

Koncentrace znečišťujících látek v zimních měsících v letech 2005-2011

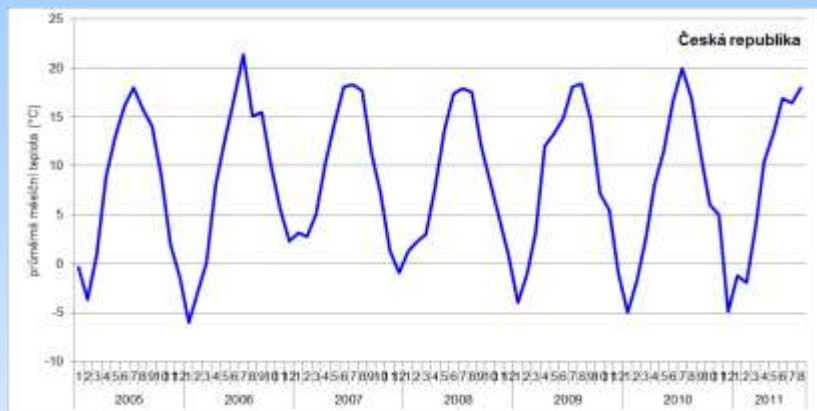
Jana Ostatnická
ČHMÚ

Zimní období říjen-březen

Nejvyšší koncentrace sledovaných znečišťujících látek, zejména suspendovaných částic PM_{10} a $PM_{2,5}$, jsou naměřeny v zimních měsících, a to zejména v měsících leden a únor. V těchto měsících většinou bývají teploty celodenně pod bodem mrazu.

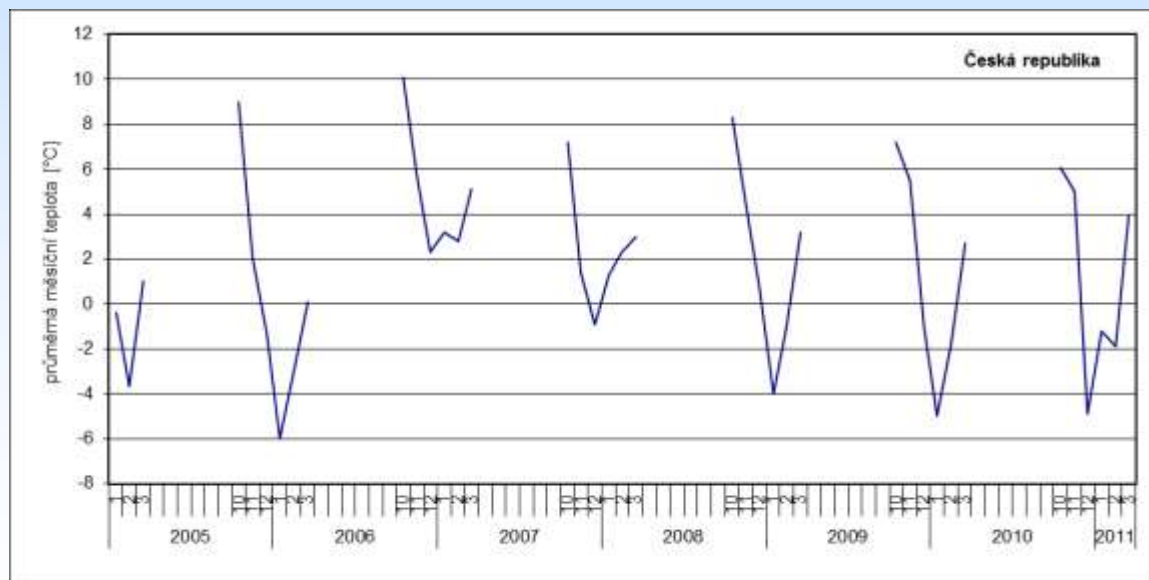
V období měsíců prosinec – únor se ve zvýšené míře vyskytují také dny se špatnými rozptylovými podmínkami. Zvýšené emise z vytápění a zejména nepříznivé rozptylové podmínky vedou k výskytu vysokých koncentrací znečišťujících látek, zejména částic PM.

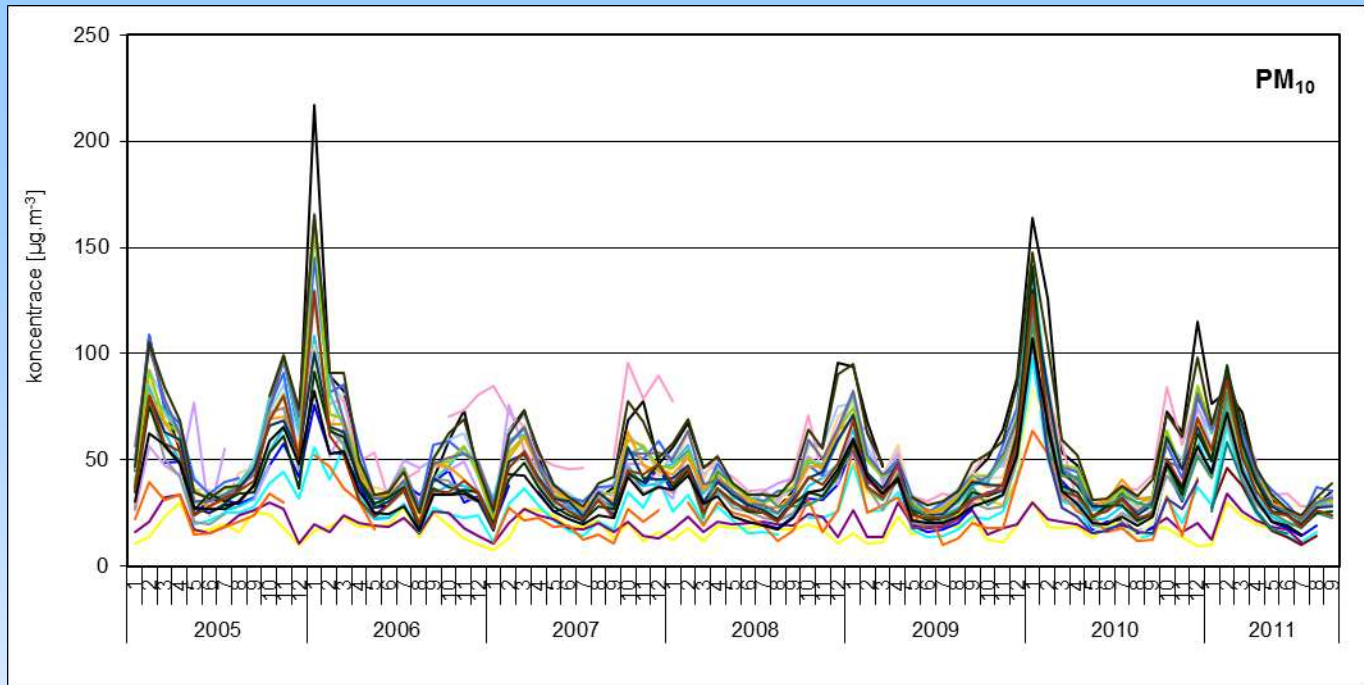
Průměrné měsíční teploty - Česká republika



2005-2011

říjen-březen

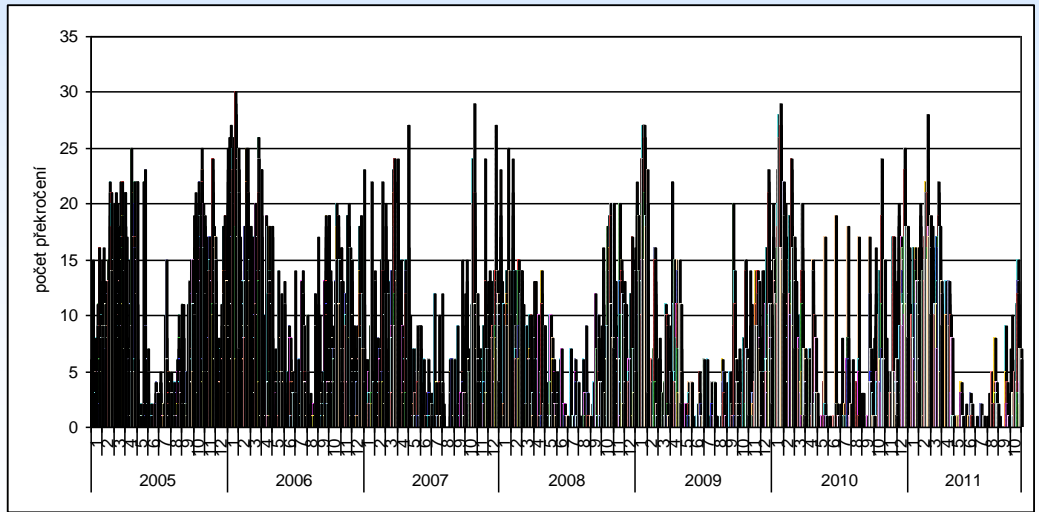




PM₁₀ 2005-2011

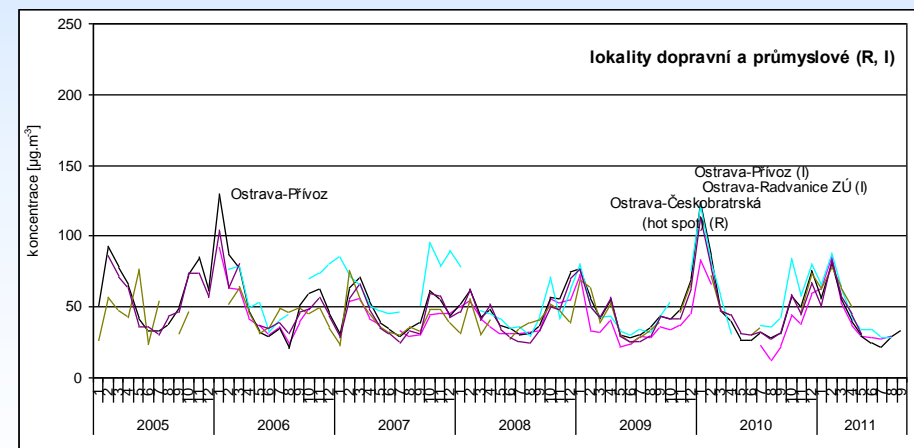
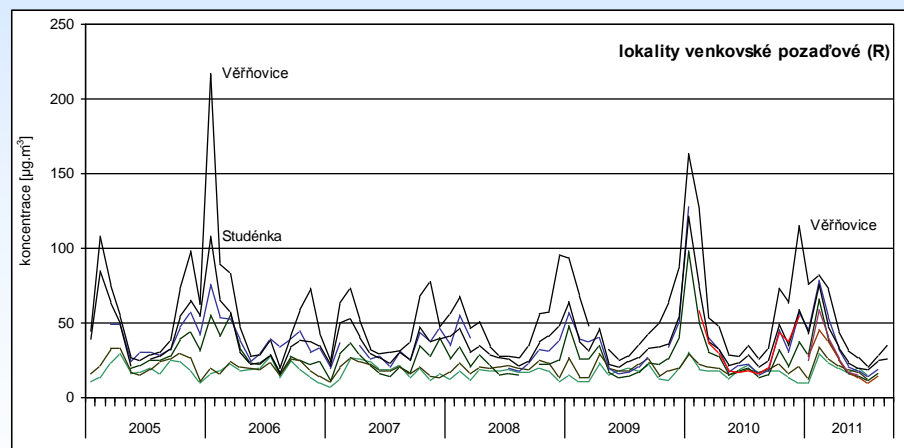
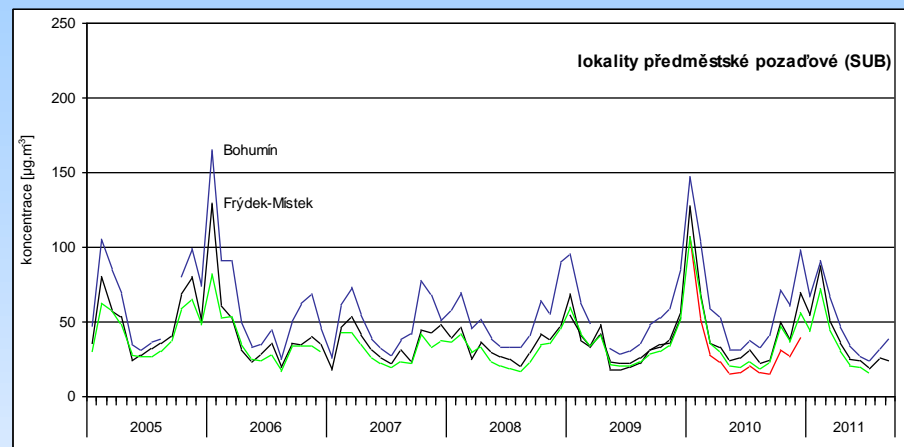
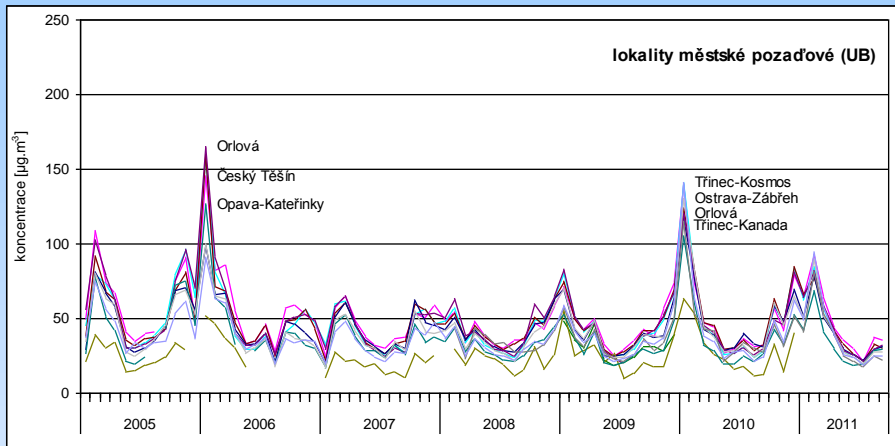
Průměrné
měsíční
koncentrace

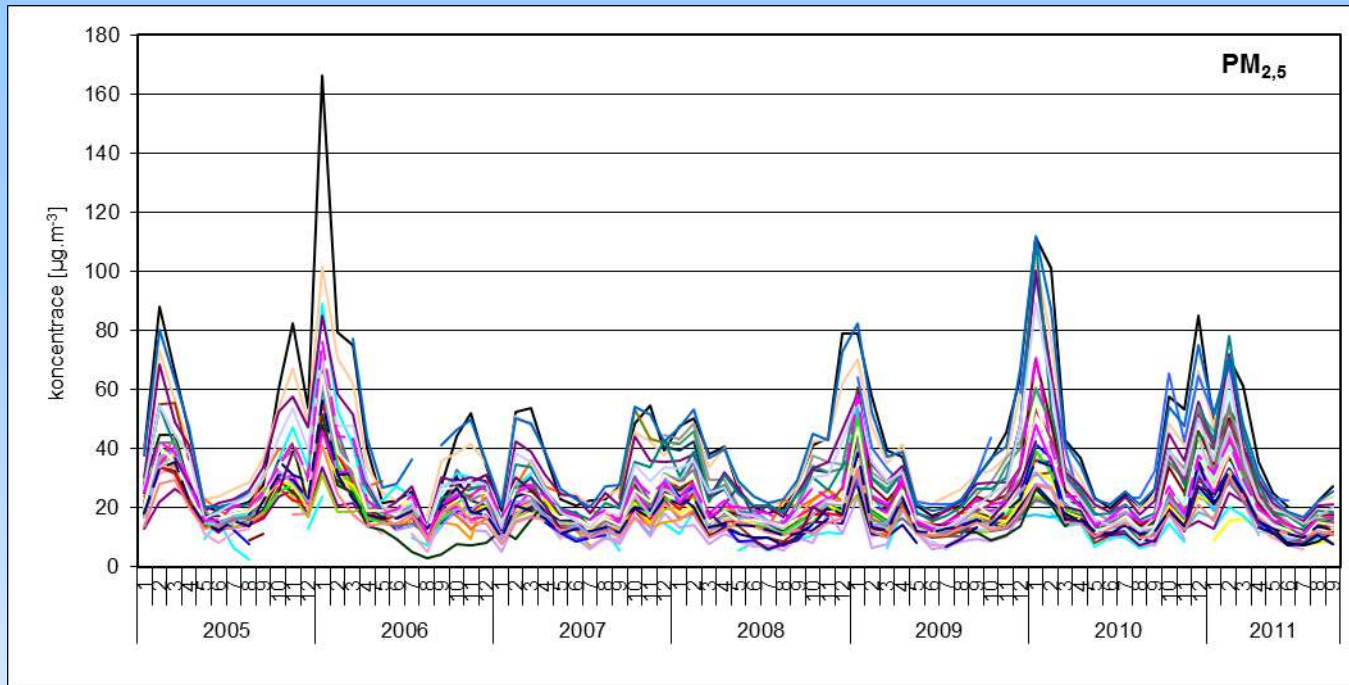
Počty překročení
hodnoty 24hod.
emisního limitu 50
µg.m⁻³ v jednotlivých
měsících



PM₁₀ 2005-2011

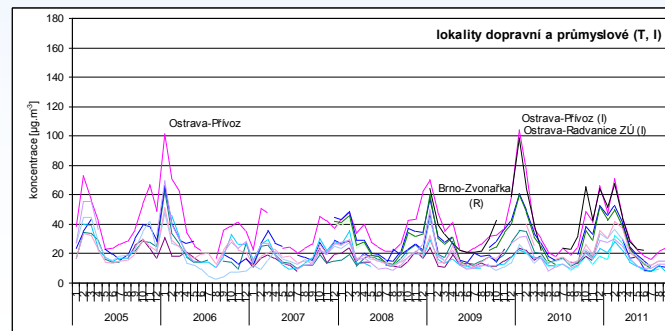
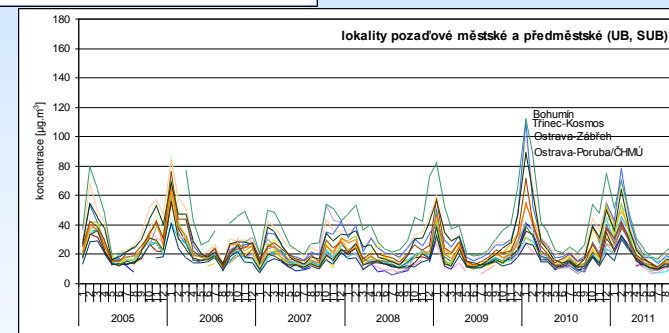
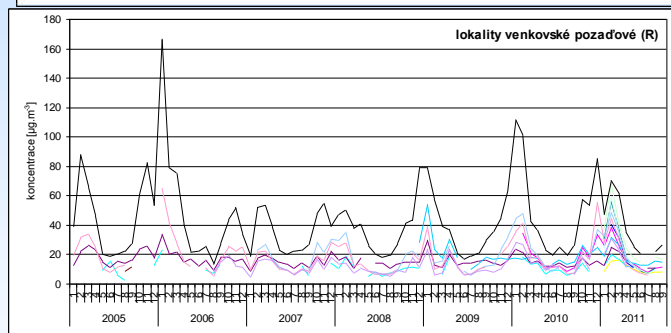
Průměrné měsíční koncentrace podle typu lokality (klasifikace podle Eol)

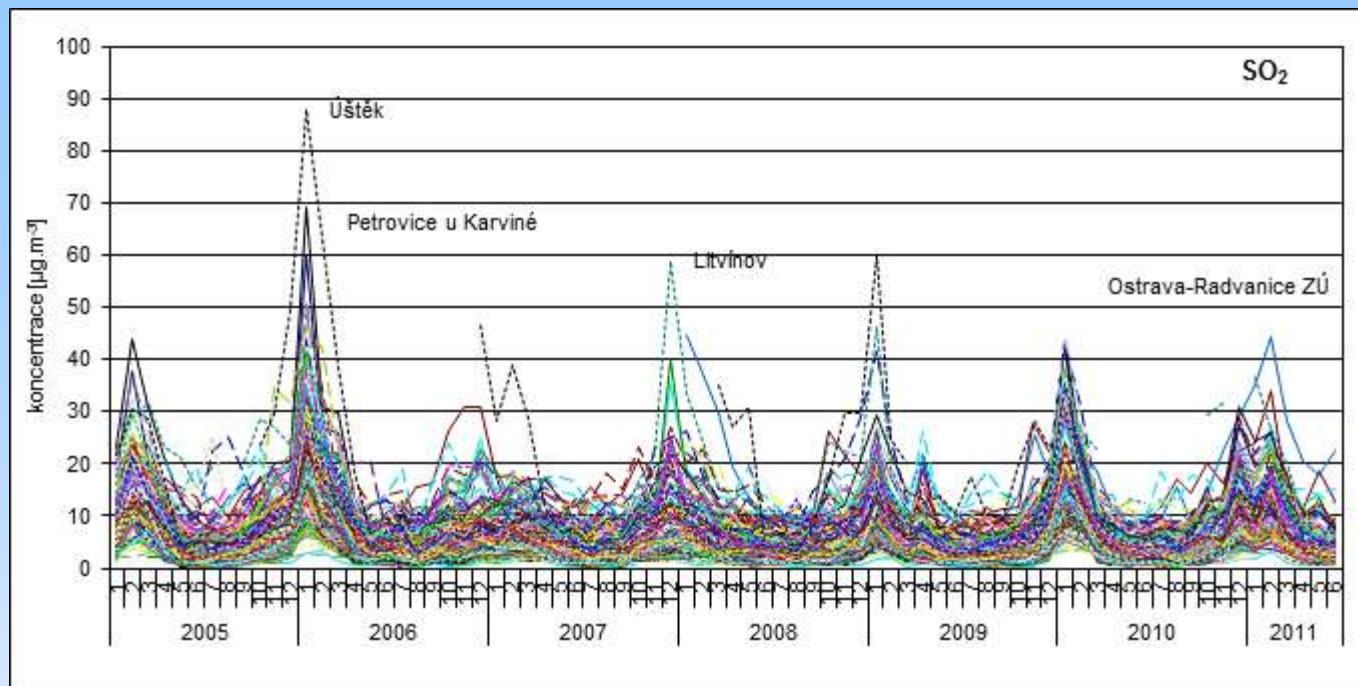




Průměrné
měsíční
koncentrace
podle typu
lokality
(klasifikace)

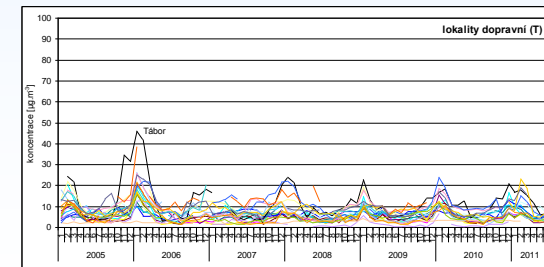
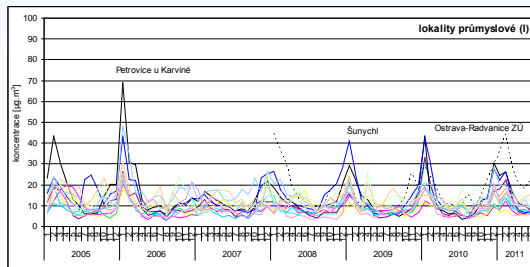
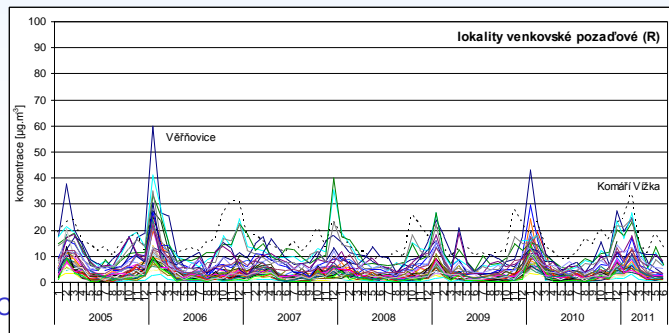
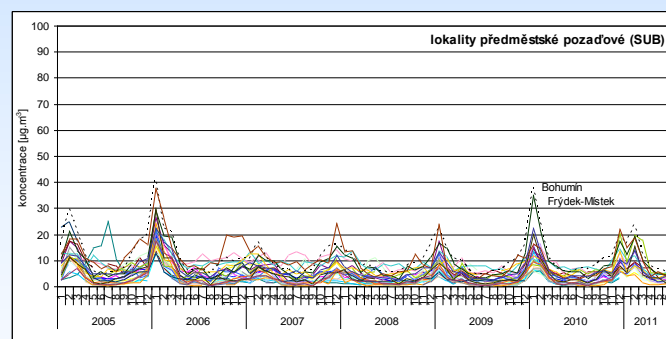
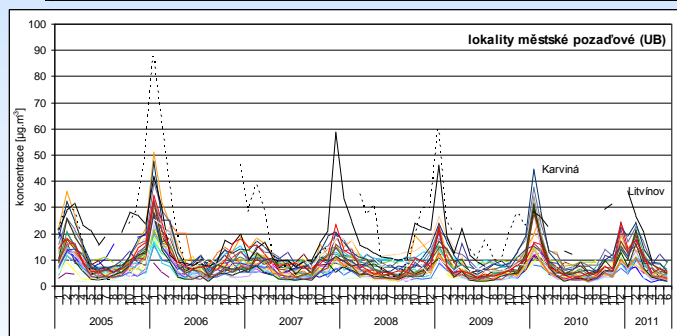
PM_{2,5}
2005-2011



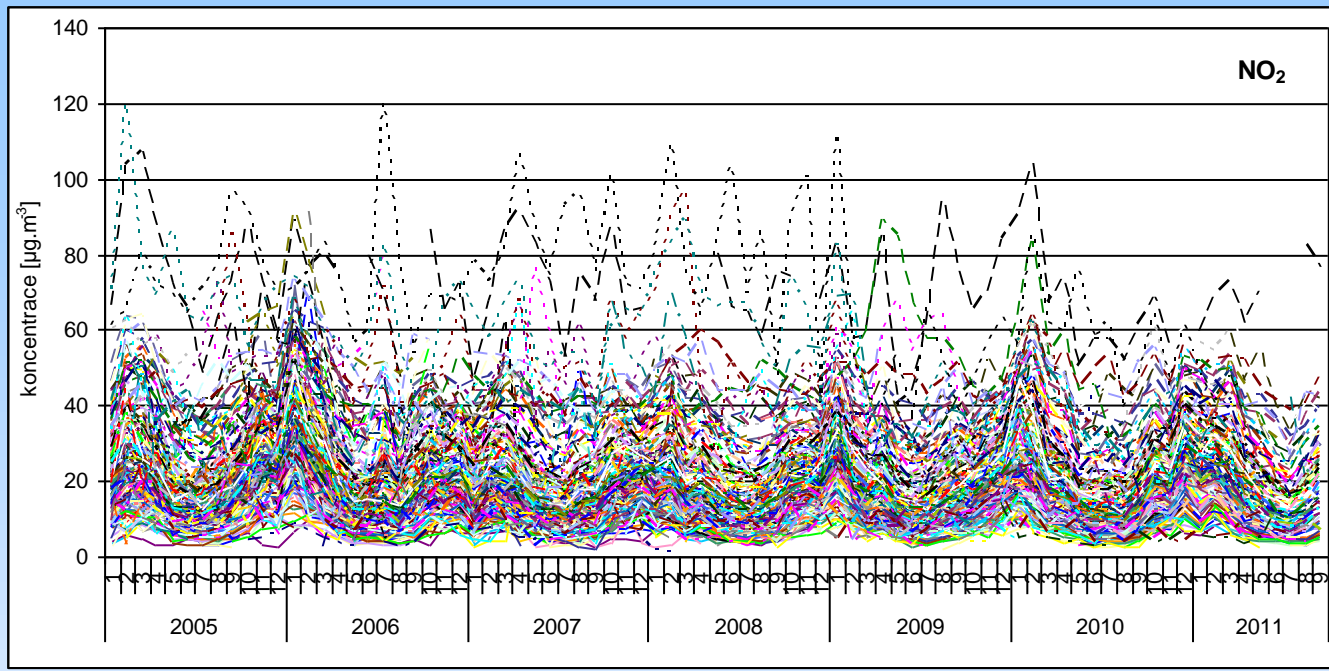


Průměrné měsíční koncentrace podle typu lokality (klasifikace)

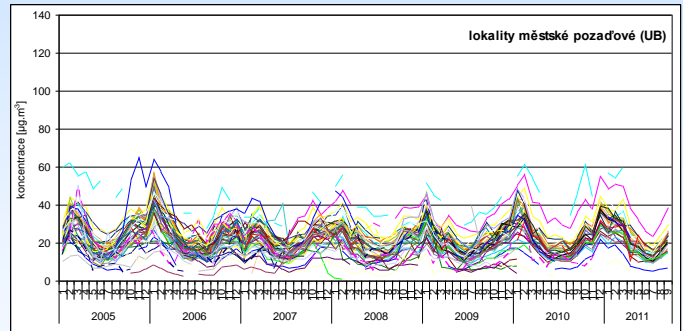
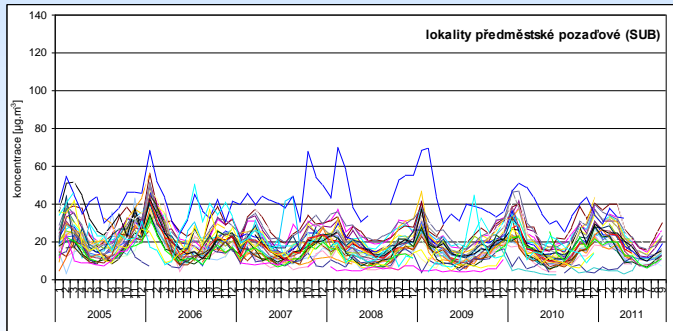
SO₂
2005-2011



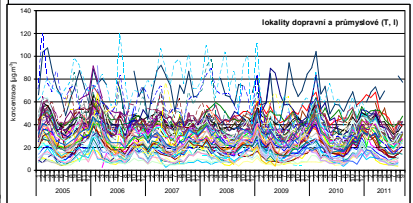
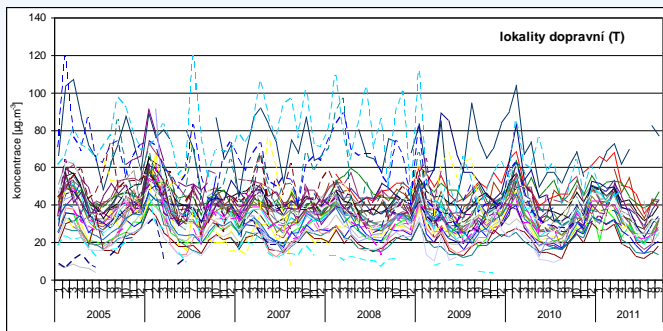
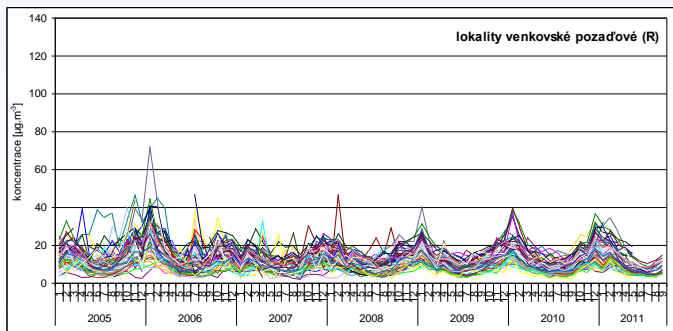
Hustopeče 8.-10. listopadu 2011



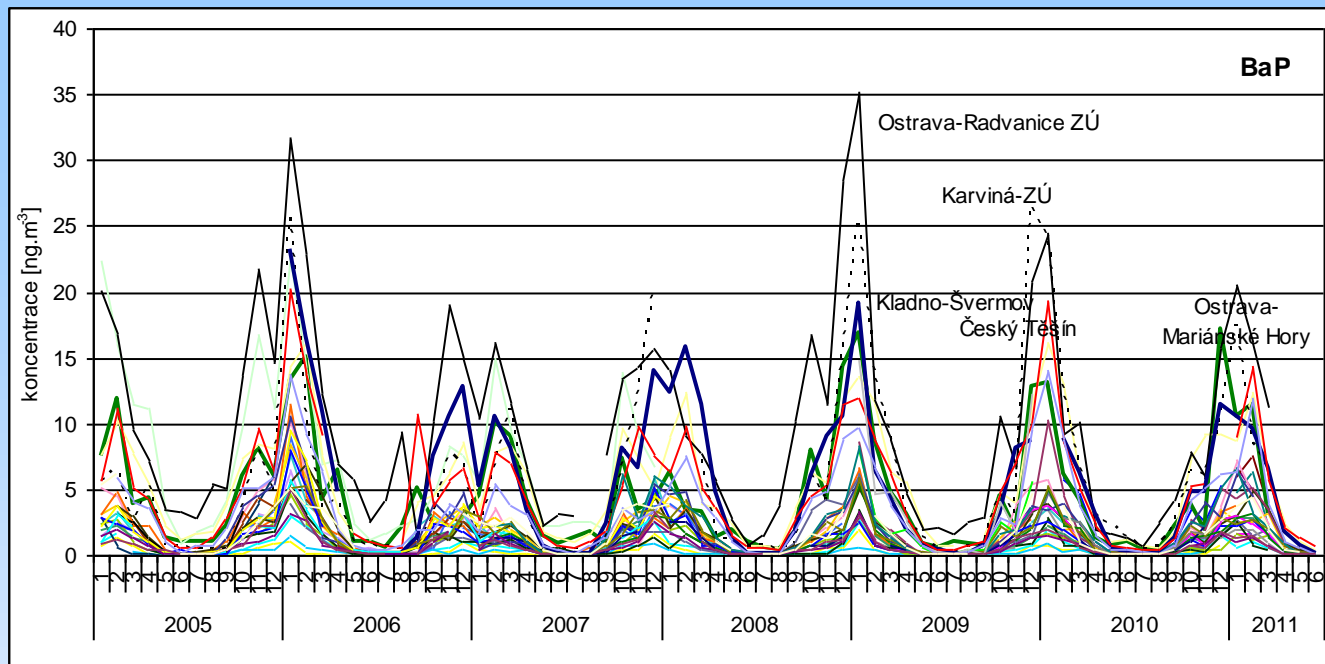
Průměrné
měsíční
koncentrace
podle typu
lokality
(klasifikace)



NO₂
2005-2011

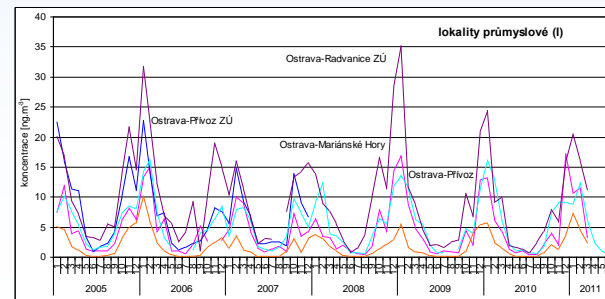
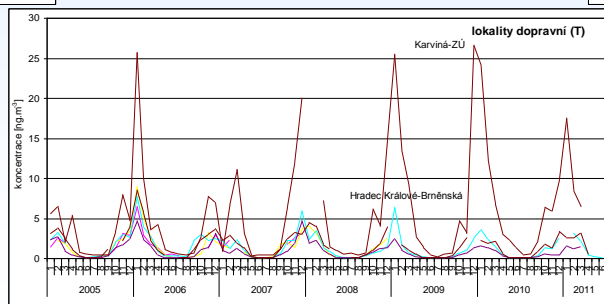
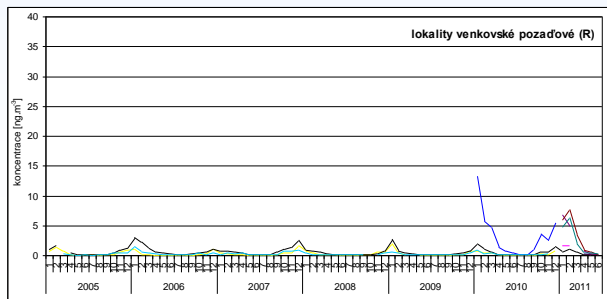
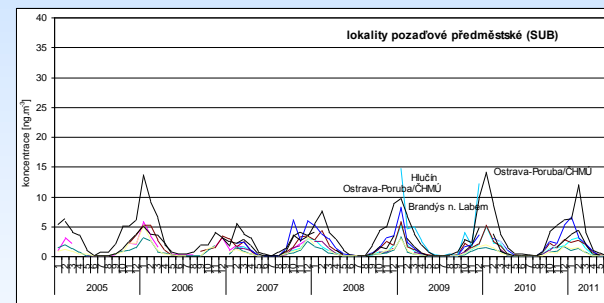
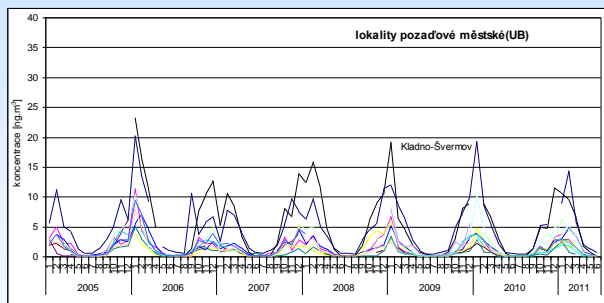


Hustopeče 8.-10. listopadu 2011

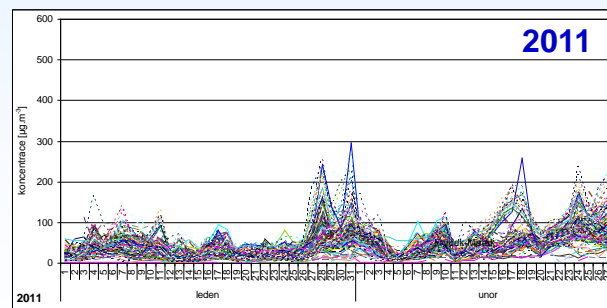
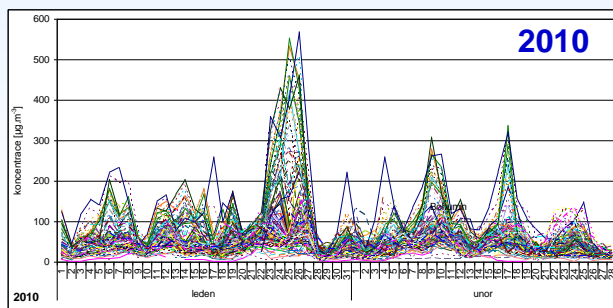
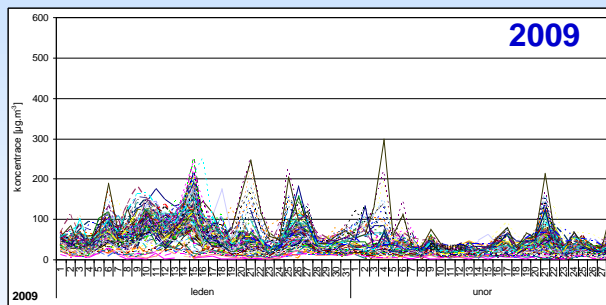
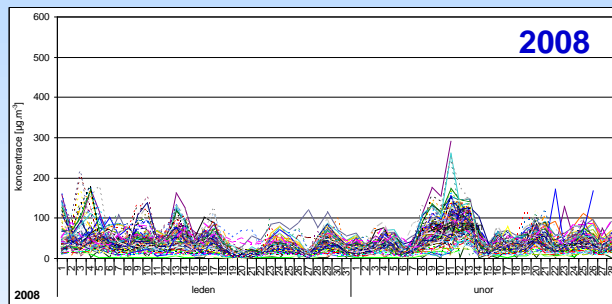
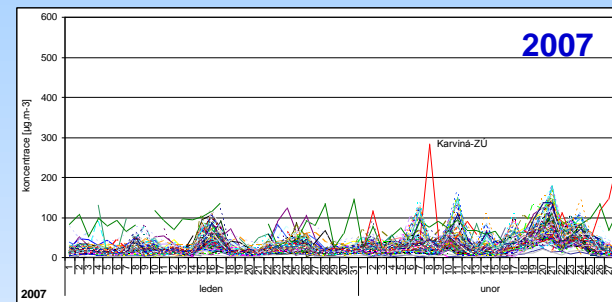
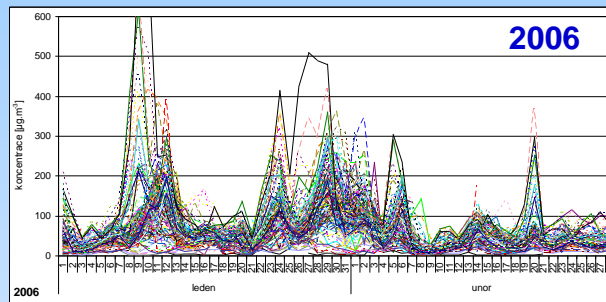
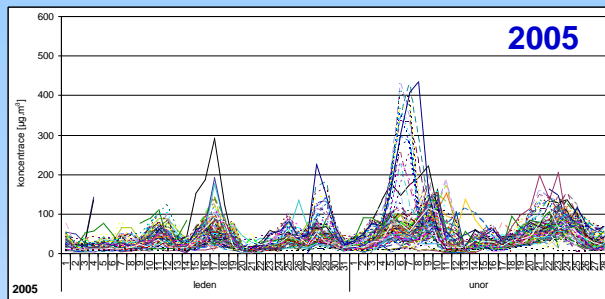


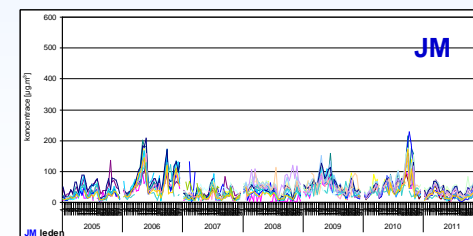
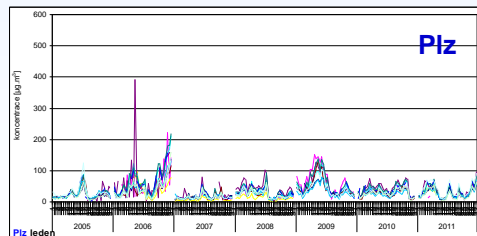
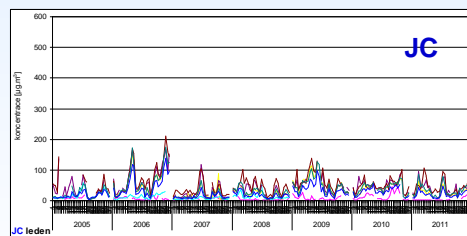
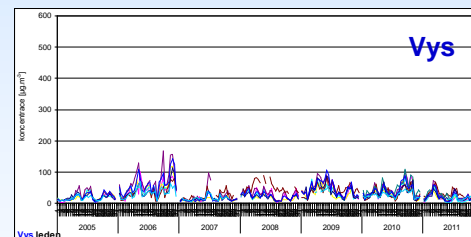
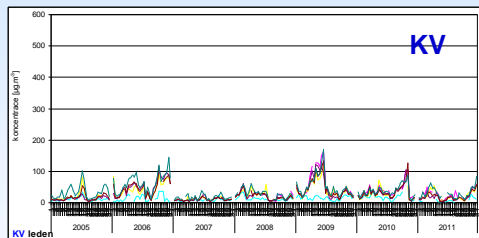
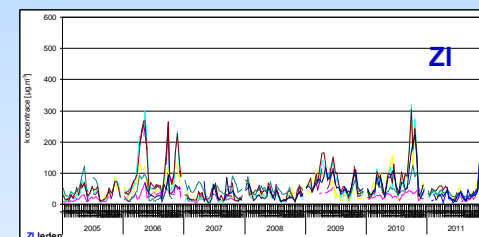
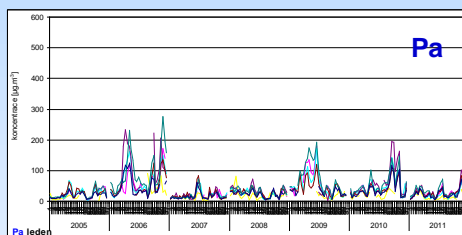
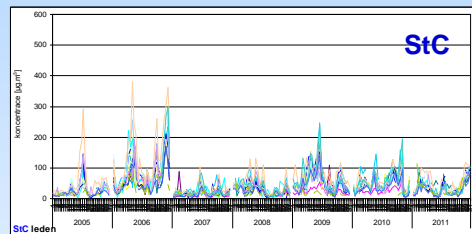
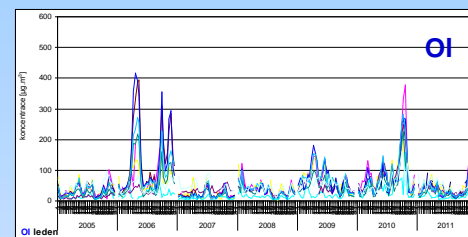
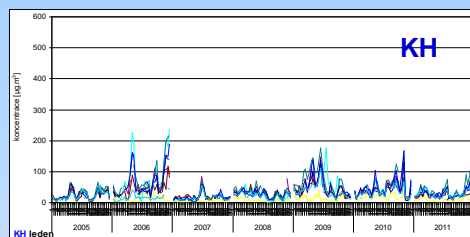
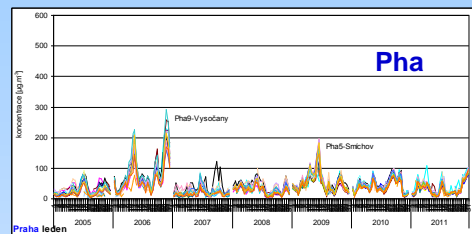
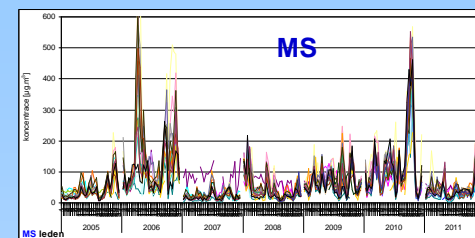
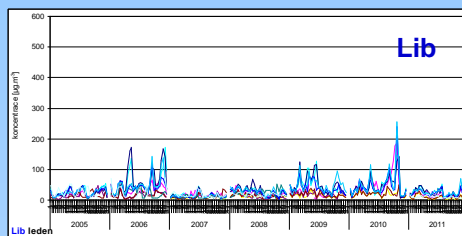
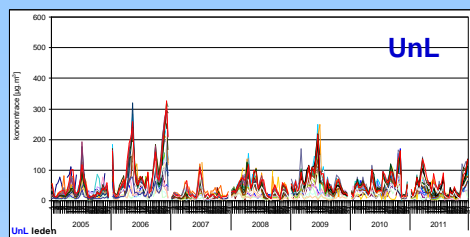
Průměrné
měsíční
koncentrace
podle typu
lokality
(klasifikace)

BaP
2005-2011

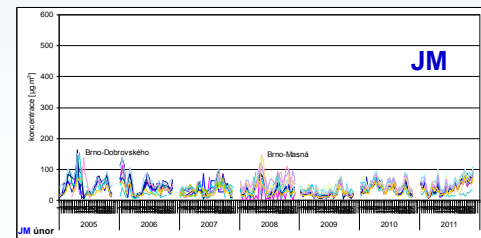
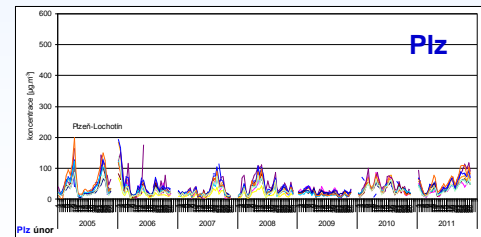
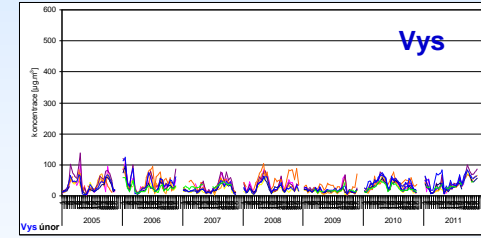
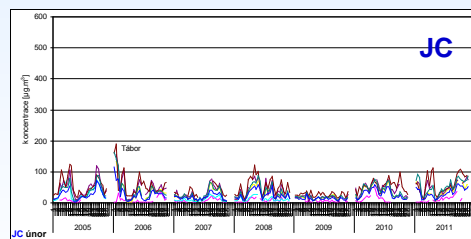
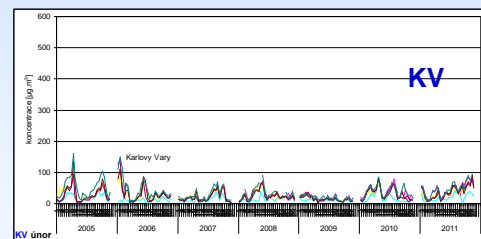
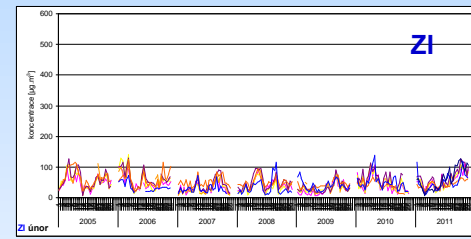
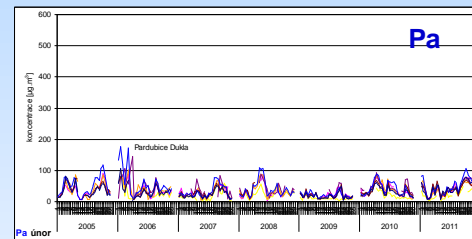
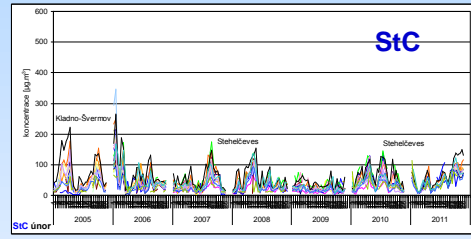
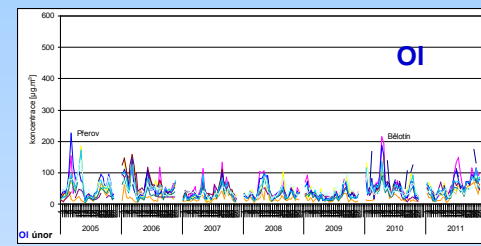
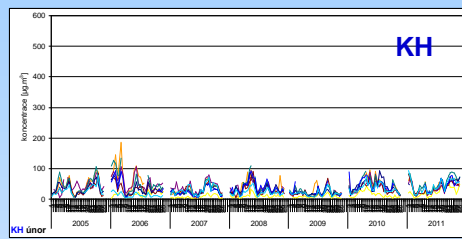
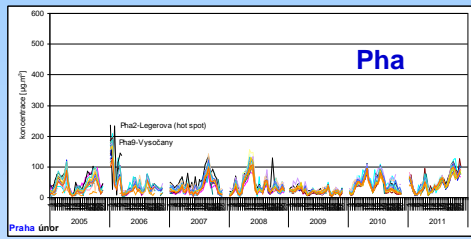
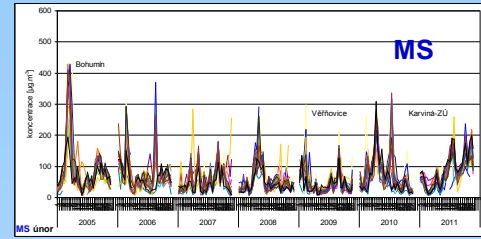
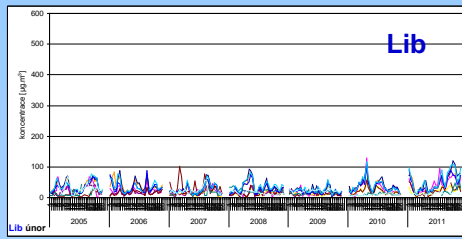
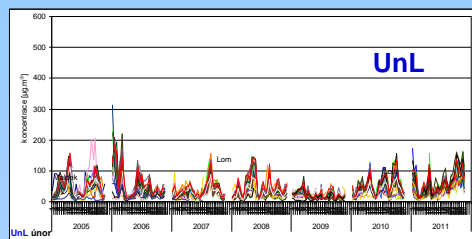


PM₁₀, leden-únor 2005-2011 denní průměrné koncentrace

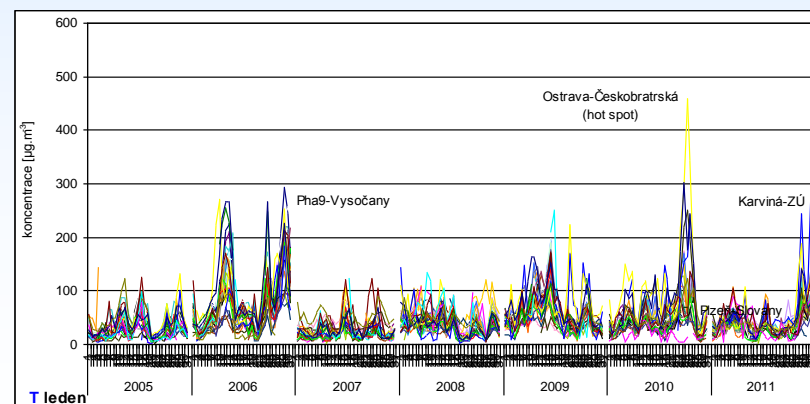
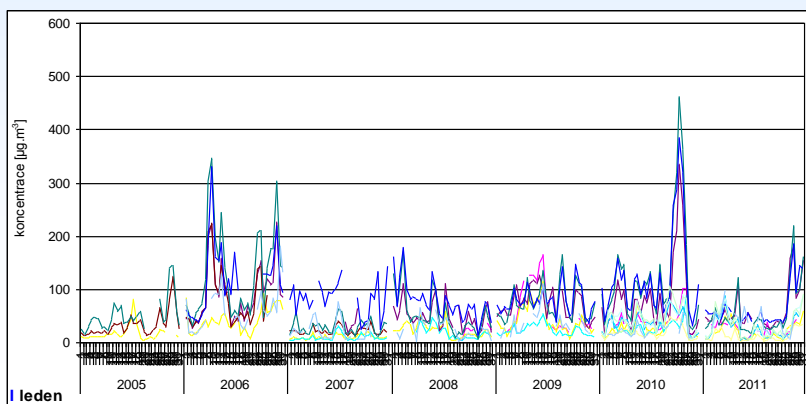
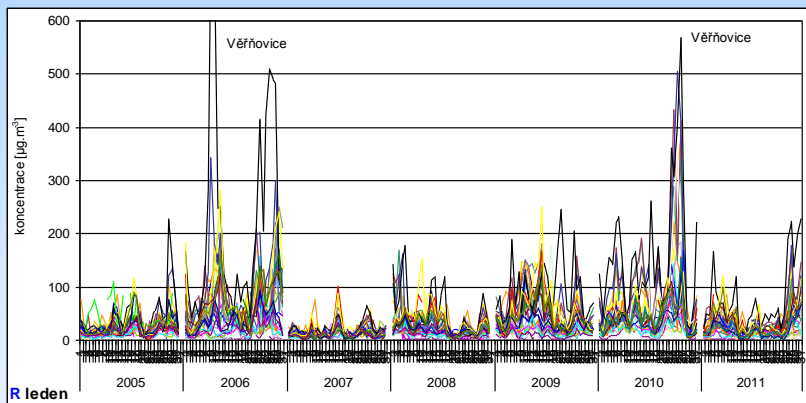
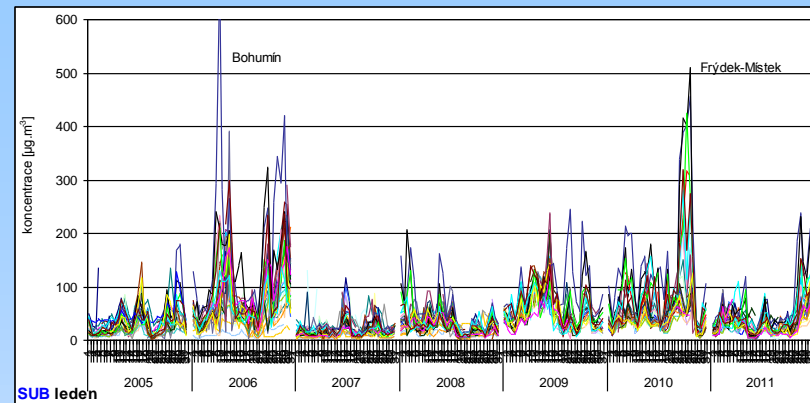
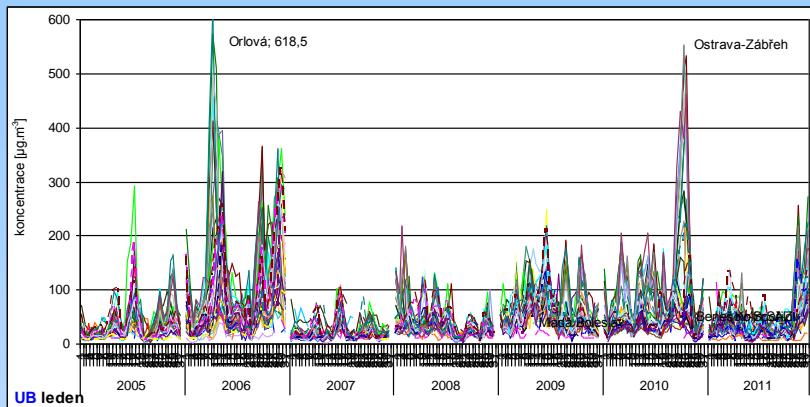




**PM₁₀ leden 2005-2011
denní průměrné koncentrace
v jednotlivých krajích ČR**

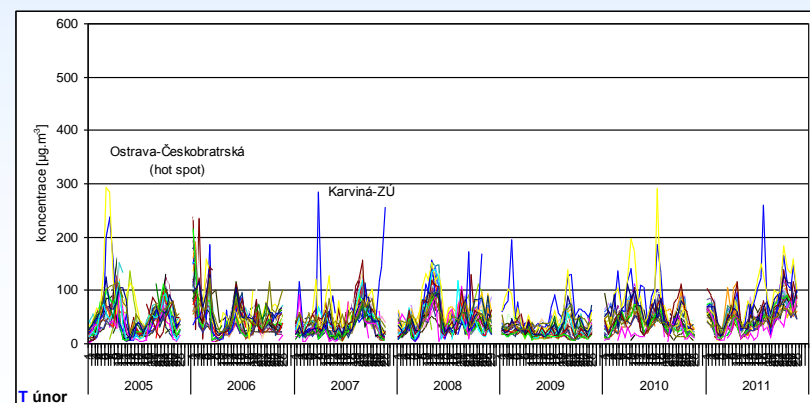
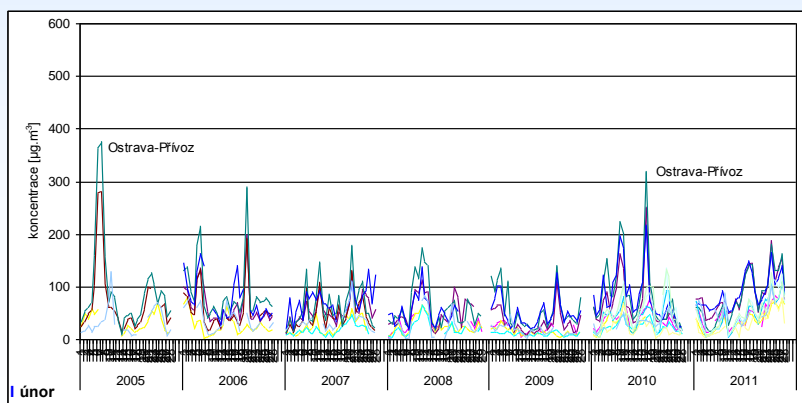
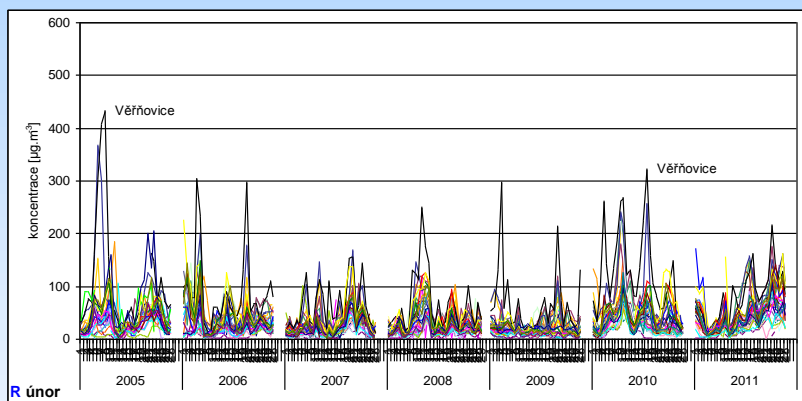
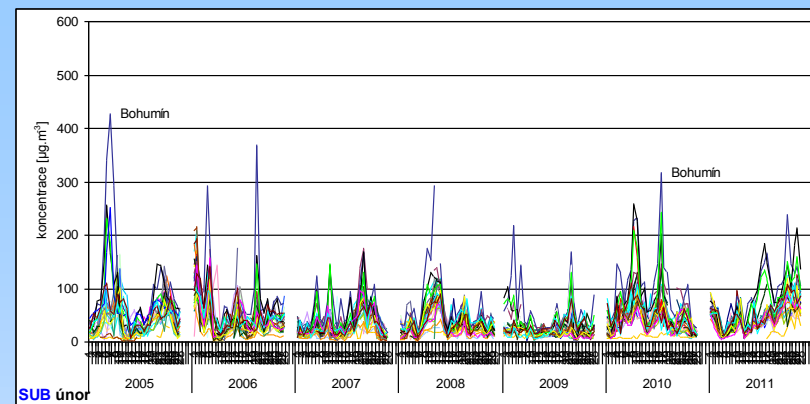
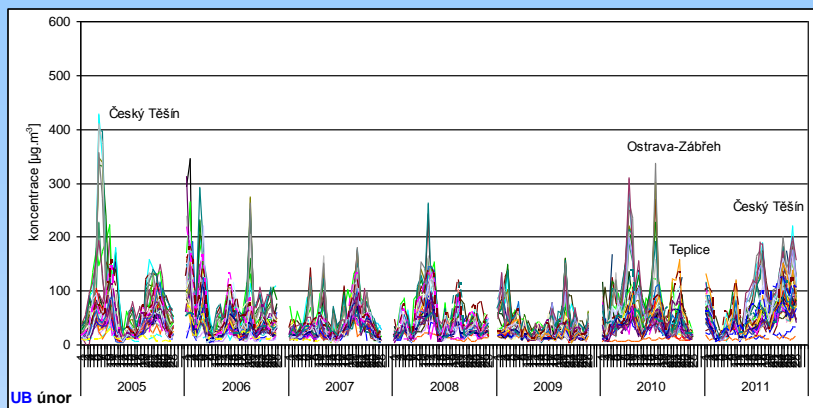


**PM₁₀ únor 2005-2011
denní průměrné koncentrace v
jednotlivých krajích ČR**



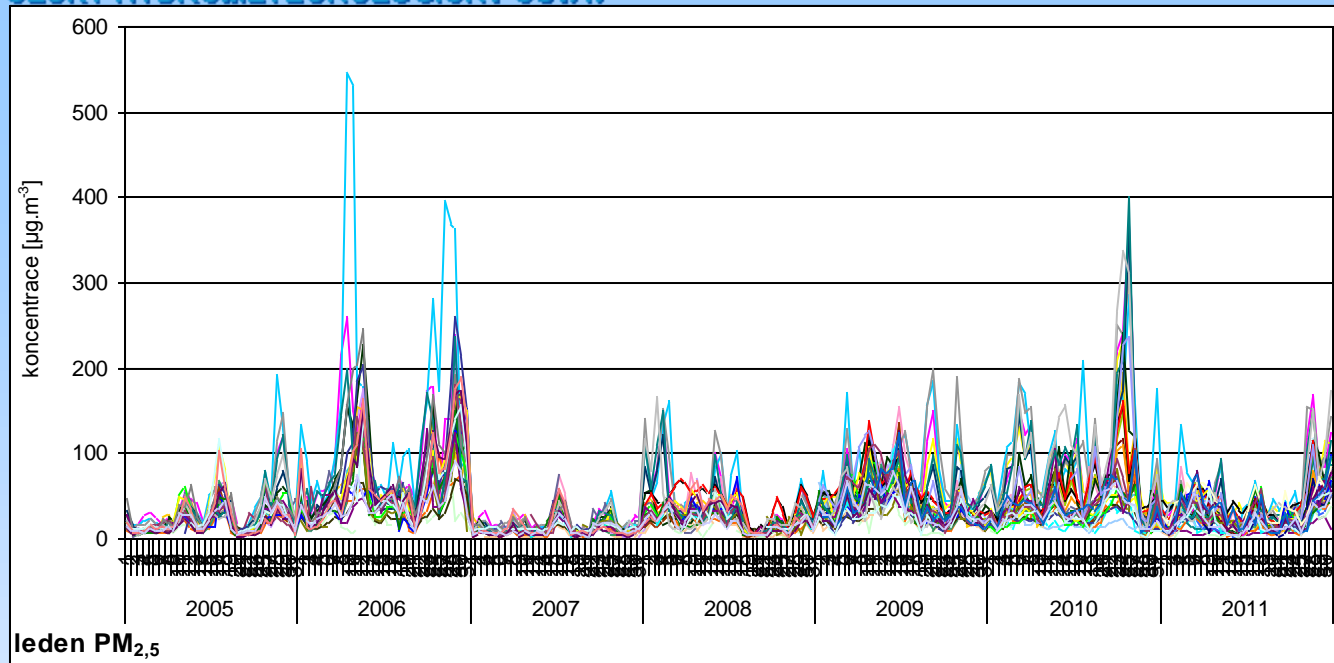
PM₁₀ leden 2005-2011 průměrné denní koncentrace

podle typu lokality
(klasifikace)

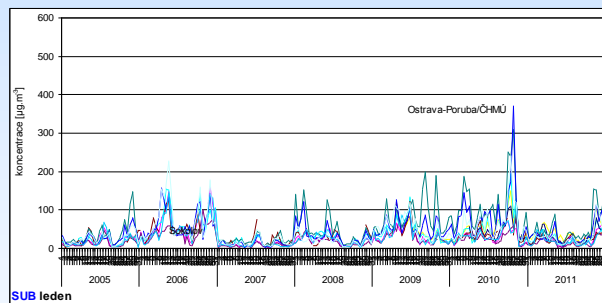
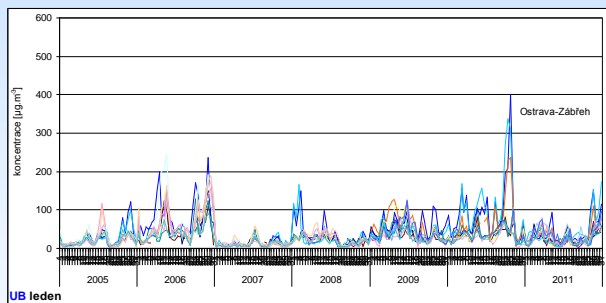


PM₁₀ únor 2005-2011 průměrné denní koncentrace

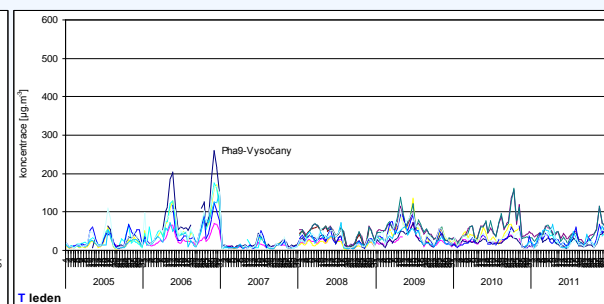
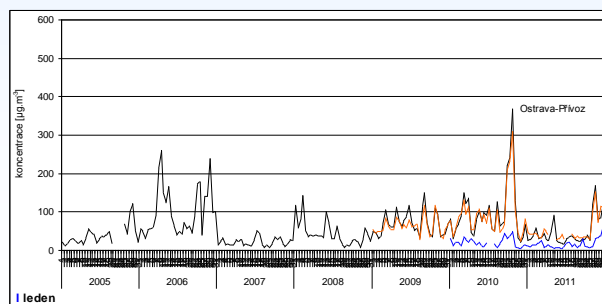
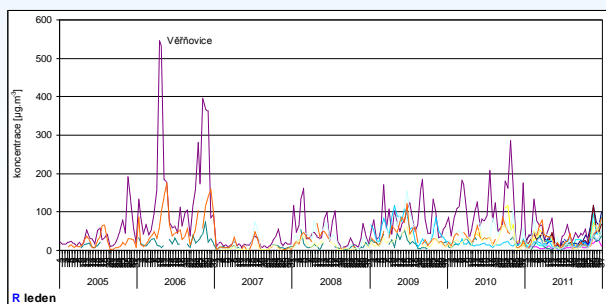
podle typu lokality
(klasifikace)

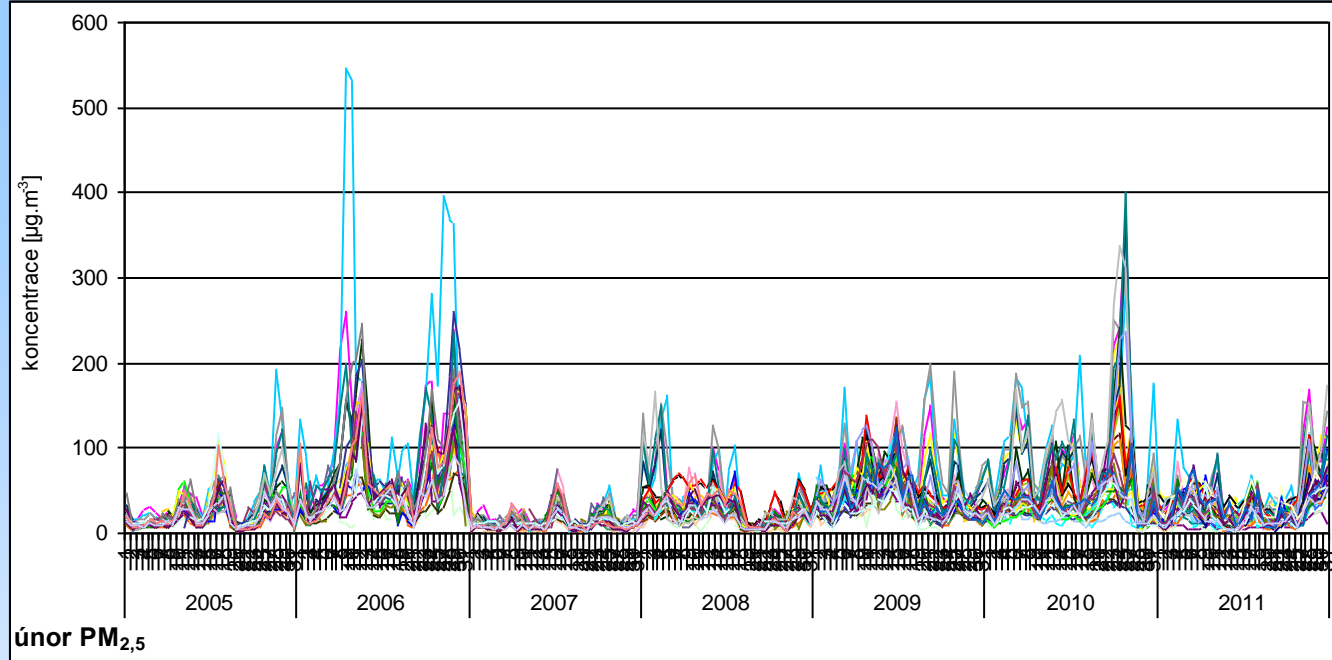


PM_{2,5} leden
2005-2011
průměrné denní
koncentrace

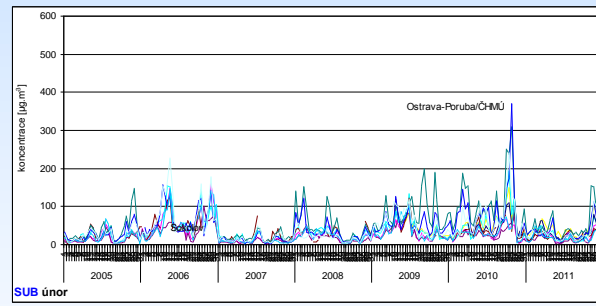
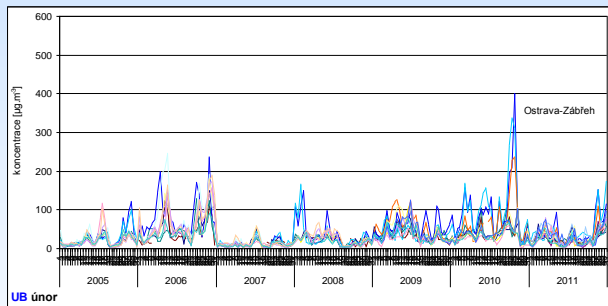


podle typu lokality
(klasifikace)

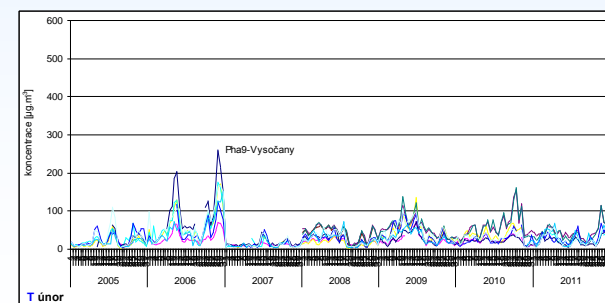
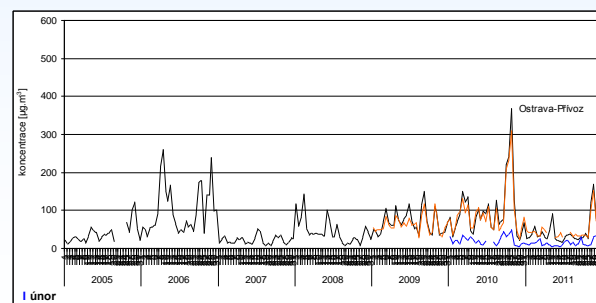
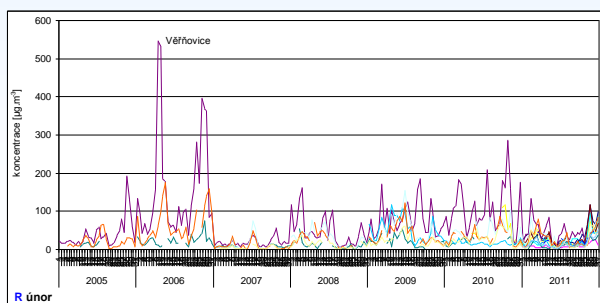


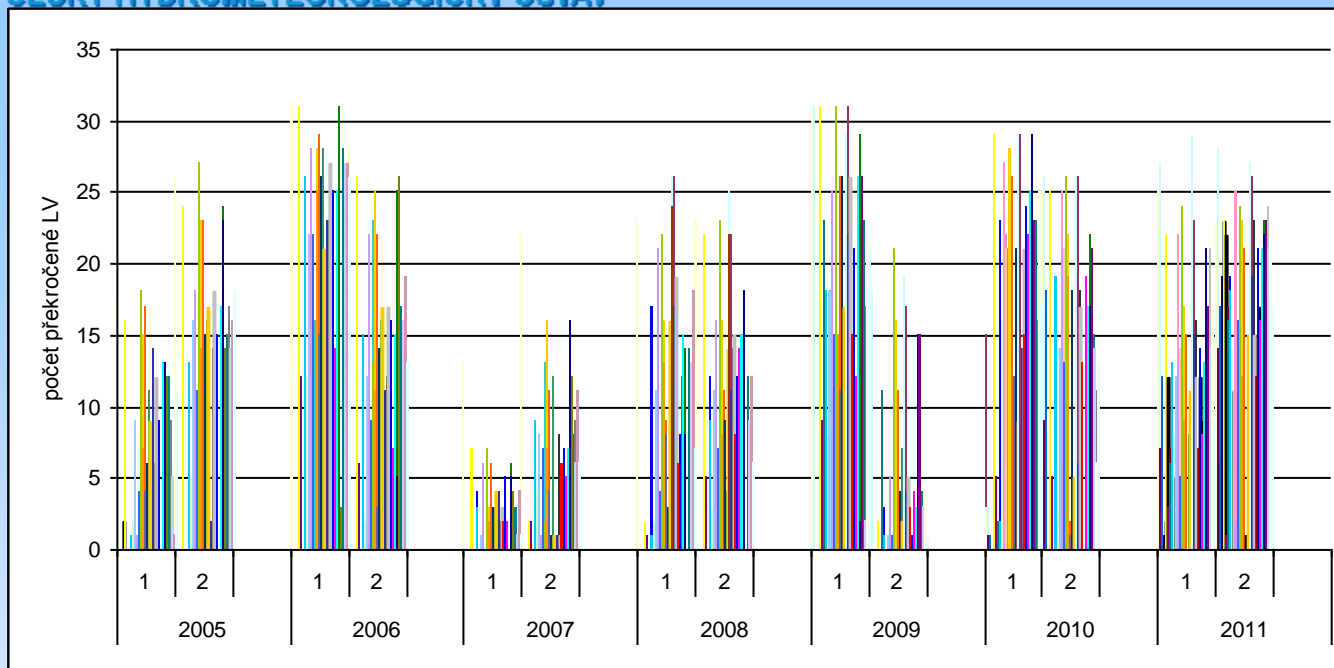


PM_{2,5} únor
2005-2011
průměrné denní
koncentrace

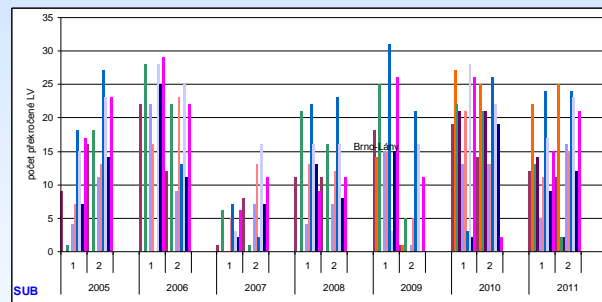
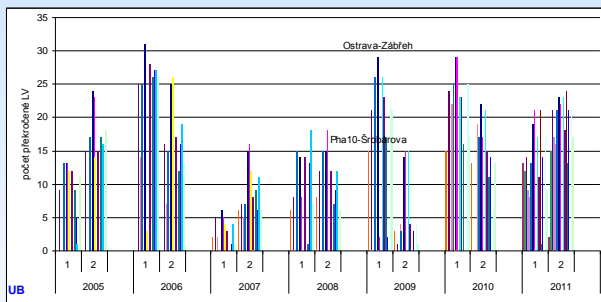


podle typu lokality
(klasifikace)

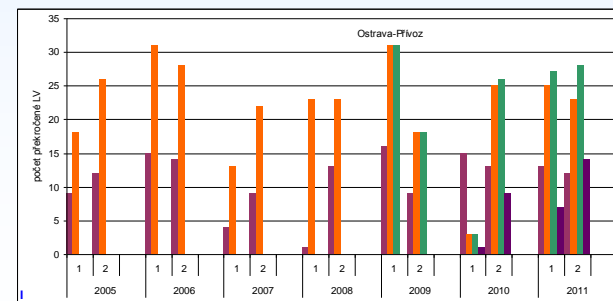
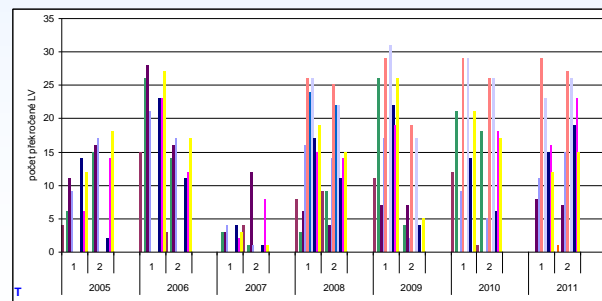
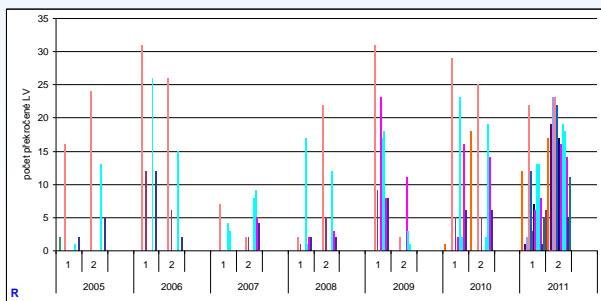




PM_{2.5} únor 2005-2011 počty překročení LV



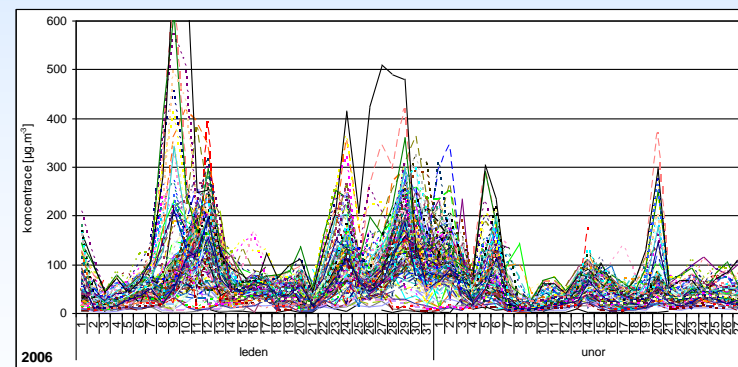
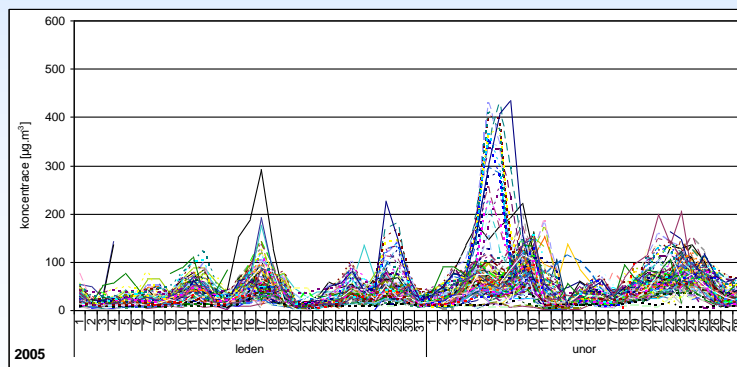
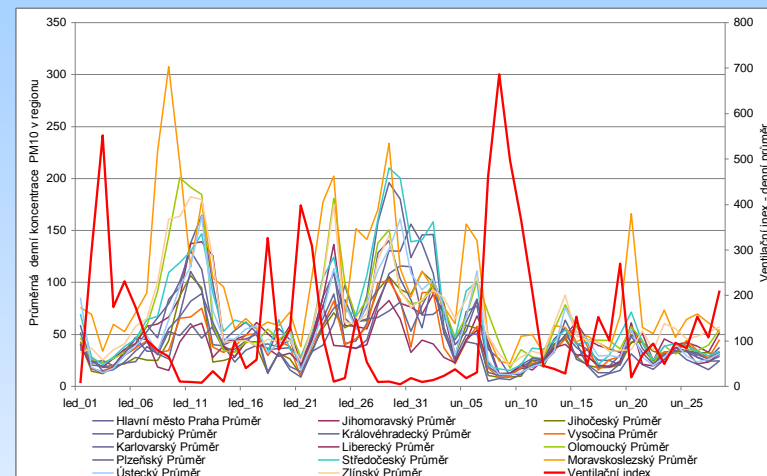
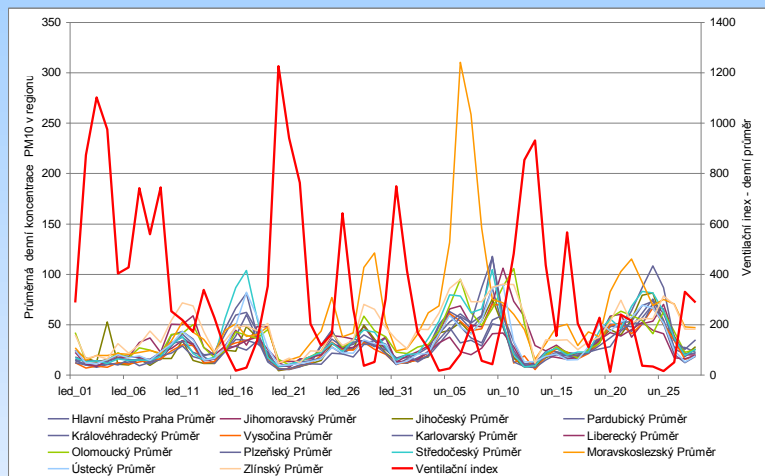
podle typu lokality (klasifikace)



Průměrná denní koncentrace PM₁₀ v regionu a ventilační index

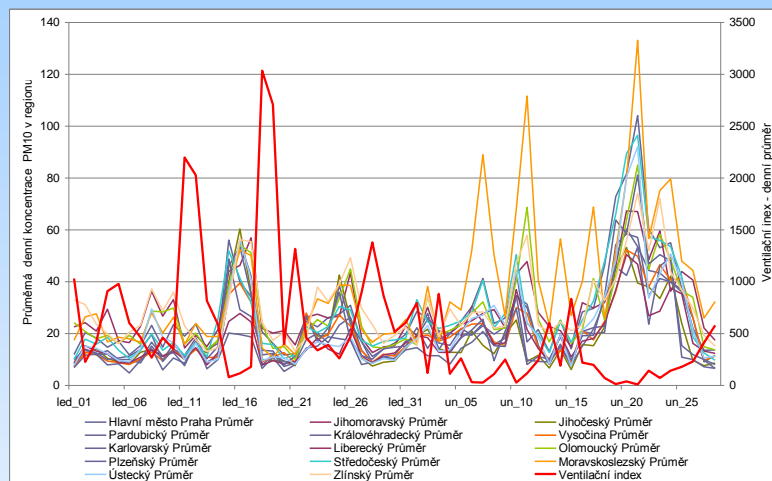
2005

2006

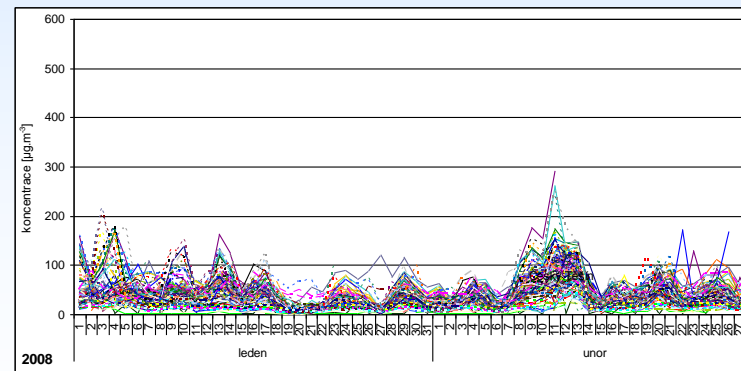
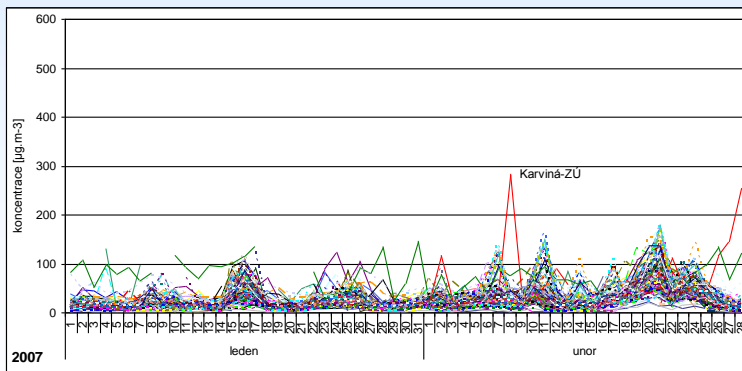
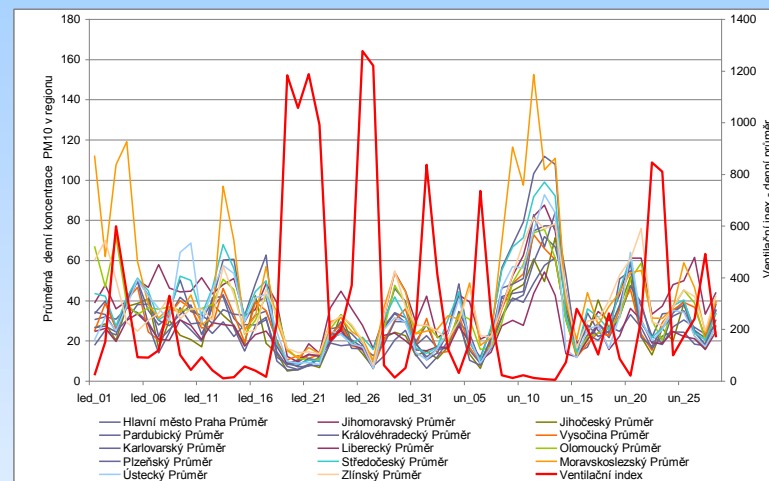


Průměrná denní koncentrace PM₁₀ v regionu a ventilační index

2007



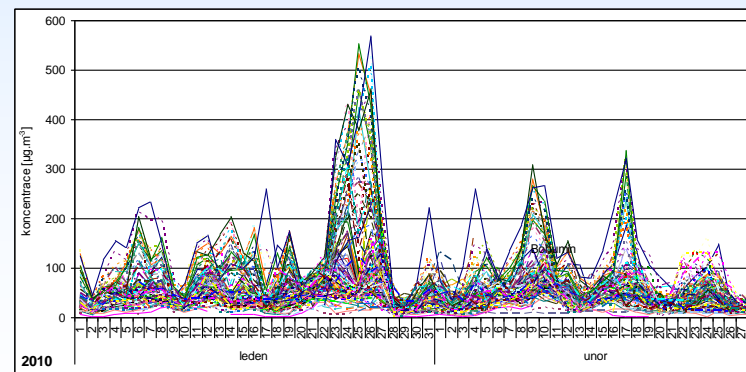
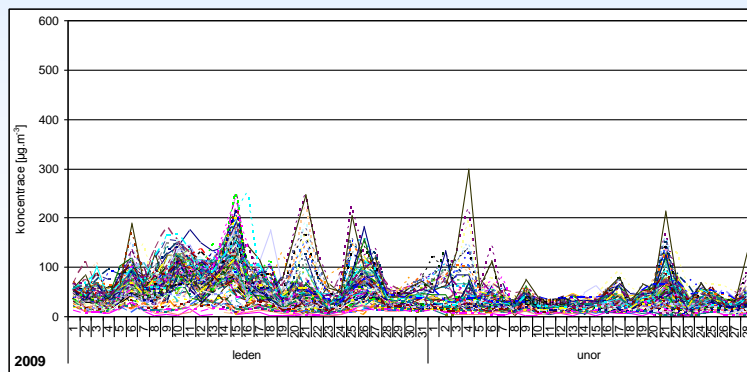
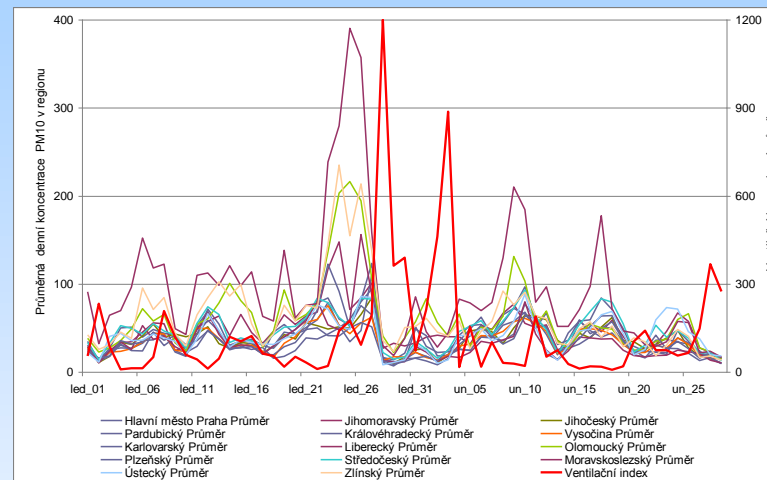
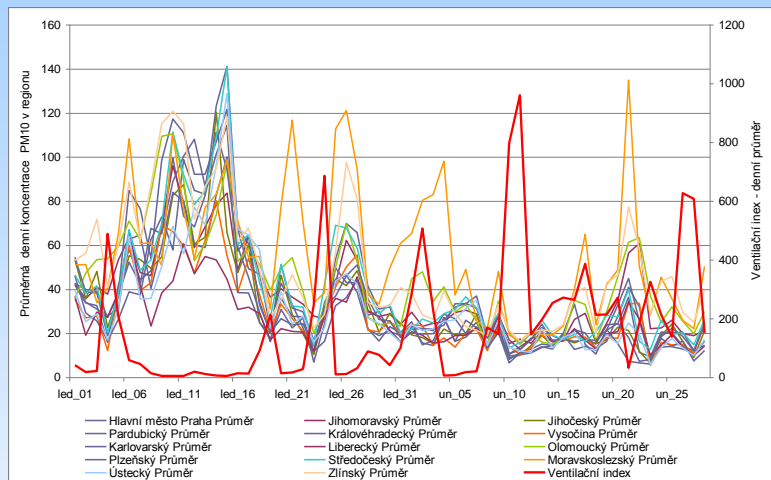
2008

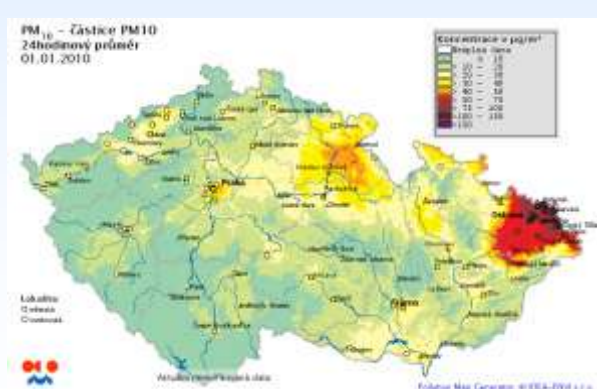
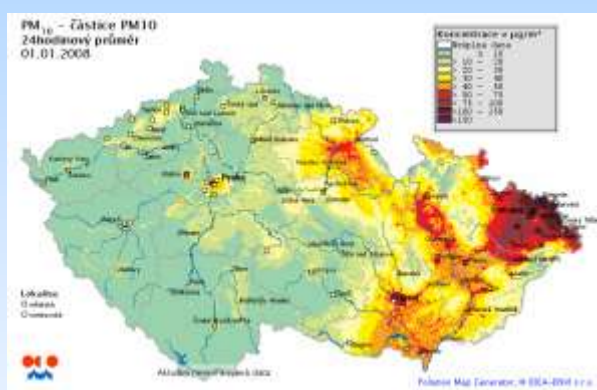
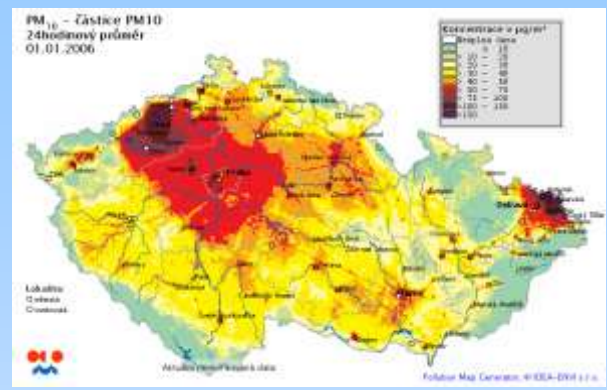


Průměrná denní koncentrace PM₁₀ v regionu a ventilační index

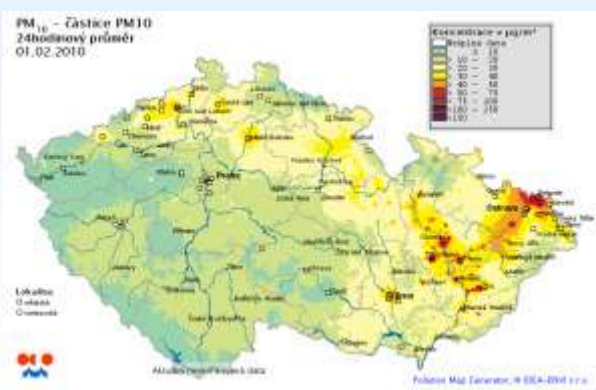
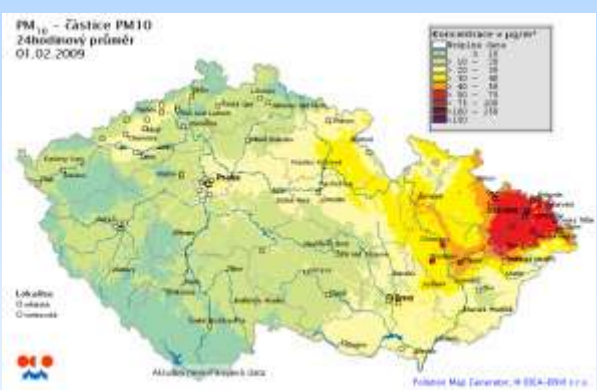
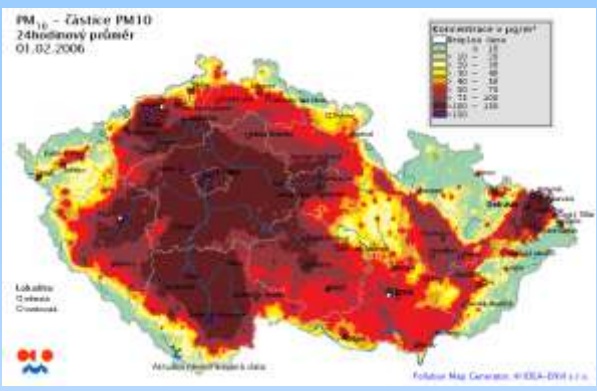
2009

2010





**PM₁₀
leden 2005-2011
odhad plošného
rozložení
průměrných
denních koncentrací**



**PM₁₀
únor 2005-2011
odhad plošného
rozložení
průměrných
denních koncentrací**

Pořadí	Lokalita	Počet překročení	Maximální koncentrace
1	Český Těšín (1066)	103	221,0
2	Bohumín (1065)	98	238,4
3	Věřňovice (1072)	90	229,9
4	Karviná-ZÚ (517)	88	296,0
5	Ostrava-Radvanice ZÚ (1650)	82	185,1
6	Karviná (1069)	78	274,7
7	Orlová (1070)	76	227,0
8	Ostrava-Přívóz (1410)	76	220,3
9	Havířov (1068)	71	257,4
10	Brno-Svatoplukova (1636)	71	144,1
11	Most (1005)	70	161,1
12	Ostrava-Fifejdy (1061)	69	212,1
13	Ostrava-Zábřeh (1064)	64	219,1
14	Kladno-Švermov (1455)	64	148,4
15	Ostrava-Českobratrská (hot spot) (1584)	61	188,0
16	Frýdek-Místek (1067)	60	231,3
17	Ostrava-Mariánské Hory (1649)	60	187,8
18	Brno-střed (1545)	60	135,9
19	Třinec-Kanada (1187)	58	177,0
20	Třinec-Kosmos (1188)	55	211,3
21	Děčín (1014)	54	141,6
22	Brno-Výstaviště (1635)	54	112,6
23	Studénka (1074)	53	177,6
24	Uherské Hradiště (1479)	53	142,0
25	Ústí n.L.-město (1571)	53	136,8
26	Brno-Arboretum (1639)	51	128,1
27	Brno-Zvonařka (1637)	51	126,6
28	Pha5-Smíchov (1459)	51	121,1
29	Kladno-Rozdělov (471)	51	113,0
30	Ústí n.L.-Všebořická (hot spot) (1579)	50	139,0

PM₁₀

počet překročení
hodnoty 24hod.
imisičního limitu
(50 µg.m⁻³)

stav 9.1.2011

Pořadí	Lokalita	Počet překročení	Maximální koncentrace
31	Opava-Kateřinky (1186)	49	191,8
32	Prostějov (1133)	48	126,1
33	Plzeň-Lochotín (1324)	48	114,1
34	Lom (1507)	47	163,1
35	Litoměřice (1475)	47	130,6
36	Tábor (1490)	47	113,2
37	Brno-Lány (1638)	47	111,9
38	Beroun (1140)	45	117,0
39	Teplice (1763)	44	151,0
40	Pha5-Řeporyje (629)	44	126,0
41	Pha8-Karlín (1519)	41	1014,0
42	Zlín (1510)	41	151,8
43	Pha5-Mlynářka (775)	41	101,5
44	Pha10-Průmyslová (1539)	40	113,9
45	Hradec Králové-Brněnská (1503)	39	145,3
46	Mladá Boleslav (1437)	39	122,7
47	Pha10-Vršovice (805)	39	111,0
48	Lom (1580)	38	154,0
49	Přerov (1076)	38	137,7
50	Chomutov (1001)	37	121,5
51	Brno-Tuřany (1130)	37	115,9
52	Návsí u Jablunkova (1357)	36	175,0
53	Děčín-ZÚ (576)	36	112,0
54	Pha9-Vysočany (1521)	36	104,0
55	Plzeň-Slovany (1322)	36	92,1

V roce 2010 byla hodnota 24hod. imisní limitu PM_{10} překročen na **83** lokalitách, v roce 2009 na **50** lokalitách, v roce 2008 na **47**, v roce 2007 na **54**, v roce 2006 na **94** lokalitách a v roce 2005 na **93** lokalitách, ze kterých byly naměřené koncentrace dodávány do databáze ISKO.

Děkuji za pozornost

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