

Poluição do Ar em Accra

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- 1 Projeto
- 2 Metodologia
- 3 Resultados

Slide 1

Sobre o projeto

Análise de Fatores

Inserir conteúdo.

PMF

Inserir conteúdo.

Black Carbon

Inserir conteúdo.

	$PM_{2.5}$	PM_{10}	Total
Área residencial (vias não pavimentadas)	199	197	396
Tráfego intenso (vias pavimentadas)	227	233	460
Total	426	430	856

Tabela: Quantidade de amostras coletadas por região e moda.

Sigla	Região	Moda	Casos
RFcH	Residencial	$MP_{2.5}$	197
TFcH	Tráfego intenso	$MP_{2.5}$	183
RIcH	Residencial	MP_{10}	197
TIcH	Tráfego intenso	MP_{10}	200
RGcH	Residencial	$MP_{2.5-10}$	196
TGcH	Tráfego intenso	$MP_{2.5-10}$	199

Tabela: Quantidade de amostras coletadas incluindo o período do Harmatã.

Sigla	Região	Moda	Casos
RFsH	Residencial	$MP_{2.5}$	118
TFsH	Tráfego intenso	$MP_{2.5}$	117
RIsh	Residencial	MP_{10}	118
TIsh	Tráfego intenso	MP_{10}	121
RGsH	Residencial	$MP_{2.5-10}$	119
TGsH	Tráfego intenso	$MP_{2.5-10}$	120

Tabela: Quantidade de amostras coletadas excluindo o período do Harmatã.

Sigla	n	Média	Desvio Padrão	Mediana	Ultrapassagens
RFcH	197	83.28	18.12	29.43	131
RGcH	183	50.61	4.68	29.66	28
RIcH	197	113.77	11.55	58.72	86
TFcH	200	76.42	9.47	36.36	184
TGcH	196	59.58	4.35	39.42	38
TIcH	199	133.99	11.63	72.72	108

Tabela: Estatística descritiva e ultrapassagens dos padrões de referência da Organização Mundial de Saúde (OMS). 25 $\mu\text{g}/\text{m}^3$ para $MP_{2.5}$ e 70 $\mu\text{g}/\text{m}^3$ para MP_{10} .

Tabela: Análise de Fatores: RFsH

RFsH									
Variable	PC1	PC4	PC2	PC6	PC3	PC5	h2	u2	com
Al	0.99	0.09	-0.02	0.06	0.00	0.05	0.99	0.01	1.03
Ti	0.99	0.09	-0.02	0.06	-0.01	0.07	0.99	0.01	1.03
Si	0.99	0.11	0.00	0.05	-0.02	0.04	0.99	0.01	1.03
Fe	0.99	0.09	-0.03	0.07	-0.01	0.08	1.00	0.00	1.04
Mn	0.98	0.11	-0.01	0.09	0.00	0.07	0.99	0.01	1.05
Ca	0.98	0.11	0.03	0.06	-0.01	0.08	0.98	0.02	1.05
Mg	0.96	0.12	0.12	0.07	0.04	0.01	0.95	0.05	1.08
mass	0.92	0.25	0.05	0.21	0.00	0.08	0.97	0.03	1.27
V	0.79	0.05	-0.04	0.10	0.31	0.03	0.74	0.26	1.35
K	0.65	0.57	0.14	0.33	0.06	0.09	0.89	0.11	2.64
S	0.05	0.90	0.32	0.04	0.12	0.07	0.95	0.05	1.31
P	0.46	0.80	-0.10	-0.01	0.04	0.04	0.87	0.13	1.63
Cl	0.36	0.01	0.86	0.02	0.10	0.14	0.90	0.10	1.44
Na	-0.32	0.27	0.78	-0.04	0.19	-0.02	0.82	0.18	1.74
BC	0.16	0.07	-0.03	0.93	0.08	0.10	0.92	0.08	1.11
Pb	0.23	-0.07	0.05	0.39	0.73	0.14	0.76	0.24	1.90
Br	-0.14	0.28	0.29	-0.15	0.72	0.06	0.73	0.27	1.89
Zn	0.13	0.09	0.10	0.12	0.14	0.96	0.99	0.01	1.15
SS loadings	9.22	2.1	1.6	1.25	1.24	1.03			
Proportion Var	0.51	0.12	0.09	0.07	0.07	0.06			
Cumulative Var	0.51	0.63	0.72	0.79	0.86	0.91			
Cum. factor Var	0.56	0.69	0.79	0.86	0.94	1			

Tabela: Análise de Fatores: RGsH

RGsH									
Variable	PC1	PC2	PC6	PC3	PC4	PC5	h2	u2	com
Mn	0.95	0.19	0.14	0.12	0.07	0.07	0.99	0.01	1.18
Ca	0.95	0.15	0.10	0.11	0.06	0.14	0.97	0.03	1.15
Ti	0.95	0.21	0.13	0.13	0.07	0.07	0.99	0.01	1.20
Fe	0.95	0.21	0.16	0.13	0.07	0.07	0.99	0.01	1.22
Si	0.93	0.25	0.09	0.16	0.08	0.09	0.98	0.02	1.27
Al	0.93	0.28	0.12	0.18	0.07	0.07	0.99	0.01	1.31
Mg	0.92	0.26	0.05	0.15	0.07	0.13	0.95	0.05	1.28
V	0.90	0.26	0.20	0.12	0.05	0.05	0.95	0.05	1.33
Cl	0.89	0.02	-0.06	-0.24	-0.01	0.07	0.86	0.14	1.18
K	0.80	0.32	0.39	0.11	0.14	0.14	0.95	0.05	2.00
Pb	0.74	0.02	0.51	0.02	0.19	0.16	0.88	0.12	2.04
Zn	0.69	0.10	0.59	-0.08	0.18	0.03	0.87	0.13	2.20
S	0.30	0.85	0.21	-0.09	0.10	0.20	0.91	0.09	1.58
P	0.35	0.84	0.13	0.12	0.07	-0.03	0.87	0.13	1.46
BC	0.07	0.42	0.77	0.25	0.10	0.15	0.87	0.13	1.96
Na	-0.23	-0.03	-0.12	-0.95	-0.02	0.03	0.97	0.03	1.15
mass	0.12	0.12	0.13	0.03	0.97	0.08	1.00	0.00	1.11
Br	0.21	0.11	0.12	-0.03	0.08	0.95	0.99	0.01	1.18
SS loadings	9.79	2.16	1.6	1.22	1.1	1.09			
Proportion Var	0.54	0.12	0.09	0.07	0.06	0.06			
Cumulative Var	0.54	0.66	0.75	0.82	0.88	0.94			
Cum. factor Var	0.58	0.7	0.8	0.87	0.94	1			

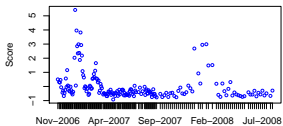
Tabela: Análise de Fatores: TFsH

TFsH									
Variable	PC1	PC3	PC2	PC6	PC4	PC5	h2	u2	com
Si	0.98	0.14	-0.02	0.11	0.07	0.04	0.99	0.01	1.08
Al	0.98	0.15	-0.02	0.10	0.08	0.03	0.99	0.01	1.09
Ti	0.97	0.12	-0.02	0.18	0.06	0.02	0.99	0.01	1.11
Fe	0.97	0.13	-0.02	0.20	0.08	0.02	1.00	0.00	1.14
Mn	0.96	0.12	-0.01	0.19	0.07	0.02	0.99	0.01	1.13
Ca	0.96	0.13	0.02	0.22	0.07	0.03	0.99	0.01	1.15
Mg	0.95	0.16	0.09	0.06	0.10	0.06	0.96	0.04	1.11
mass	0.91	0.16	0.01	0.29	0.14	0.08	0.97	0.03	1.33
V	0.85	0.13	0.03	0.25	0.19	0.06	0.83	0.17	1.33
K	0.79	0.29	0.04	0.36	0.20	0.17	0.91	0.09	1.98
Pb	0.58	0.03	0.10	0.58	0.24	0.22	0.80	0.20	2.70
P	0.34	0.88	-0.10	0.01	0.08	-0.01	0.91	0.09	1.34
S	0.16	0.86	0.24	0.11	0.05	0.29	0.92	0.08	1.52
Na	-0.36	0.19	0.84	0.03	-0.08	0.09	0.88	0.12	1.53
Cl	0.46	-0.10	0.78	0.11	0.02	0.15	0.86	0.14	1.80
Zn	0.53	0.10	0.11	0.75	0.09	0.05	0.88	0.12	1.95
BC	0.21	0.10	-0.05	0.13	0.96	0.06	0.99	0.01	1.17
Br	0.06	0.19	0.17	0.10	0.06	0.95	0.98	0.02	1.19
SS loadings	9.87	1.87	1.44	1.41	1.14	1.12			
Proportion Var	0.55	0.1	0.08	0.08	0.06	0.06			
Cumulative Var	0.55	0.65	0.73	0.81	0.87	0.94			
Cum. factor Var	0.59	0.7	0.78	0.87	0.93	1			

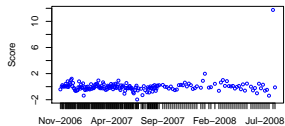
Tabela: Análise de Fatores: TGsH

TGsH									
Variable	PC1	PC6	PC2	PC3	PC4	PC5	h2	u2	com
Ti	0.97	0.15	0.06	0.11	0.10	0.06	0.99	0.01	1.11
Mn	0.97	0.13	0.05	0.09	0.10	0.06	0.98	0.02	1.09
Fe	0.97	0.15	0.07	0.10	0.10	0.06	0.99	0.01	1.11
Ca	0.97	0.10	0.07	0.08	0.09	0.11	0.97	0.03	1.09
Si	0.95	0.18	0.09	0.14	0.10	0.08	0.98	0.02	1.18
V	0.94	0.18	0.06	0.09	0.09	0.04	0.95	0.05	1.13
Al	0.94	0.20	0.11	0.16	0.09	0.07	0.98	0.02	1.21
Mg	0.93	0.18	0.08	0.13	0.09	0.10	0.94	0.06	1.18
Cl	0.91	-0.05	0.04	-0.18	0.01	0.08	0.87	0.13	1.11
K	0.86	0.27	0.32	0.11	0.15	0.12	0.96	0.04	1.62
Pb	0.76	0.04	0.54	0.02	0.18	0.15	0.92	0.08	2.05
Zn	0.69	0.08	0.61	-0.06	0.17	0.08	0.89	0.11	2.17
P	0.68	0.64	0.11	0.11	0.09	0.00	0.90	0.10	2.14
S	0.25	0.86	0.30	-0.06	0.09	0.19	0.93	0.07	1.57
BC	-0.05	0.40	0.80	0.26	0.10	0.13	0.89	0.11	1.82
Na	-0.21	0.01	-0.14	-0.95	-0.02	0.02	0.97	0.03	1.15
mass	0.21	0.10	0.14	0.02	0.96	0.08	1.00	0.00	1.17
Br	0.18	0.14	0.13	-0.02	0.07	0.96	1.00	0.00	1.16
SS loadings	10.56	1.62	1.59	1.15	1.1	1.07			
Proportion Var	0.59	0.09	0.09	0.06	0.06	0.06			
Cumulative Var	0.59	0.68	0.76	0.83	0.89	0.95			
Cum. factor Var	0.62	0.71	0.81	0.87	0.94	1			

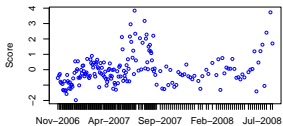
RGCh: Fator 1



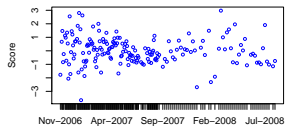
RGCh: Fator 2



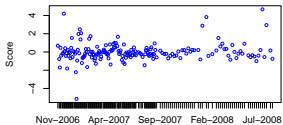
RGCh: Fator 3



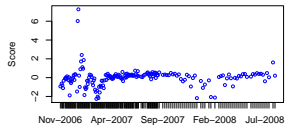
RGCh: Fator 4



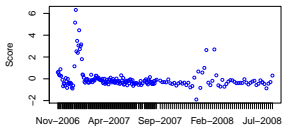
RGCh: Fator 5



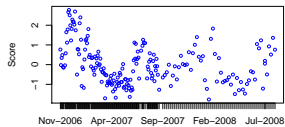
RGCh: Fator 6



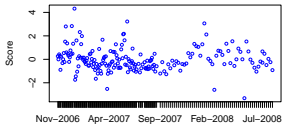
RFCh: Fator 1



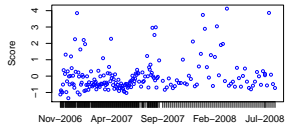
RFCh: Fator 2



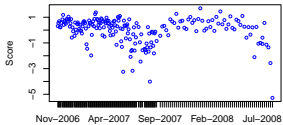
RFCh: Fator 3



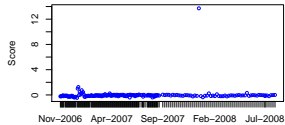
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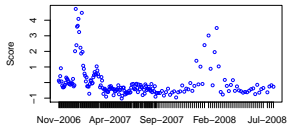
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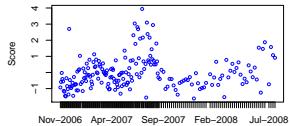
RFCh: Fator 6



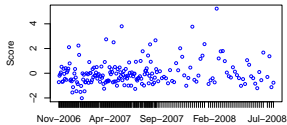
TGCh: Fator 1



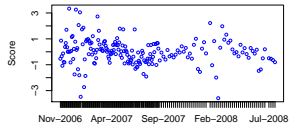
TGCh: Fator 2



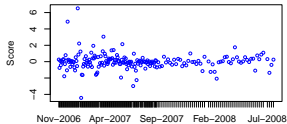
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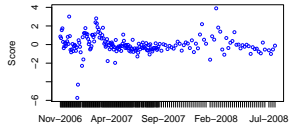
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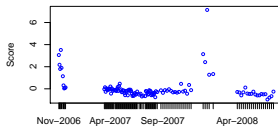
TGCh: Fator 5



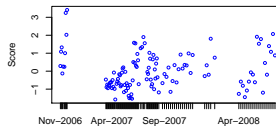
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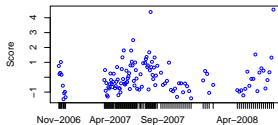
TFsH: Fator 1



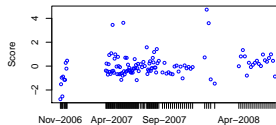
TFsH: Fator 2



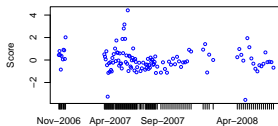
TFsH: Fator 3



TFsH: Fator 4



TFsH: Fator 5



TFsH: Fator 6

