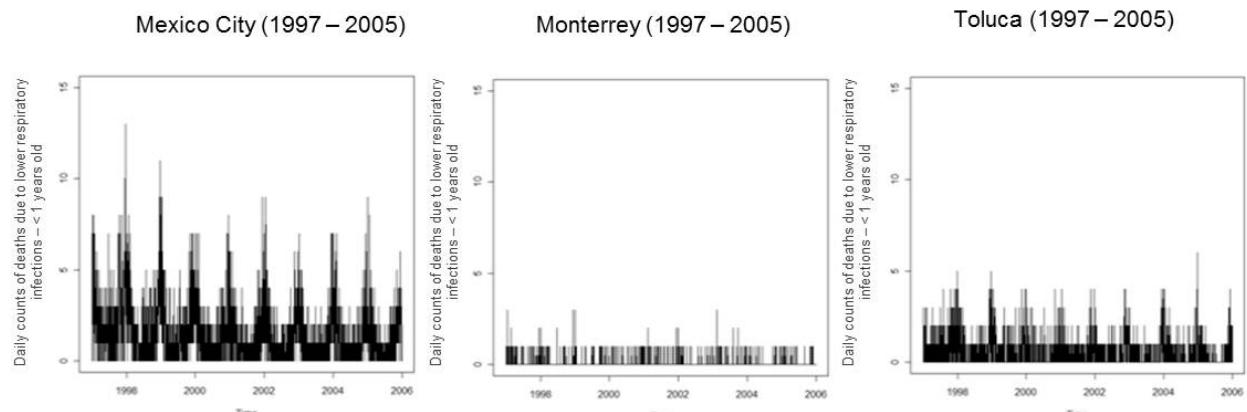
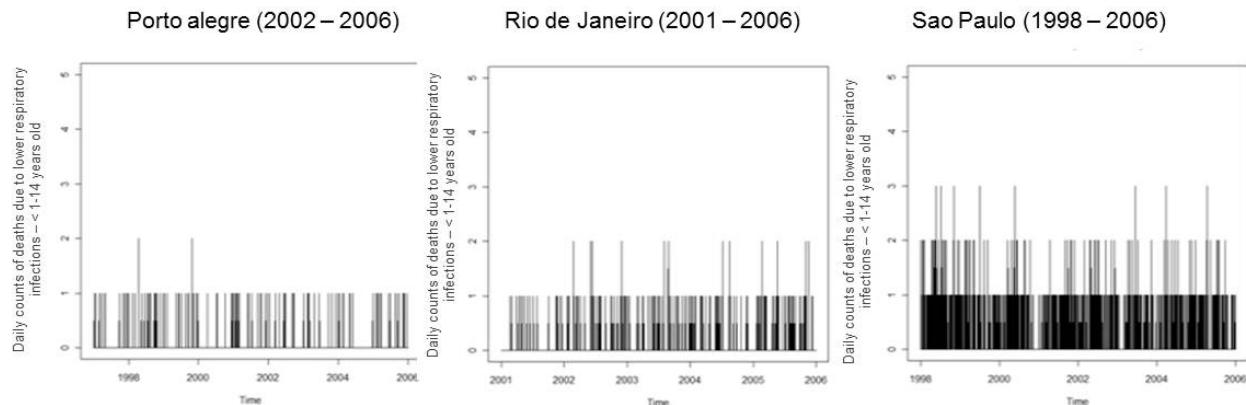
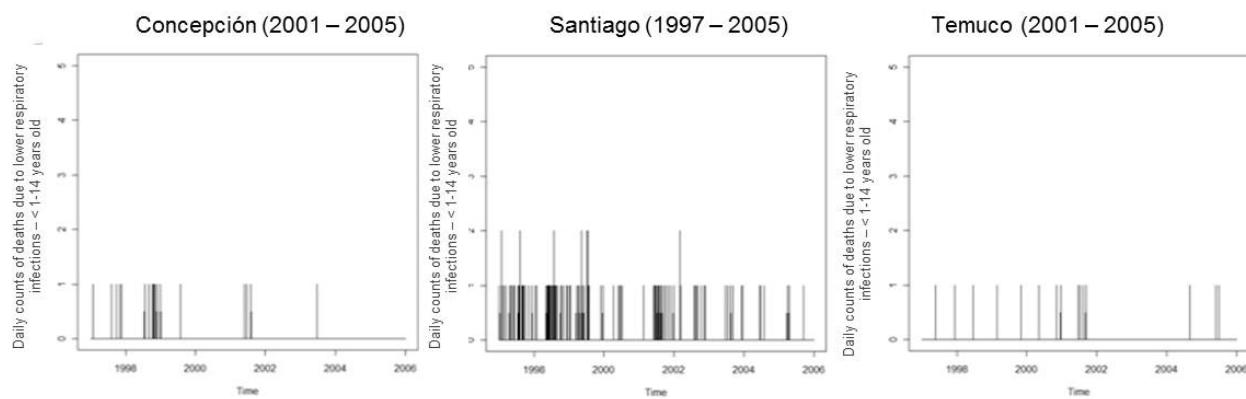


Figure 13. Daily count of deaths due to Lower Respiratory Infections for children 1 to 14 years old by city.

Brazil



Chile



México

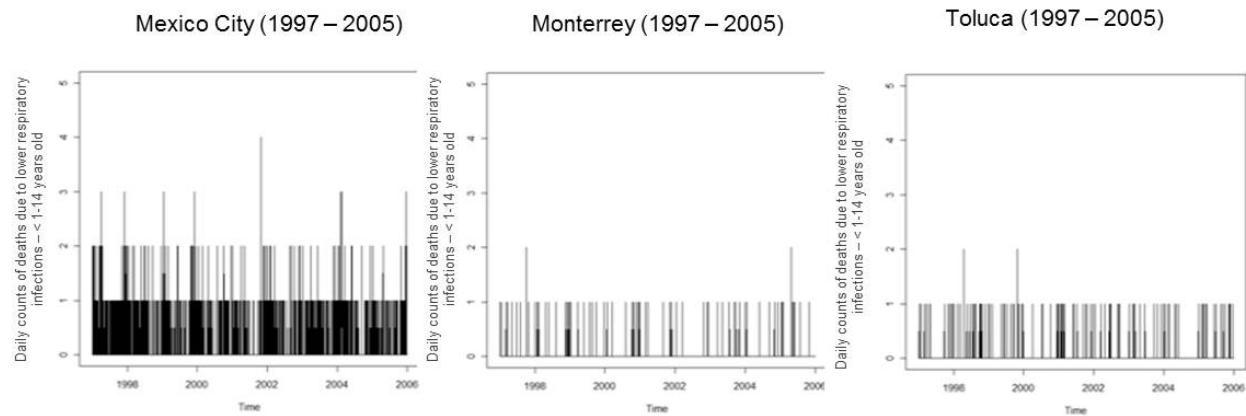


Figure 14. Daily count of deaths due to chronic obstructive pulmonary diseases in all ages by city.

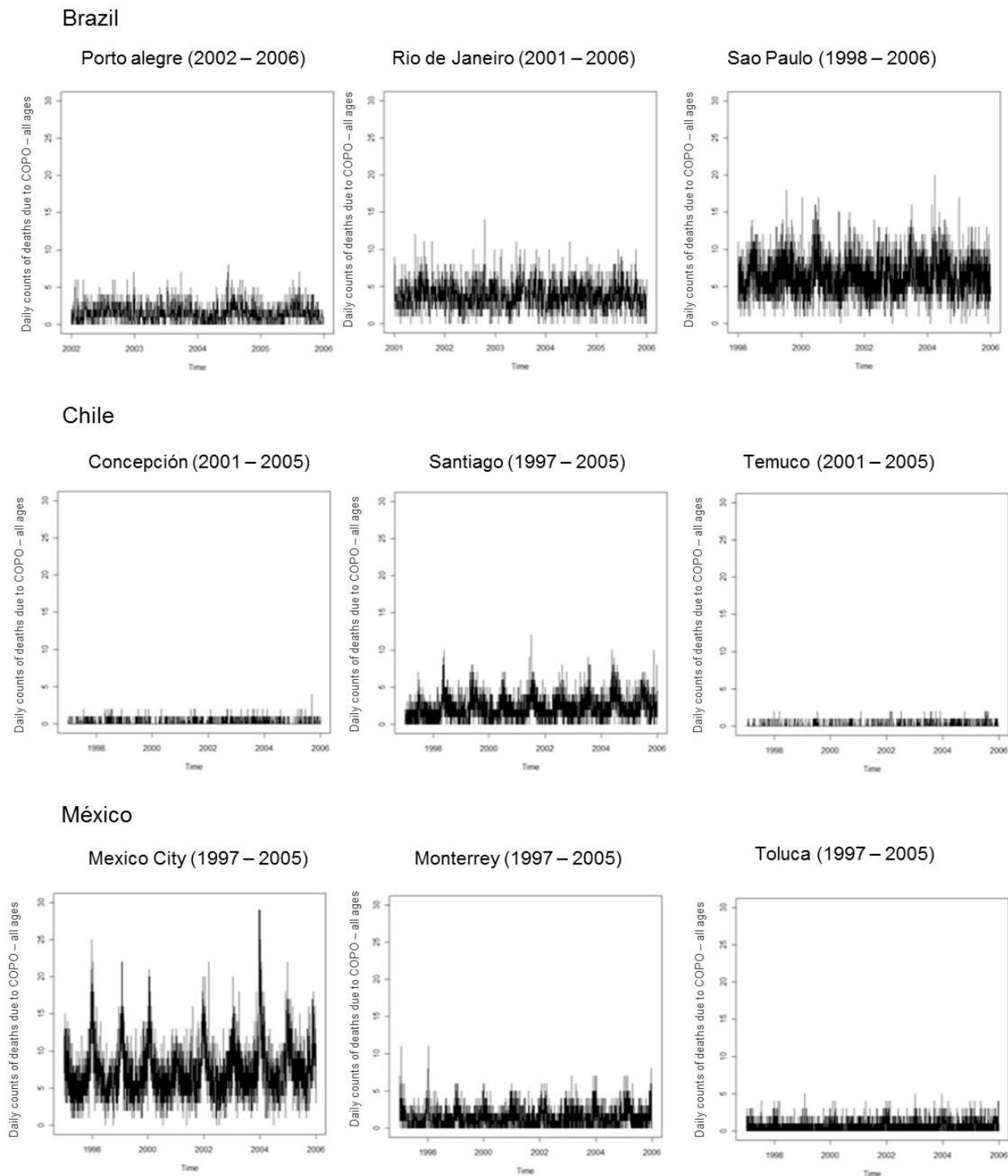
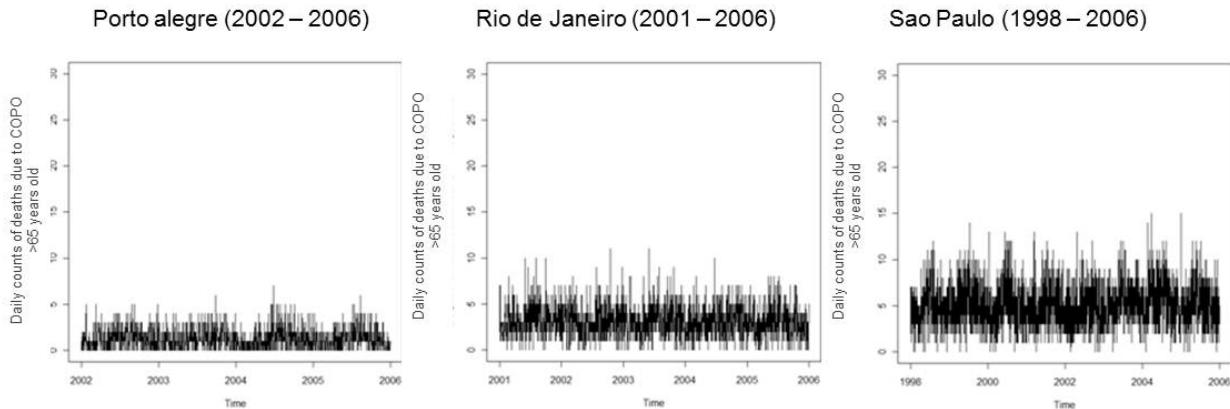
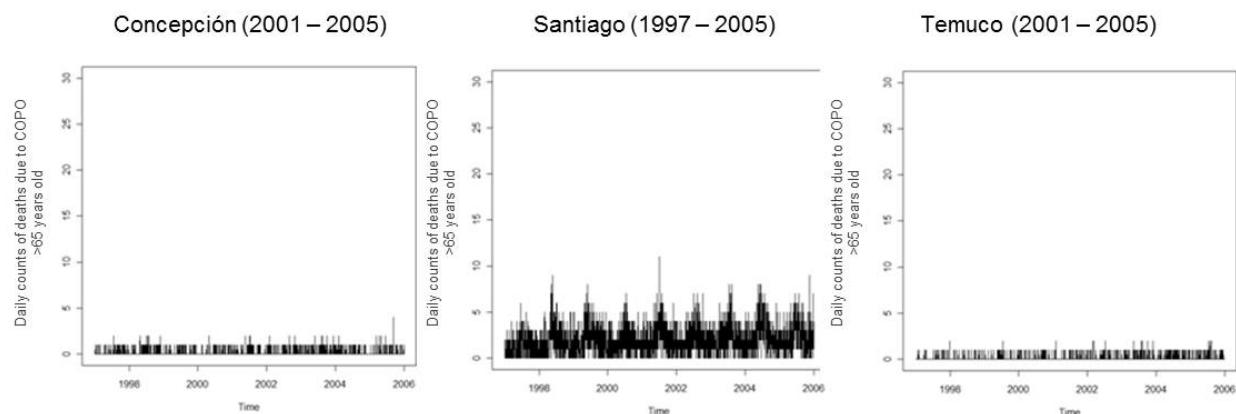


Figure 15. Daily count of deaths due to chronic obstructive pulmonary diseases in individuals 65 years old by city.

Brazil



Chile



México

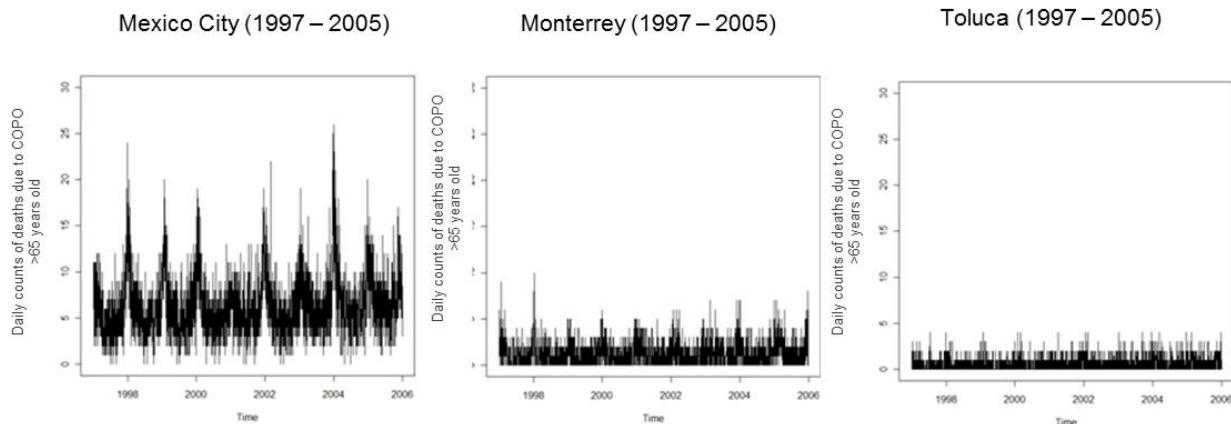


Figure 16. Daily count of deaths due to cardiopulmonary causes in all ages, for females by city.

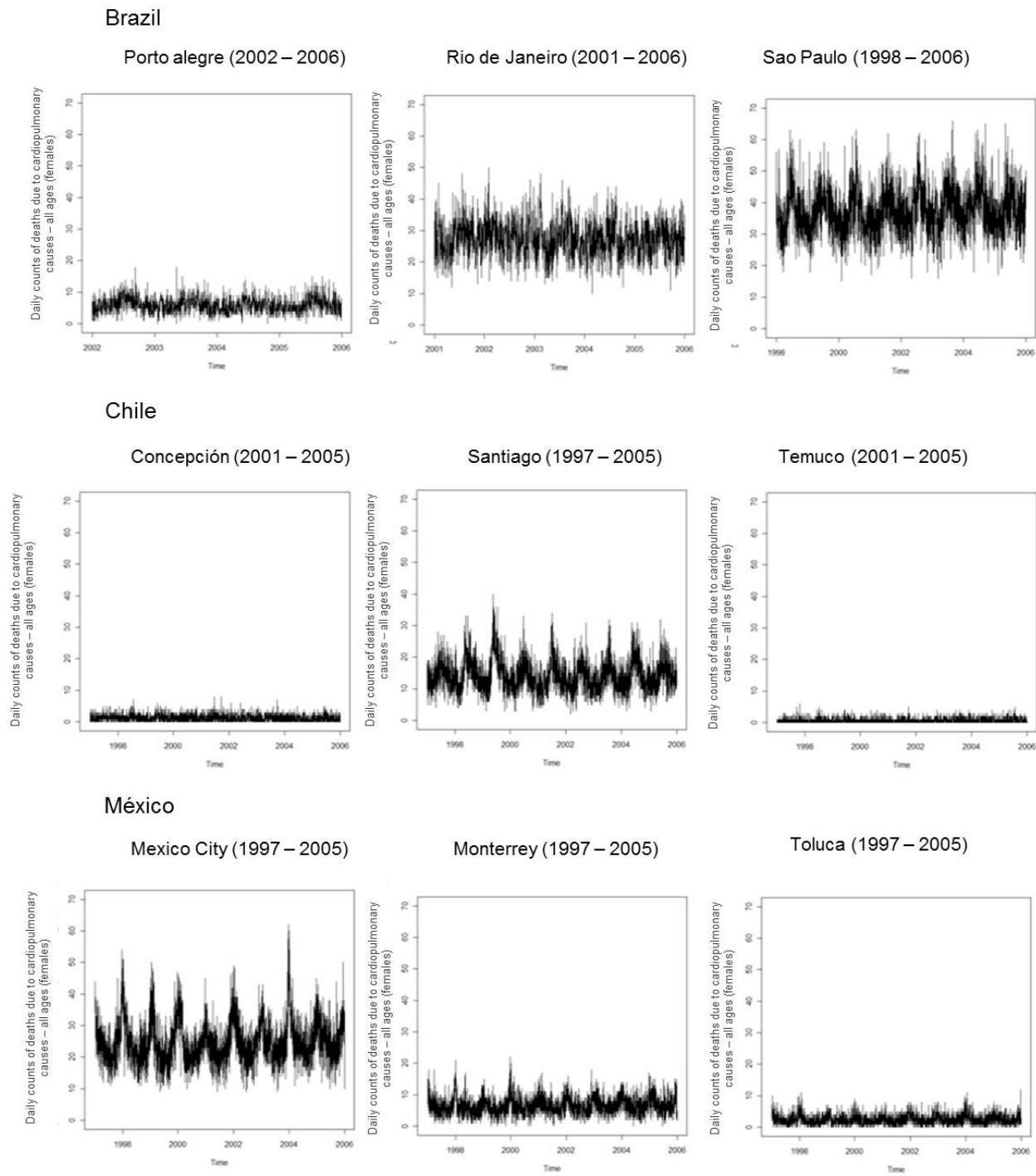


Figure 17. Daily count of deaths due to cardiopulmonary causes in all ages, for males and by city.

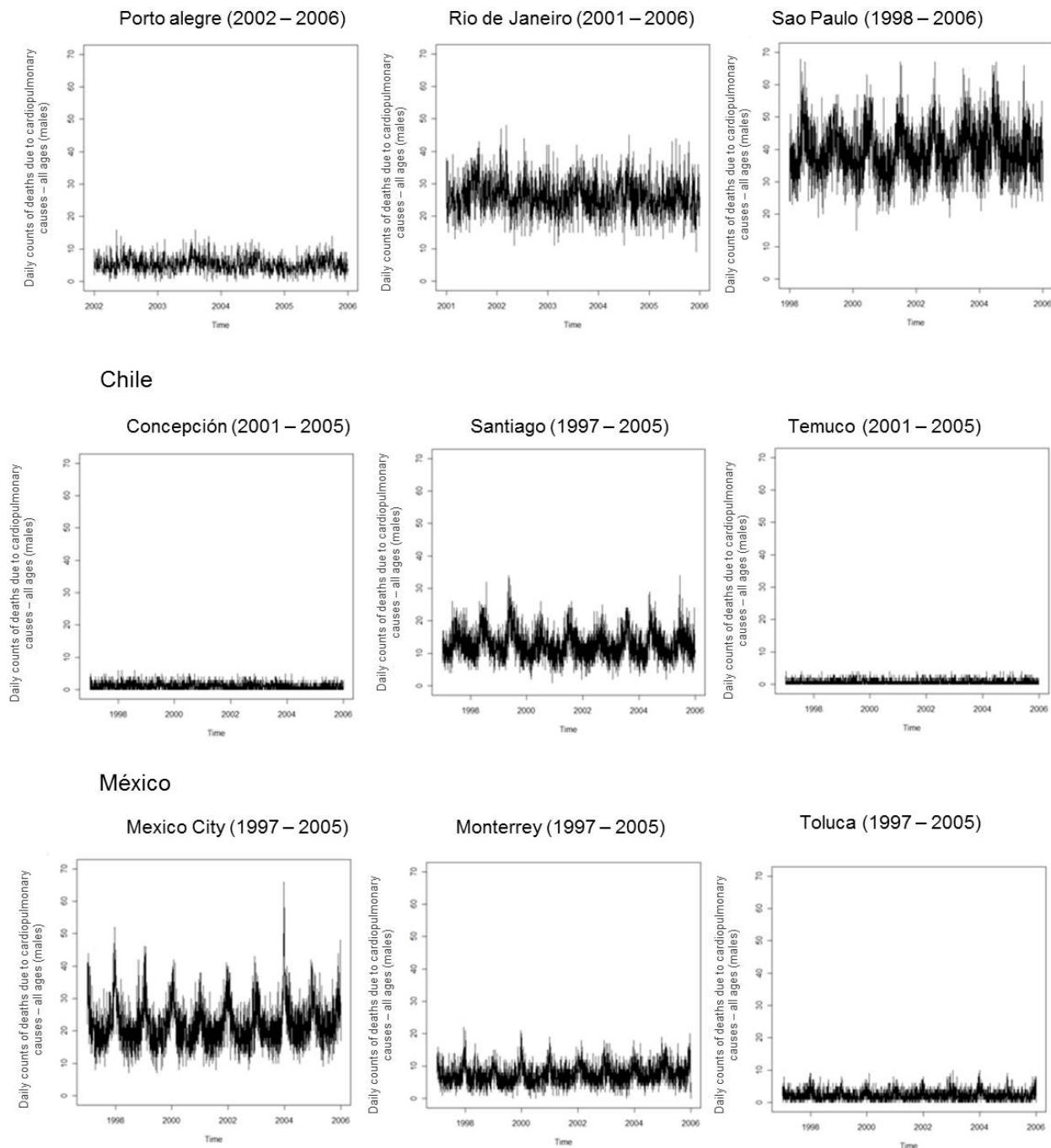


Figure 18. Daily count of deaths due to cardiopulmonary causes, for females 65 years old by city.

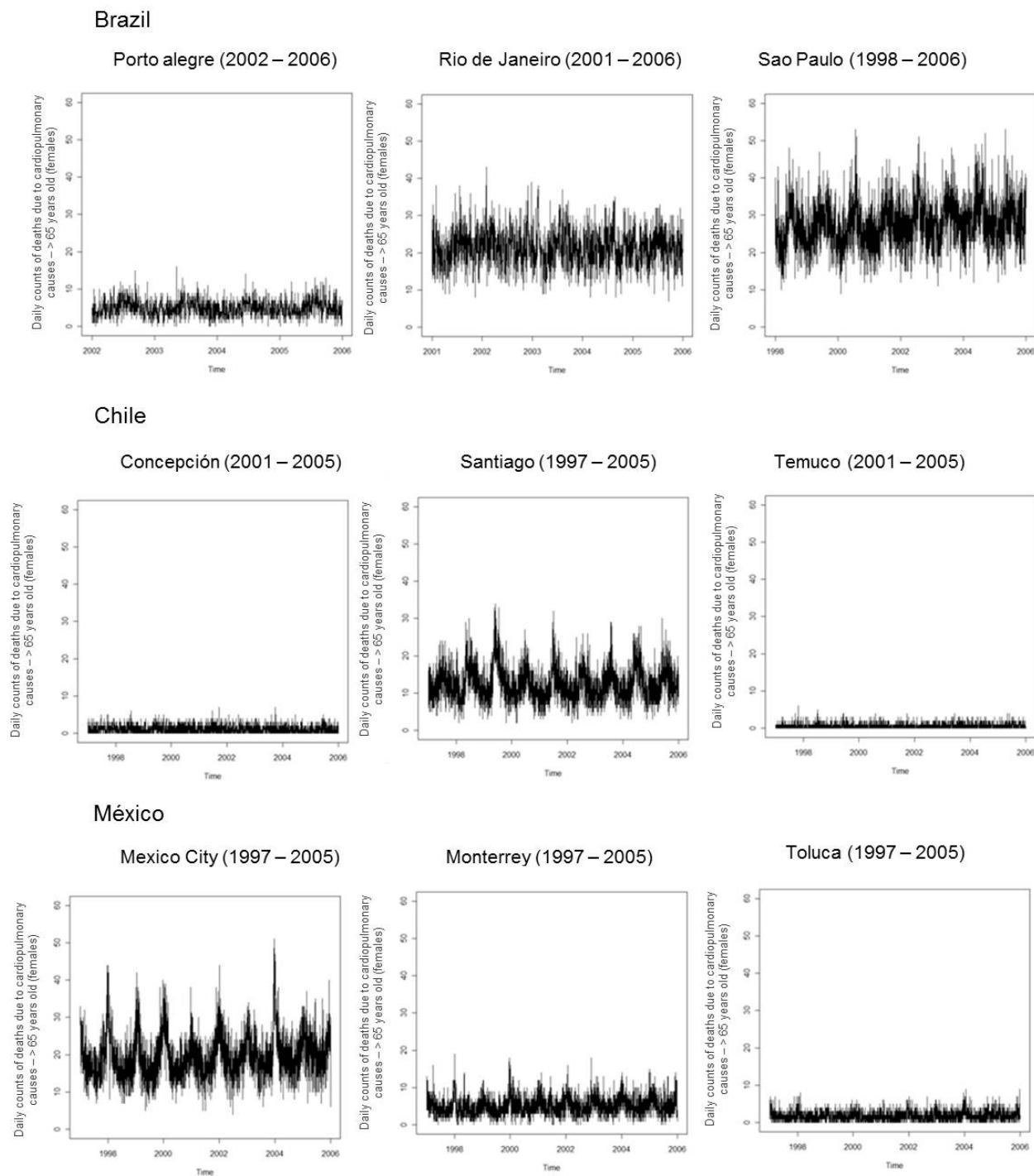
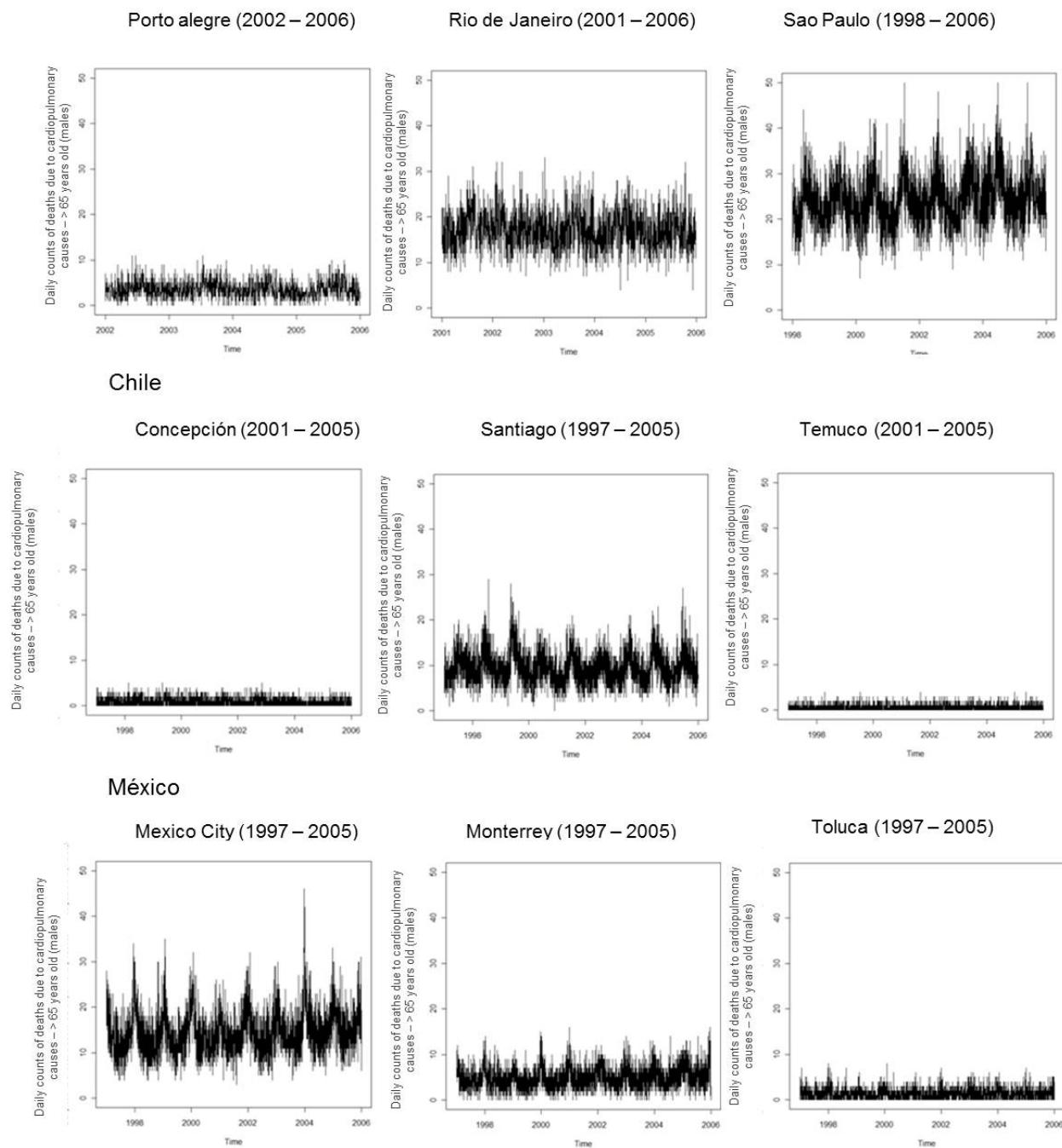


Figure 19. Daily count of deaths due to cardiopulmonary causes, for males 65 years old by city.

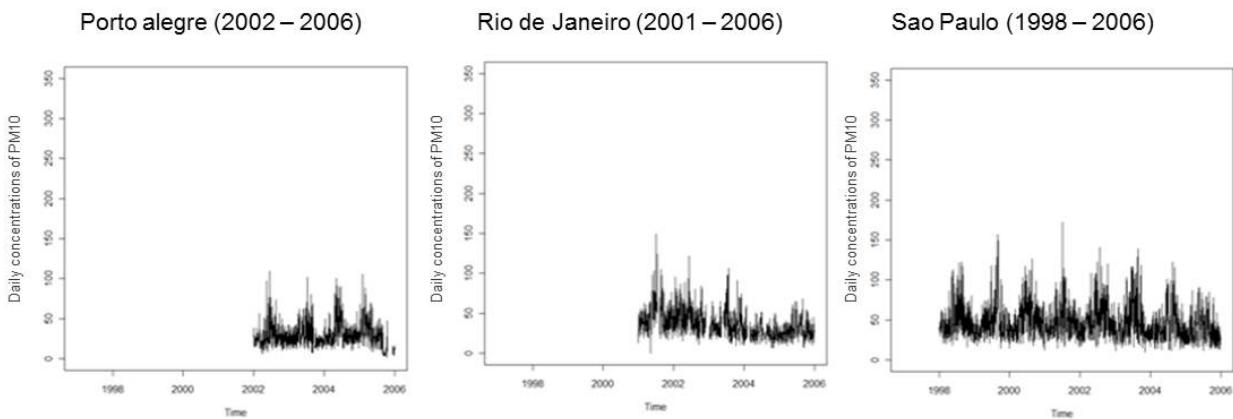


1.2 Air Pollution Data

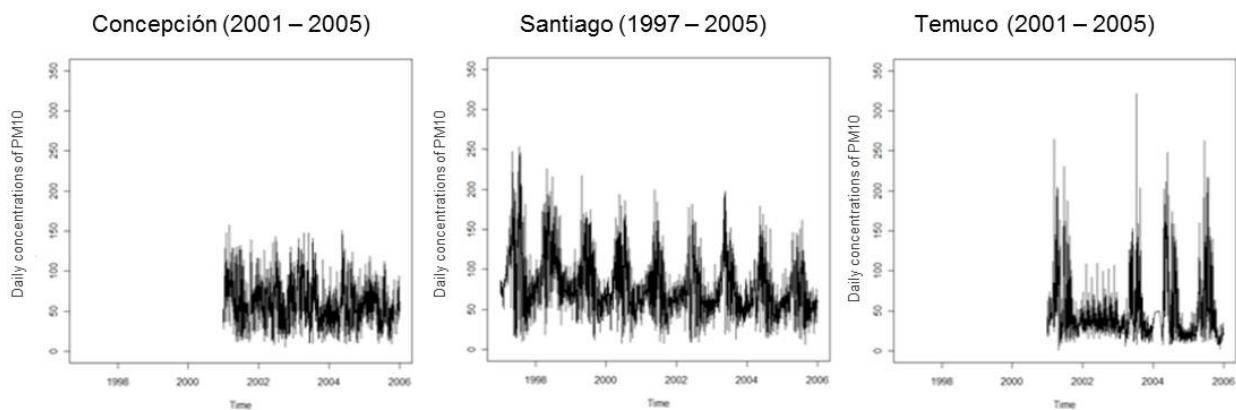
ALL SEASON

Figure 20. Daily concentrations of PM₁₀ ($\mu\text{g}/\text{m}^3$), by city. All year.

Brazil



Chile



México

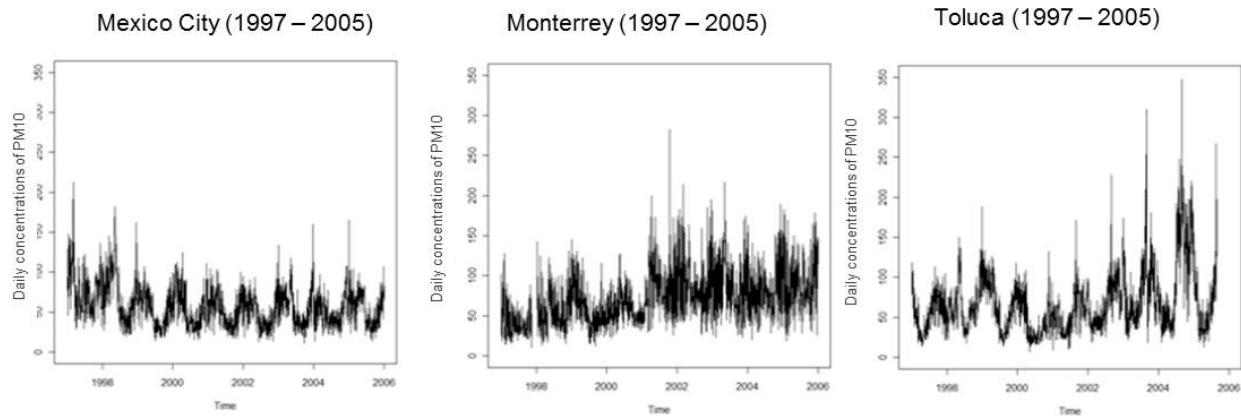
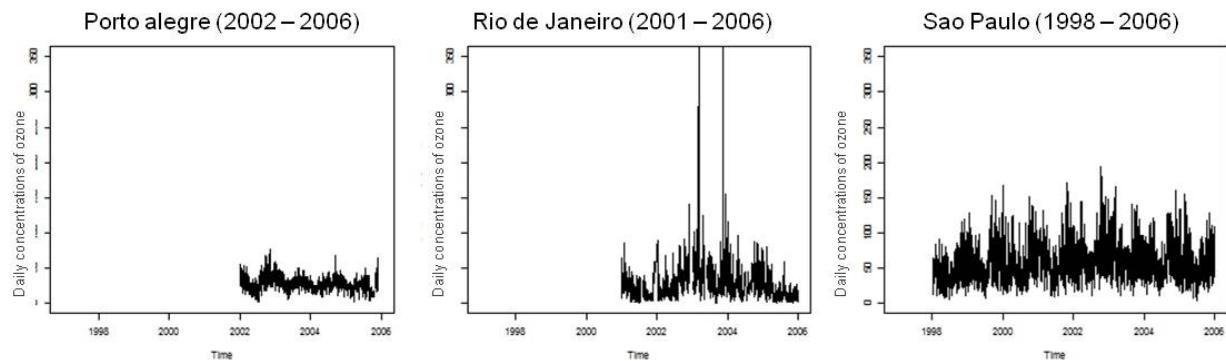


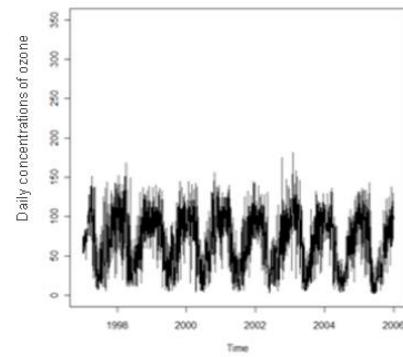
Figure 21. Daily concentrations of O₃ ($\mu\text{g}/\text{m}^3$) by city. All year.

Brazil



Chile

Concepción (2001 – 2005) Santiago (1997 – 2005) Temuco (2001 – 2005)

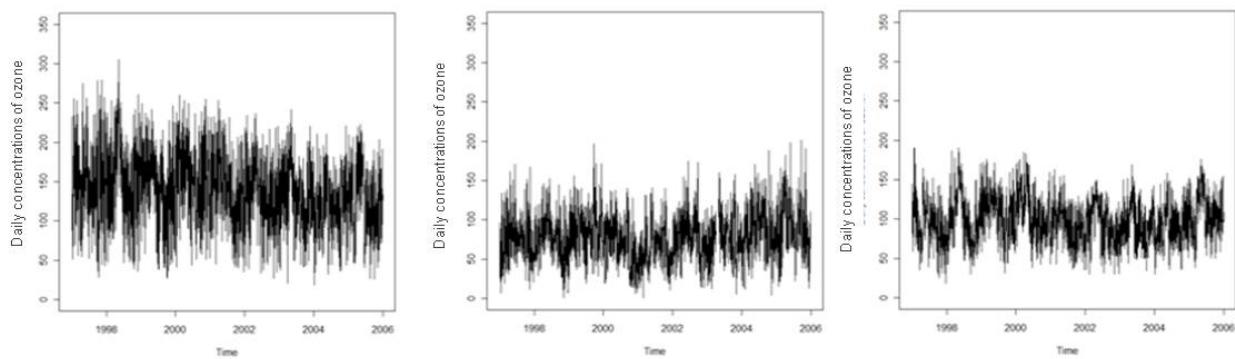


México

Mexico City (1997 – 2005)

Monterrey (1997 – 2005)

Toluca (1997 – 2005)

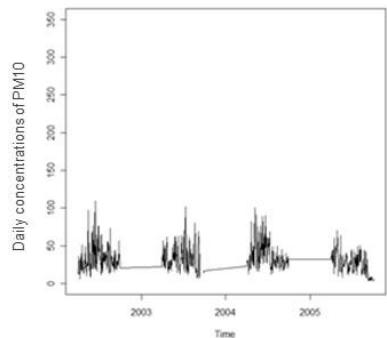


COLD SEASON

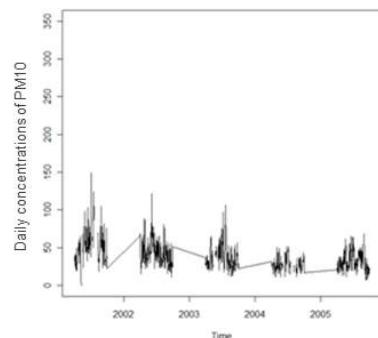
Figure 22. Daily concentrations of PM₁₀ ($\mu\text{g}/\text{m}^3$) by city. Cold season.

Brazil

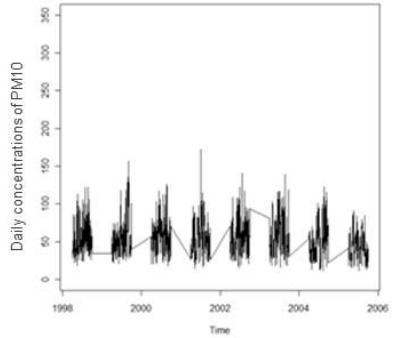
Porto alegre (2002 – 2006)



Rio de Janeiro (2001 – 2006)

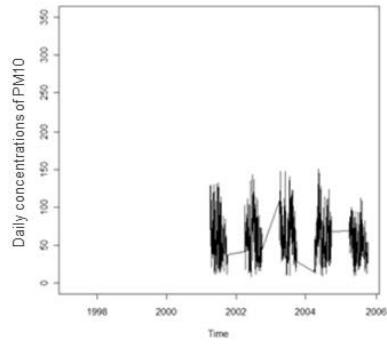


Sao Paulo (1998 – 2006)

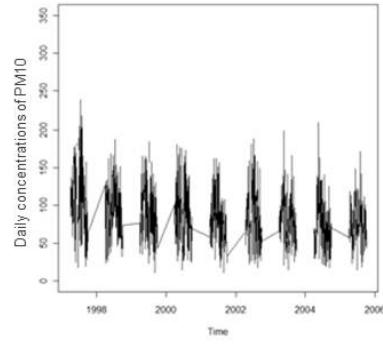


Chile

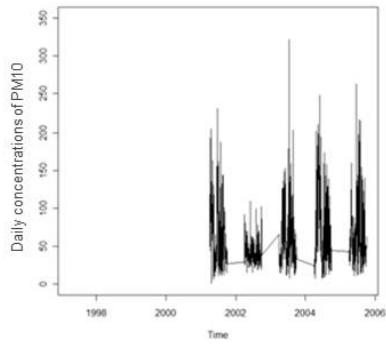
Concepción (2001 – 2005)



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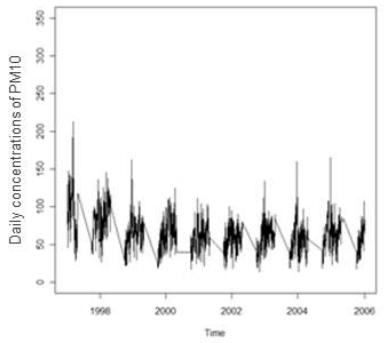


Temuco (2001 – 2005)

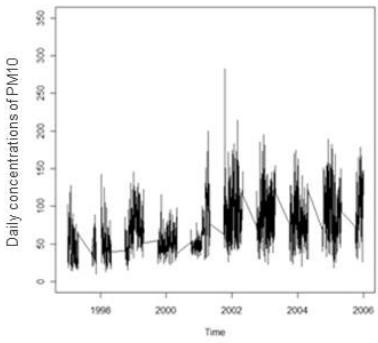


México

Mexico City (1997 – 2005)



Monterrey (1997 – 2005)



Toluca (1997 – 2005)

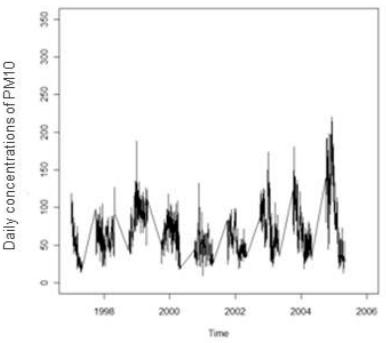
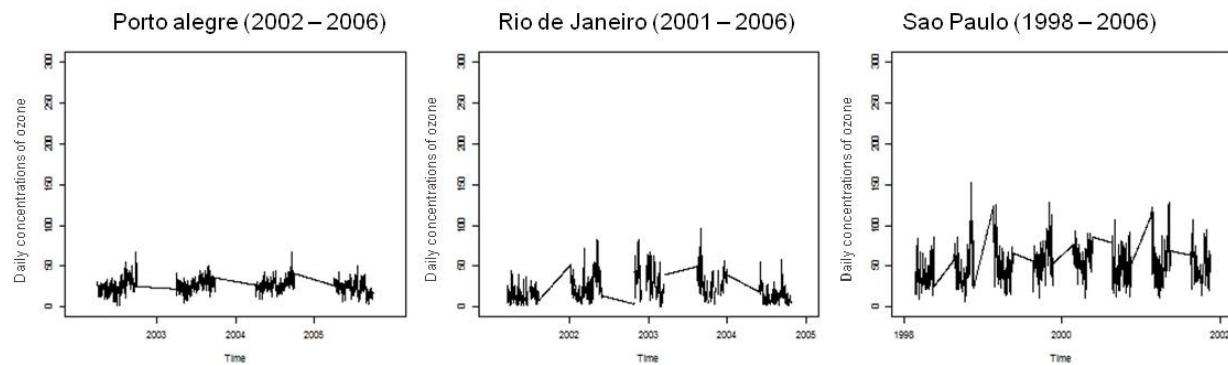


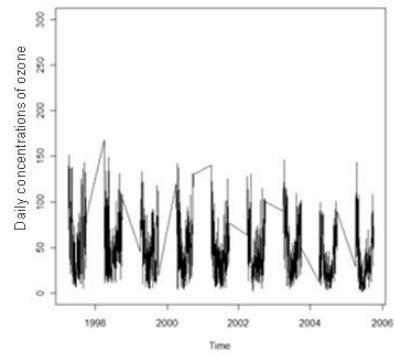
Figure 23. Daily concentrations of O₃ ($\mu\text{g}/\text{m}^3$) by city. Cold season.

Brazil



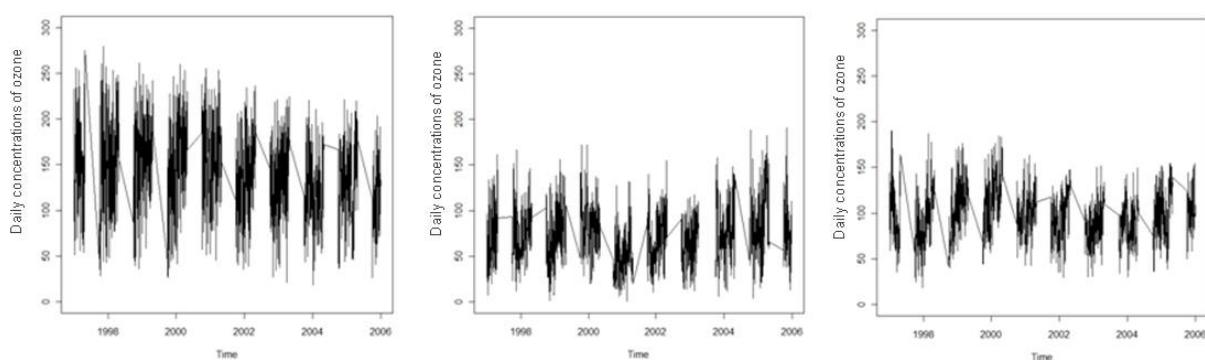
Chile

Concepción (2001 – 2005) Santiago (1997 – 2005) Temuco (2001 – 2005)



México

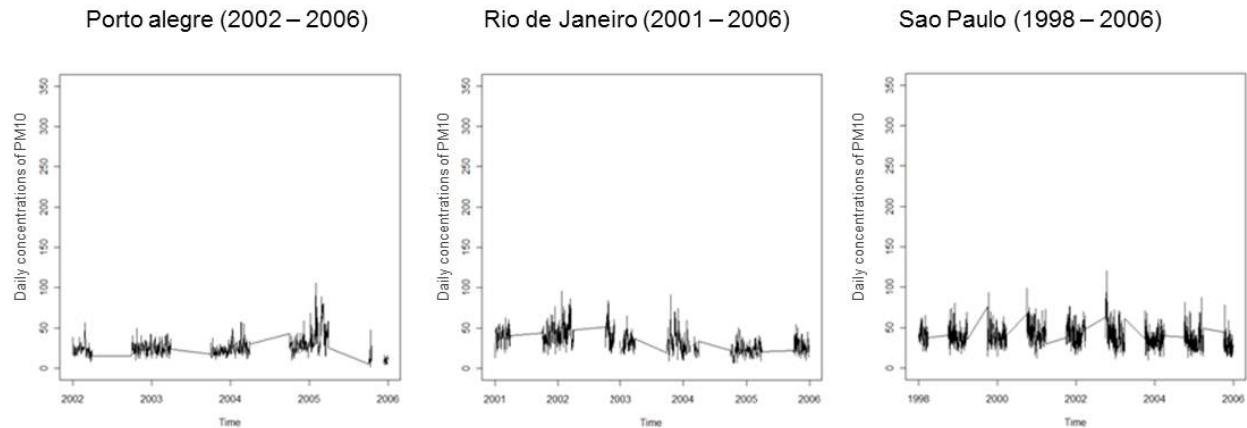
Mexico City (1997 – 2005) Monterrey (1997 – 2005) Toluca (1997 – 2005)



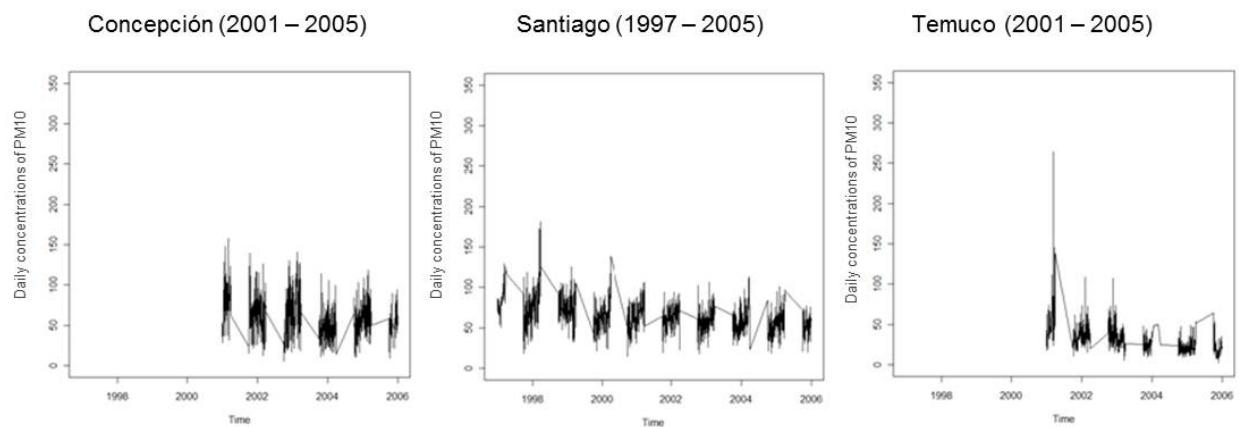
WARM SEASON

Figure 24. Daily concentrations of PM₁₀ ($\mu\text{g}/\text{m}^3$) by city. Warm season.

Brazil



Chile



México

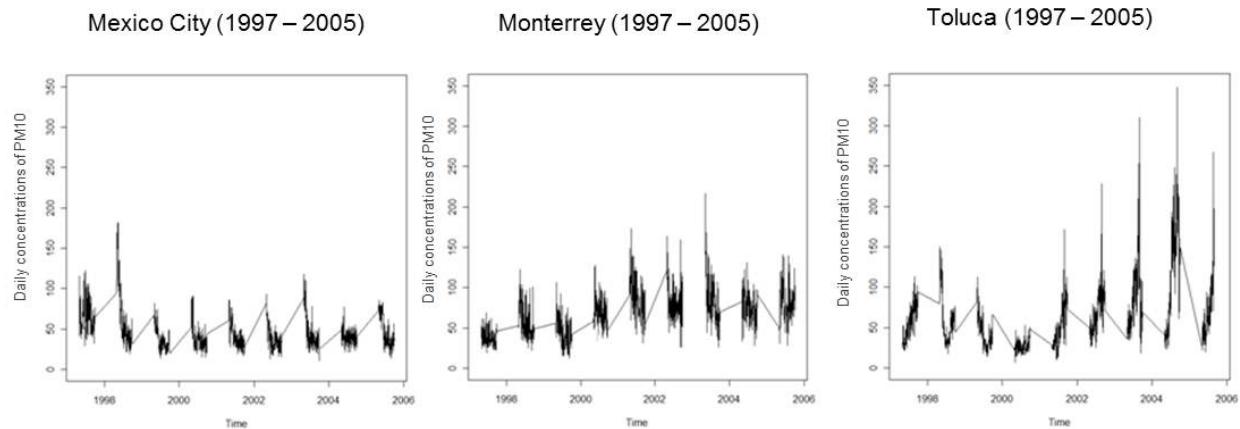
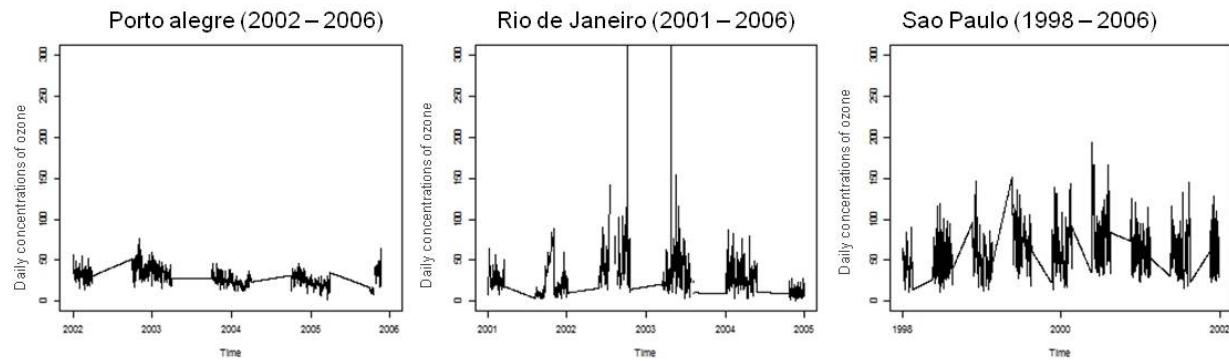


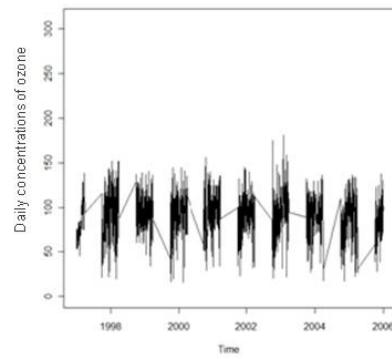
Figure 25. Daily concentrations of O₃ ($\mu\text{g}/\text{m}^3$) by city. Warm season.

Brazil



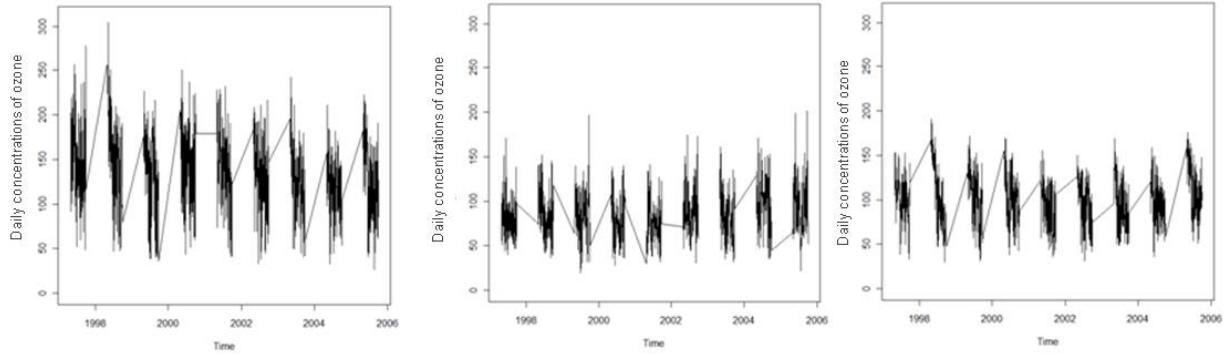
Chile

Concepción (2001 – 2005) Santiago (1997 – 2005) Temuco (2001 – 2005)



México

Mexico City (1997 – 2005) Monterrey (1997 – 2005) Toluca (1997 – 2005)

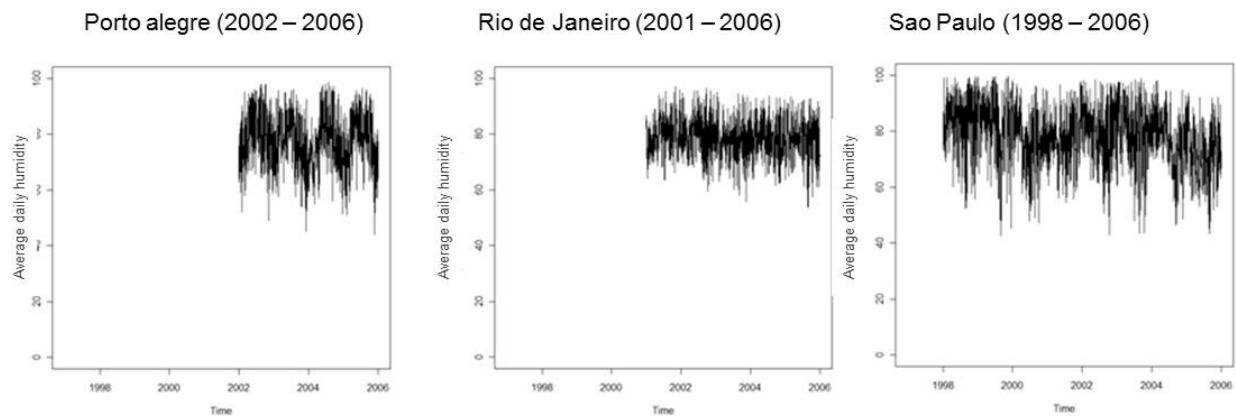


1.3 Meteorological Data

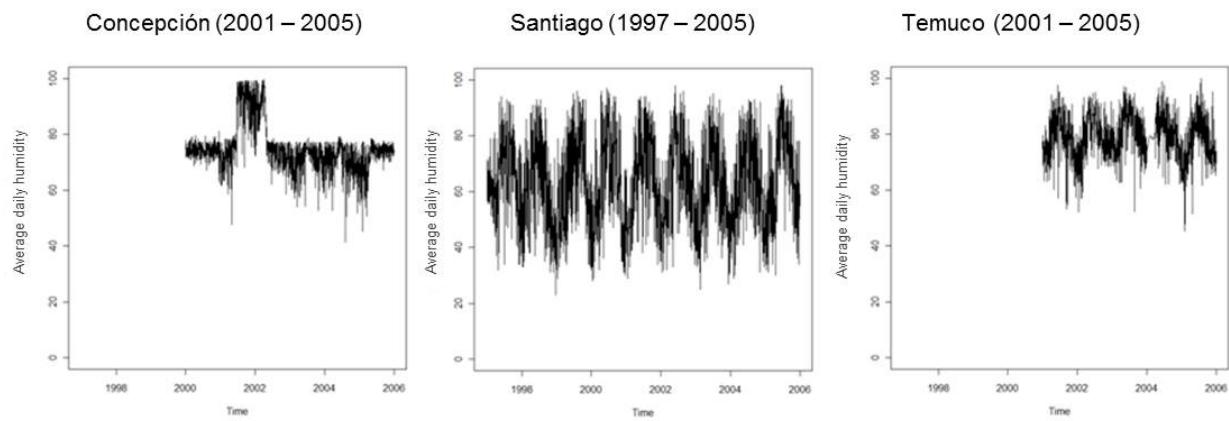
ALL SEASON

Figure 26. Daily relative humidity (%) by city. All year

Brazil



Chile



México

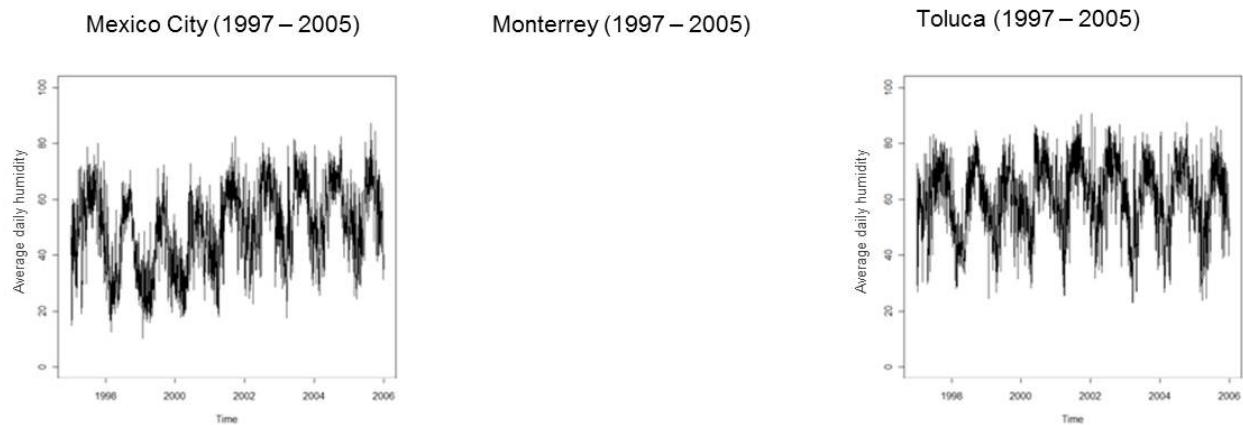


Figure 27. Average daily temperature ($^{\circ}\text{C}$) by city. All year

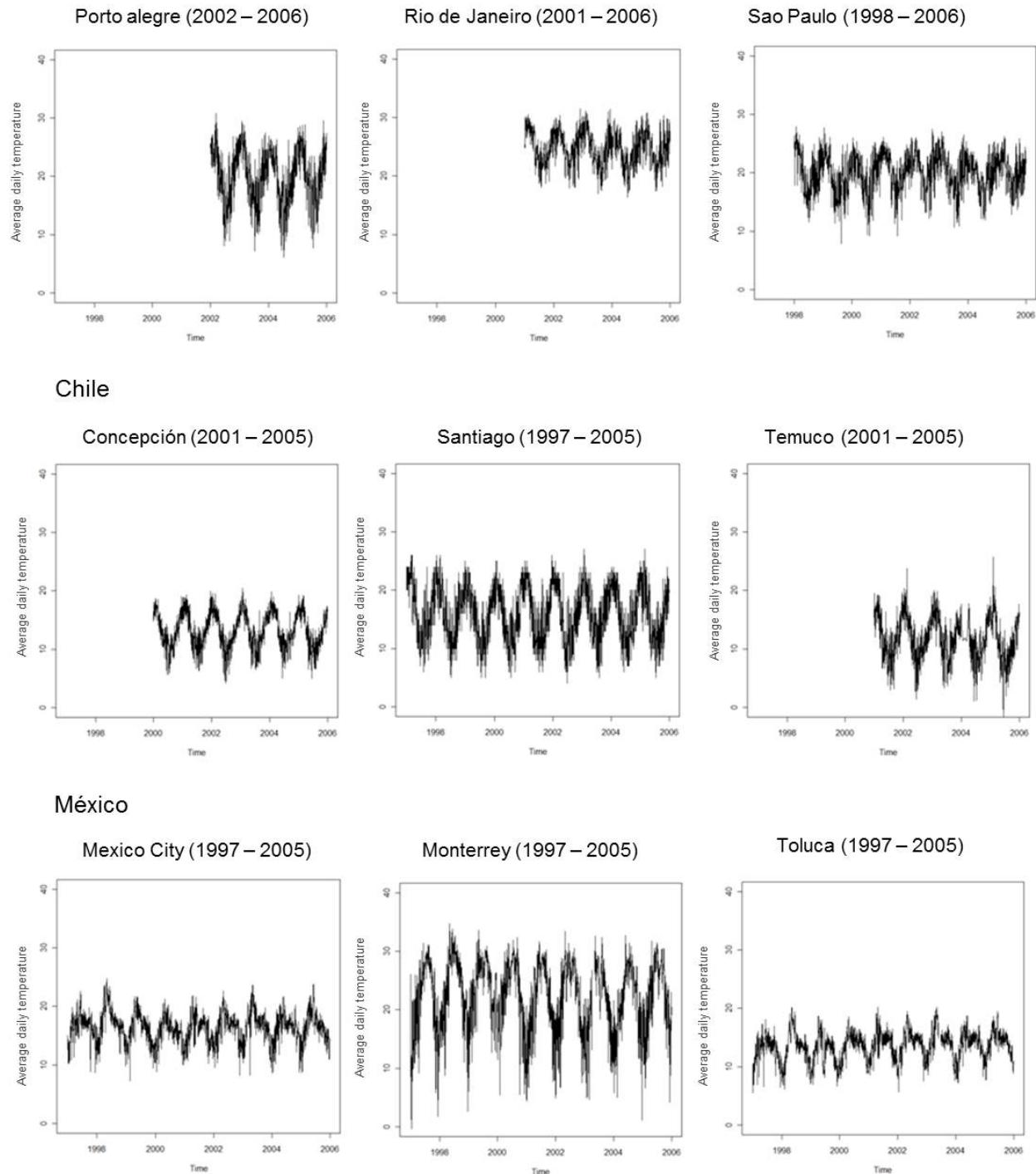
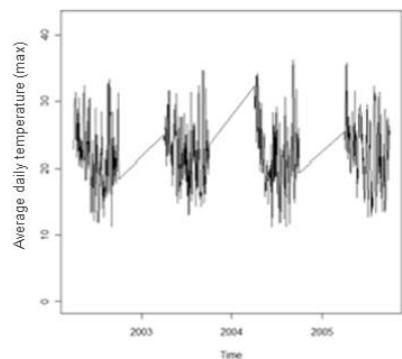


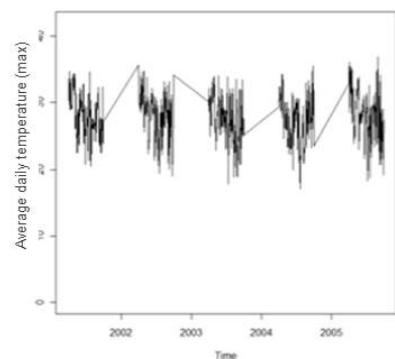
Figure 28. Average daily temperature (°C) by city. Cold season

Brazil

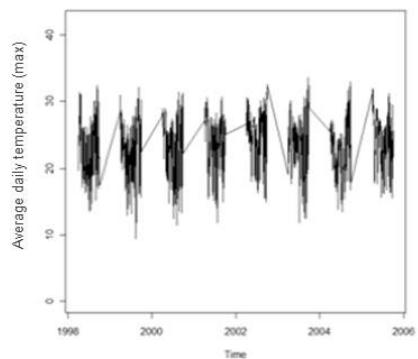
Porto alegre (2002 – 2006)



Rio de Janeiro (2001 – 2006)

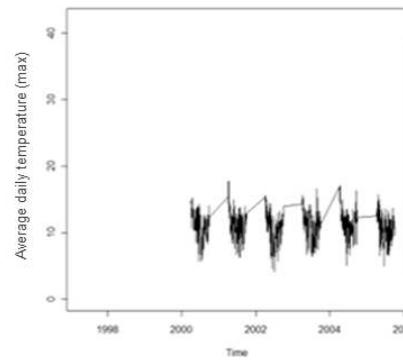


Sao Paulo (1998 – 2006)

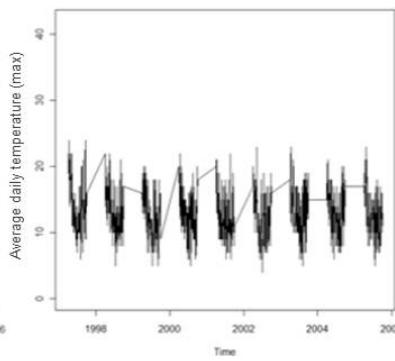


Chile

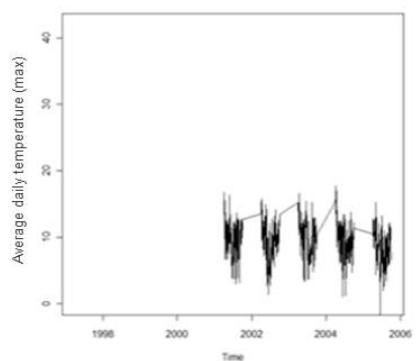
Concepción (2001 – 2005)



Santiago (1997 – 2005)

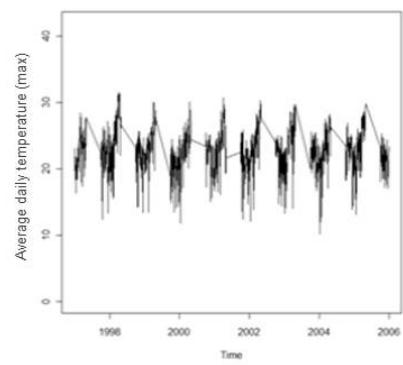


Temuco (2001 – 2005)

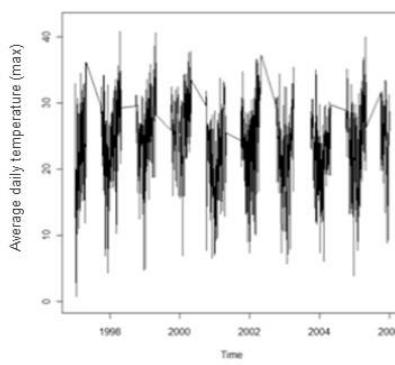


México

Mexico City (1997 – 2005)



Monterrey (1997 – 2005)



Toluca (1997 – 2005)

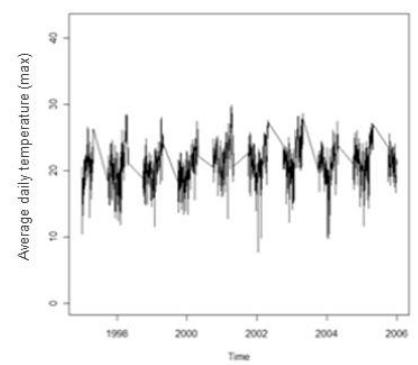
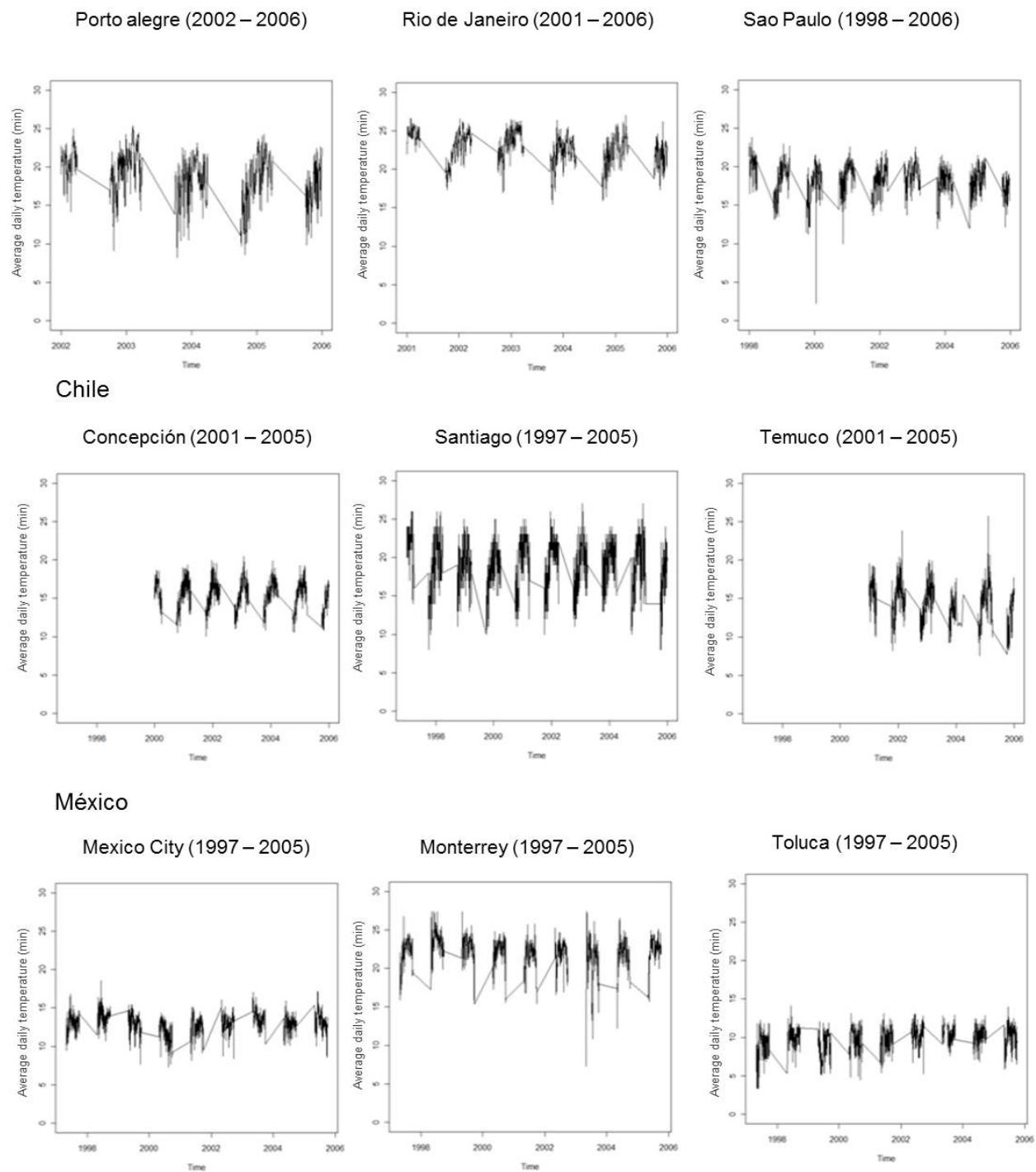


Figure 29. Average daily temperature (°C) by city. Warm season



Appendix Table G.1. Brazil: Mortality Data Set Summary (São Paulo 1997–2005, Rio de Janeiro 2001–2005, Porto Alegre 2002–2005)

Cause / Age Group	City	Total Days	Total Deaths	Mean	SD	Minimum	Maximum	Percentage		
								5	50	95
All-natural-cause	Porto Alegre	1461	39,970	27.36	5.79	12	47	18	27	37
	Rio de Janeiro	1826	233,430	127.84	14.08	89	186	106	127	152
	São Paulo	2922	483,416	165.44	17.91	112	232	138	165	197
Cardiopulmonary	Porto Alegre	1461	16,576	11.35	3.90	2	27	5	11	18
	Rio de Janeiro	1826	97,231	53.25	8.55	25	86	40	53	67
	São Paulo	2922	224,593	76.86	12.38	38	123	58	76	99
Cardiopulmonary ≥ 65	Porto Alegre	1461	12,443	8.52	3.36	1	23	3	8	15
	Rio de Janeiro	1826	70,133	38.41	7.08	19	70	27	38	50
	São Paulo	2922	151,823	52	10	25	97	37	51	69
Respiratory	Porto Alegre	1461	4,079	2.79	1.83	0	12	0	3	6
	Rio de Janeiro	1826	27,003	14.79	4.23	5	37	8	14	22
	São Paulo	2922	56,942	19.49	5.58	4	44	11	19	29
Respiratory < 1	Porto Alegre	1461	89	0.06	0.25	0	2	0	0	1
	Rio de Janeiro	1826	364	0.20	0.46	0	3	0	0	1
	São Paulo	2922	2,177	0.75	0.94	0	6	0	0	3
Respiratory 1–5	Porto Alegre	1461	17	0.01	0.11	0	1	0	0	0
	Rio de Janeiro	1826	180	0.10	0.32	0	2	0	0	1
	São Paulo	2922	763	0.26	0.51	0	3	0	0	1
Respiratory ≥ 65	Porto Alegre	1461	3,119	2.13	1.57	0	9	0	2	5
	Rio de Janeiro	1826	20,750	11.36	3.66	2	29	6	11	18
	São Paulo	2922	39,543	13.53	4.54	2	37	7	13	22
Cardiovascular	Porto Alegre	1461	12,497	8.55	3.21	1	23	4	8	14
	Rio de Janeiro	1826	70,228	38.46	6.95	17	63	28	38	50
	São Paulo	2922	167,651	57.38	9.71	27	94	43	57	74
Cardiovascular ≥ 65	Porto Alegre	1461	9,324	6.38	2.79	0	19	2	6	11
	Rio de Janeiro	1826	49,383	27.04	5.69	10	44	18	27	37
	São Paulo	2922	111,483	38.15	7.62	14	73	27	38	52
Cerebrovascular–stroke	Porto Alegre	1461	4,327	2.96	1.76	0	12	0	3	6
	Rio de Janeiro	1826	22,267	12.19	3.75	3	30	6.25	12	19
	São Paulo	2922	43,805	14.99	4.17	2	31	8	15	22
Cerebrovascular–stroke ≥ 65	Porto Alegre	1461	3,333	2.28	1.54	0	10	0	2	5
	Rio de Janeiro	1826	15,543	8.51	3.06	1	19	4	8	14
	São Paulo	2922	28,804	9.86	3.31	1	26	5	10	16
Lower respiratory infection < 1	Porto Alegre	1461	74	0.05	0.23	0	2	0	0	0
	Rio de Janeiro	1826	295	0.16	0.41	0	3	0	0	1
	São Paulo	2922	1,807	0.62	0.86	0	6	0	0	2
Lower respiratory infection 1–14	Porto Alegre	1461	13	0.01	0.09	0	1	0	0	0
	Rio de Janeiro	1826	171	0.09	0.31	0	2	0	0	1
	São Paulo	2922	1,807	0.62	0.86	0	6	0	0	2
COPD	Porto Alegre	1461	2,275	1.56	1.34	0	8	0	1	4
	Rio de Janeiro	1826	6,933	3.80	2.00	0	14	1	4	7
	São Paulo	2922	18,598	6.36	2.72	0	20	2	6	11
COPD ≥ 65	Porto Alegre	1461	1,831	1.25	1.19	0	7	0	1	4
	Rio de Janeiro	1826	5,682	3.11	1.81	0	11	0	3	6
	São Paulo	2922	14,696	5.03	2.36	0	15	2	5	9

Appendix Table G.2. Chile: Mortality Data Set Summary (1997–2005)

Cause / Age Group	City	Total Days	Total Deaths	Mean	SD	Minimum	Maximum	Percentage		
								5	50	95
All-natural-cause	Concepción	3287	19,635	5.97	2.65	0	18	2	6	11
	Santiago	3287	207,622	63.16	11.92	33	113	47	62	86
	Temuco	3287	12,525	3.81	1.99	0	12	1	4	7
Cardiopulmonary	Concepción	3287	8,046	2.45	1.62	0	10	0	2	5
	Santiago	3287	88,441	26.91	7.97	9	65	16	26	42
	Temuco	3287	4,743	1.44	1.22	0	7	0	1	4
Cardiopulmonary ≥ 65	Concepción	3287	6,430	1.96	1.45	0	8	0	2	5
	Santiago	3287	72,235	21.98	7.01	6	54	12	21	35
	Temuco	3287	3,698	1.13	1.09	0	7	0	1	3
Respiratory	Concepción	3287	2,183	0.66	0.84	0	5	0	0	2
	Santiago	3287	25,370	7.72	4.27	0	34	2	7	16
	Temuco	3287	1,352	0.41	0.65	0	5	0	0	2
Respiratory < 1	Concepción	3287	62	0.02	0.14	0	2	0	0	0
	Santiago	3287	413	0.13	0.36	0	4	0	0	1
	Temuco	3287	36	0.01	0.10	0	1	0	0	0
Respiratory 1–5	Concepción	3287	18	0.01	0.07	0	1	0	0	0
	Santiago	3287	113	0.03	0.19	0	2	0	0	0
	Temuco	3287	14	0.00	0.07	0	1	0	0	0
Respiratory ≥ 65	Concepción	3287	1,773	0.54	0.75	0	5	0	0	2
	Santiago	3287	21,381	6.50	3.74	0	29	2	6	13
	Temuco	3287	1,044	0.32	0.58	0	4	0	0	1
Cardiovascular	Concepción	3287	5,863	1.78	1.35	0	8	0	2	4
	Santiago	3287	63,071	19.19	5.43	6	40	11	19	29
	Temuco	3287	3,391	1.03	1.01	0	7	0	1	3
Cardiovascular ≥ 65	Concepción	3287	4,657	1.42	1.21	0	7	0	1	4
	Santiago	3287	50,854	15.47	4.78	3	35	8.3	15	24
	Temuco	3287	2,654	0.81	0.91	0	6	0	1	3
Cerebrovascular- stroke	Concepción	3287	2,308	0.70	0.84	0	5	0	1	2
	Santiago	3287	19,571	5.95	2.53	0	15	2	6	10
	Temuco	3287	1,394	0.42	0.65	0	4	0	0	2
Cerebrovascular- stroke ≥ 65	Concepción	3287	1,799	0.55	0.74	0	4	0	0	2
	Santiago	3287	15,710	4.78	2.29	0	14	1	5	9
	Temuco	3287	1,071	0.33	0.56	0	3	0	0	1
Lower respiratory infection < 1	Concepción	3287	60	0.02	0.13	0	1	0	0	0
	Santiago	3287	368	0.11	0.35	0	4	0	0	1
	Temuco	3287	30	0.01	0.10	0	1	0	0	0
Lower respiratory infection 1–14	Concepción	3287	18	0.01	0.07	0	1	0	0	0
	Santiago	3287	124	0.04	0.20	0	2	0	0	0
	Temuco	3287	16	0.00	0.07	0	1	0	0	0
COPD	Concepción	3287	492	0.15	0.39	0	4	0	0	1
	Santiago	3287	7,125	2.17	1.68	0	12	0	2	5
	Temuco	3287	334	0.10	0.32	0	2	0	0	1
COPD ≥ 65	Concepción	3287	430	0.13	0.36	0	4	0	0	1
	Santiago	3287	6,322	1.92	1.57	0	11	0	2	5
	Temuco	3287	301	0.09	0.30	0	2	0	0	1

Appendix Table G.3. México: Mortality Data Set Summary (1997–2005)

Cause / Age Group	City	Total Days	Total Deaths	Mean	SD	Minimum	Maximum	Percentage		
								5	50	95
All-natural-cause	Mexico City	3287	492,263	149.8	37.3	57	385	103	142	222
	Monterrey	3287	108,833	33.1	11.9	5	110	17	32	55
	Toluca	3287	39,287	12.0	6.6	0	43	3	11	24
Cardiopulmonary	Mexico City	3287	205,828	62.6	15.1	23	158	44	60	92
	Monterrey	3287	45,876	14.0	4.9	2	43	7	13	23
	Toluca	3287	15,675	4.8	2.6	0	17	1	4	9.7
Cardiopulmonary ≥ 65	Mexico City	3287	149,389	45.4	11.9	17	117	30	43	68
	Monterrey	3287	33,169	10.1	4.1	1	33	4	10	17
	Toluca	3287	10,312	3.1	1.9	0	12	1	3	7
Respiratory	Mexico City	3287	54,982	16.7	7.2	4	57	8	15	31
	Monterrey	3287	10,318	3.1	2.2	0	18	0	3	7
	Toluca	3287	5,984	1.8	1.6	0	12	0	2	5
Respiratory < 1	Mexico City	3287	5,808	1.8	1.9	0	14	0	1	5
	Monterrey	3287	416	0.1	0.4	0	6	0	0	1
	Toluca	3287	1,703	0.5	0.8	0	6	0	0	2
Respiratory 1–5	Mexico City	3287	858	0.3	0.5	0	4	0	0	1
	Monterrey	3287	120	0.0	0.2	0	2	0	0	0
	Toluca	3287	183	0.1	0.2	0	2	0	0	1
Respiratory ≥ 65	Mexico City	3287	37,703	11.5	5.3	1	41	5	10	22
	Monterrey	3287	7,727	2.4	1.8	0	12	0	2	6
	Toluca	3287	3,195	1.0	1.1	0	7	0	1	3
Cardiovascular	Mexico City	3287	150,853	45.9	9.9	15	103	32	45	64
	Monterrey	3287	35,558	10.8	3.9	2	30	5	10	18
	Toluca	3287	9,695	2.9	1.8	0	12	0	3	6
Cardiovascular ≥ 65	Mexico City	3287	111,687	34.0	8.3	11	76	22	33	49
	Monterrey	3287	25,442	7.7	3.2	0	26	3	7	14
	Toluca	3287	7,117	2.2	1.5	0	10	0	2	5
Cerebrovascular- stroke	Mexico City	3287	35,052	10.7	3.5	0	25	5	10	17
	Monterrey	3287	8,409	2.6	1.7	0	9	0	2	6
	Toluca	3287	2,671	0.8	0.9	0	6	0	1	3
Cerebrovascular- stroke ≥ 65	Mexico City	3287	26,080	7.9	3.0	0	21	3	8	13
	Monterrey	3287	6,306	1.9	1.4	0	9	0	2	4.7
	Toluca	3287	1,899	0.6	0.8	0	5	0	0	2
Lower respiratory infection < 1	Mexico City	3287	4,838	1.5	1.6	0	13	0	1	5
	Monterrey	3287	263	0.1	0.3	0	3	0	0	1
	Toluca	3287	1,618	0.5	0.8	0	6	0	0	2
Lower respiratory infection 1–14	Mexico City	3287	783	0.2	0.5	0	4	0	0	1
	Monterrey	3287	70	0.0	0.1	0	2	0	0	0
	Toluca	3287	107	0.0	0.2	0	2	0	0	0
COPD	Mexico City	3287	23,920	7.3	3.7	0	29	2	7	14
	Monterrey	3287	4,634	1.4	1.3	0	11	0	1	4
	Toluca	3287	2,027	0.6	0.8	0	5	0	0	2
COPD ≥ 65	Mexico City	3287	20,678	6.3	3.4	0	26	2	6	12
	Monterrey	3287	4,116	1.3	1.3	0	10	0	1	4
	Toluca	3287	1,736	0.5	0.8	0	4	0	0	2

Appendix Table G.4. Brazil: Mortality Data Set Summary, Stratified by Season (1997–2005)

Cause / Age Group	City	Warm Season				Cold Season			
		Days	Deaths	Mean	SD	Days	Deaths	Mean	SD
All-natural-cause	Porto Alegre	729	18,971	26.02	5.51	732	20,999	28.69	5.76
	Rio de Janeiro	911	116,377	127.75	15.01	915	117,053	127.93	13.09
	São Paulo	1458	232,005	159.13	15.49	1464	251,411	171.73	17.94
Cardiopulmonary	Porto Alegre	729	7,494	10.28	3.43	732	9,082	12.41	4.04
	Rio de Janeiro	911	47,919	52.6	8.58	915	49,312	53.89	8.49
	São Paulo	1458	104,632	71.76	10.15	1464	119,961	81.94	12.32
Cardiopulmonary ≥ 65	Porto Alegre	729	5,533	7.59	2.96	732	6,910	9.44	3.49
	Rio de Janeiro	911	34,539	37.91	7.22	915	35,594	38.9	6.9
	São Paulo	1458	70,307	48.22	8.19	1464	81,516	55.68	9.77
Respiratory	Porto Alegre	729	1,776	2.44	1.67	732	2,303	3.15	1.91
	Rio de Janeiro	911	13,433	14.75	4.19	915	13,570	14.83	4.27
	São Paulo	1458	25,856	17.73	4.9	1464	31,086	21.23	5.67
Respiratory < 1	Porto Alegre	729	30	0.04	0.21	732	59	0.08	0.29
	Rio de Janeiro	911	160	0.18	0.43	915	204	0.22	0.48
	São Paulo	1458	821	0.56	0.77	1464	1,356	0.93	1.06
Respiratory 1–5	Porto Alegre	729	7	0.01	0.1	732	10	0.01	0.12
	Rio de Janeiro	911	82	0.09	0.3	915	98	0.11	0.33
	São Paulo	1458	328	0.22	0.47	1464	435	0.3	0.54
Respiratory ≥ 65	Porto Alegre	729	1,333	1.83	1.4	732	1,786	2.44	1.66
	Rio de Janeiro	911	10,295	11.3	3.64	915	10,455	11.43	3.68
	São Paulo	1458	18,046	12.38	4.13	1464	21,497	14.68	4.64
Cardiovascular	Porto Alegre	729	5,718	7.84	2.91	732	6,779	9.26	3.35
	Rio de Janeiro	911	34,486	37.86	6.92	915	35,742	39.06	6.93
	São Paulo	1458	78,776	54.03	8.32	1464	88,875	60.71	9.85
Cardiovascular ≥ 65	Porto Alegre	729	4,200	5.76	2.5	732	5,124	7	2.93
	Rio de Janeiro	911	24,244	26.61	5.76	915	25,139	27.47	5.59
	São Paulo	1458	51,885	35.59	6.55	1464	59,598	40.71	7.75
Cerebrovascular–stroke	Porto Alegre	729	2,050	2.81	1.69	732	2,277	3.11	1.82
	Rio de Janeiro	911	10,899	11.96	3.61	915	11,368	12.42	3.87
	São Paulo	1458	21,080	14.46	4.12	1464	22,725	15.52	4.16
Cerebrovascular–stroke ≥ 65	Porto Alegre	729	1,571	2.16	1.48	732	1,762	2.41	1.58
	Rio de Janeiro	911	7,690	8.44	3.08	915	7,853	8.58	3.03
	São Paulo	1458	13,914	9.54	3.25	1464	14,890	10.17	3.33
Lower respiratory infection < 1	Porto Alegre	729	25	0.03	0.19	732	49	0.07	0.26
	Rio de Janeiro	911	122	0.13	0.37	915	173	0.19	0.45
	São Paulo	1458	671	0.46	0.71	1464	1,136	0.78	0.96
Lower respiratory infection 1–14	Porto Alegre	729	5	0.01	0.08	732	8	0.01	0.1
	Rio de Janeiro	911	85	0.09	0.31	915	86	0.09	0.32
	São Paulo	1458	316	0.22	0.46	1464	445	0.3	0.55
COPD	Porto Alegre	729	979	1.34	1.23	732	1,296	1.77	1.4
	Rio de Janeiro	911	3,418	3.75	1.97	915	3,515	3.84	2.03
	São Paulo	1458	8,526	5.85	2.53	1464	10,072	6.88	2.8
COPD ≥ 65	Porto Alegre	729	760	1.04	1.06	732	1,071	1.46	1.28
	Rio de Janeiro	911	2,811	3.09	1.77	915	2,871	3.14	1.84
	São Paulo	1458	6,717	4.61	2.2	1464	7,979	5.45	2.44

Appendix Table G.5. Chile: Mortality Data Set Summary, Stratified by Season (1997–2004)

Cause / Age Group	City	Warm Season				Cold Season			
		Days	Deaths	Mean	SD	Days	Deaths	Mean	SD
All-natural-cause	Concepción	1,640	9,360	5.7	2.5	1,640	10,275	6.3	2.8
	Santiago	1,640	93,624	57.1	8.2	1,640	113,998	69.5	12.0
	Temuco	1,640	5,900	3.6	1.9	1,640	6,625	4.0	2.0
Cardiopulmonary	Concepción	1,640	3,648	2.2	1.5	1,640	4,398	2.7	1.7
	Santiago	1,640	37,204	22.7	5.2	1,640	51,237	31.2	8.0
	Temuco	1,640	2,165	1.3	1.2	1,640	2,578	1.6	1.3
Cardiopulmonary ≥ 65	Concepción	1,640	2,891	1.8	1.4	1,640	3,539	2.2	1.5
	Santiago	1,640	30,163	18.4	4.6	1,640	42,072	25.7	7.2
	Temuco	1,640	1,697	1.0	1.0	1,640	2,001	1.2	1.1
Respiratory	Concepción	1,640	903	0.6	0.7	1,640	1,280	0.8	0.9
	Santiago	1,640	9,613	5.9	2.7	1,640	15,757	9.6	4.7
	Temuco	1,640	572	0.3	0.6	1,640	780	0.5	0.7
Respiratory < 1	Concepción	1,640	29	0.0	0.1	1,640	33	0.0	0.1
	Santiago	1,640	128	0.1	0.3	1,640	285	0.2	0.4
	Temuco	1,640	17	0.0	0.1	1,640	19	0.0	0.1
Respiratory 1–5	Concepción	1,640	9	0.0	0.1	1,640	9	0.0	0.1
	Santiago	1,640	32	0.0	0.1	1,640	81	0.0	0.2
	Temuco	1,640	3	0.0	0.1	1,640	11	0.0	0.1
Respiratory ≥ 65	Concepción	1,640	727	0.4	0.7	1,640	1,046	0.6	0.8
	Santiago	1,640	8,066	4.9	2.4	1,640	13,315	8.1	4.2
	Temuco	1,640	446	0.3	0.5	1,640	598	0.4	0.6
Cardiovascular	Concepción	1,640	2,745	1.7	1.3	1,640	3,118	1.9	1.4
	Santiago	1,640	27,591	16.8	4.4	1,640	35,480	21.6	5.4
	Temuco	1,640	1,593	1.0	1.0	1,640	1,798	1.1	1.0
Cardiovascular ≥ 65	Concepción	1,640	2,164	1.3	1.2	1,640	2,493	1.5	1.2
	Santiago	1,640	22,097	13.5	3.8	1,640	28,757	17.5	4.8
	Temuco	1,640	1,251	0.8	0.9	1,640	1,403	0.9	0.9
Cerebrovascular–stroke	Concepción	1,640	1,097	0.7	0.8	1,640	1,211	0.7	0.9
	Santiago	1,640	8,803	5.4	2.3	1,640	10,768	6.6	2.6
	Temuco	1,640	653	0.4	0.6	1,640	741	0.5	0.7
Cerebrovascular–stroke ≥ 65	Concepción	1,640	853	0.5	0.7	1,640	946	0.6	0.8
	Santiago	1,640	7,043	4.3	2.1	1,640	8,667	5.3	2.4
	Temuco	1,640	501	0.3	0.5	1,640	570	0.3	0.6
Lower respiratory infection < 1	Concepción	1,640	27	0.0	0.1	1,640	33	0.0	0.1
	Santiago	1,640	110	0.1	0.3	1,640	258	0.2	0.4
	Temuco	1,640	15	0.0	0.1	1,640	15	0.0	0.1
Lower respiratory infection 1–14	Concepción	1,640	9	0.0	0.1	1,640	9	0.0	0.1
	Santiago	1,640	36	0.0	0.2	1,640	88	0.1	0.2
	Temuco	1,640	5	0.0	0.1	1,640	11	0.0	0.1
COPD	Concepción	1,640	202	0.1	0.3	1,640	290	0.2	0.4
	Santiago	1,640	2,648	1.6	1.3	1,640	4,477	2.7	1.8
	Temuco	1,640	146	0.1	0.3	1,640	188	0.1	0.3
COPD ≥ 65	Concepción	1,640	182	0.1	0.3	1,640	248	0.2	0.4
	Santiago	1,640	2,375	1.4	1.2	1,640	3,947	2.4	1.7
	Temuco	1,640	134	0.1	0.3	1,640	167	0.1	0.3

Appendix Table G.6. México: Mortality Data Set Summary, Stratified by Season (1997–2005)

Cause / Age Group	City	Warm Season				Cold Season			
		Days	Deaths	Mean	SD	Days	Deaths	Mean	SD
All-natural-cause	Mexico City	1377	175,841	127.7	19.2	1910	316,422	165.7	39.1
	Monterrey	1377	39,106	28.4	9.1	1910	69,727	36.5	12.6
	Toluca	1377	13,432	9.8	5.1	1910	25,855	13.5	7.1
Cardiopulmonary	Mexico City	1377	74,080	53.8	8.0	1910	131,755	69.0	15.7
	Monterrey	1377	16,611	12.1	3.8	1910	29,265	15.3	5.1
	Toluca	1377	5,433	3.9	2.0	1910	10,246	5.4	2.7
Cardiopulmonary ≥ 65	Mexico City	1377	53,485	38.8	7.0	1910	95,905	50.2	12.3
	Monterrey	1377	11,833	8.6	3.3	1910	21,336	11.2	4.3
	Toluca	1377	3,660	2.7	1.6	1910	6,652	3.5	2.1
Respiratory	Mexico City	1377	17,417	12.6	3.7	1910	48,583	25.4	9.9
	Monterrey	1377	3,345	2.4	1.6	1910	6,973	3.7	2.4
	Toluca	1377	1,759	1.3	1.2	1910	4,225	2.2	1.8
Respiratory < 1	Mexico City	1377	1,330	1.0	1.1	1910	4,478	2.3	2.1
	Monterrey	1377	102	0.1	0.3	1910	314	0.2	0.5
	Toluca	1377	382	0.3	0.5	1910	1,321	0.7	0.9
Respiratory 1–5	Mexico City	1377	192	0.1	0.4	1910	610	0.3	0.6
	Monterrey	1377	39	0.0	0.2	1910	81	0.06	0.2
	Toluca	1377	60	0.0	0.2	1910	123	0.1	0.3
Respiratory ≥ 65	Mexico City	1377	12,143	8.8	3.0	1910	25,560	13.4	5.7
	Monterrey	1377	2,471	1.8	1.4	1910	5,256	2.8	2.0
	Toluca	1377	1,003	0.7	0.9	1910	2,192	1.1	1.2
Cardiovascular	Mexico City	1377	56,663	41.1	7.0	1910	94,190	49.3	10.2
	Monterrey	1377	13,266	9.6	3.3	1910	22,292	11.7	4.0
	Toluca	1377	3,674	2.7	1.7	1910	6,021	3.2	1.9
Cardiovascular ≥ 65	Mexico City	1377	41,342	30.0	6.1	1910	70,345	36.8	8.6
	Monterrey	1377	9,362	6.8	2.9	1910	16,080	8.4	3.3
	Toluca	1377	2,657	1.9	1.4	1910	4,460	2.3	1.6
Cerebrovascular–stroke	Mexico City	1377	13,487	9.8	3.1	1910	21,565	11.3	3.6
	Monterrey	1377	3,140	2.3	1.5	1910	5,269	2.8	1.7
	Toluca	1377	1,047	0.8	0.9	1910	1,624	0.9	0.9
Cerebrovascular–stroke ≥ 65	Mexico City	1377	9,928	7.2	2.7	1910	16,152	8.5	3.1
	Monterrey	1377	2,353	1.7	1.3	1910	3,953	2.1	1.5
	Toluca	1377	749	0.5	0.7	1910	1,150	0.6	0.8
Lower respiratory infection < 1	Mexico City	1377	1,085	0.8	1.0	1910	3,753	2.0	1.9
	Monterrey	1377	66	0.0	0.2	1910	197	0.1	0.3
	Toluca	1377	367	0.3	0.5	1910	1,251	0.7	0.9
Lower respiratory infection 1–14	Mexico City	1377	214	0.2	0.4	1910	569	0.3	0.6
	Monterrey	1377	21	0.0	0.1	1910	49	0.01	0.2
	Toluca	1377	38	0.0	0.2	1910	69	0.04	0.2
COPD	Mexico City	1377	7,821	5.7	2.4	1910	16,099	8.4	4.1
	Monterrey	1377	1,453	1.1	1.0	1910	3,181	1.7	1.5
	Toluca	1377	665	0.5	0.7	1910	1,362	0.7	0.9
COPD ≥ 65	Mexico City	1377	6,769	4.9	2.3	1910	13,909	7.3	3.7
	Monterrey	1377	1,264	0.9	1.0	1910	2,852	1.5	1.4
	Toluca	1377	572	0.4	0.7	1910	1,164	0.6	0.8