

Tab. 1 Air pollution monitoring localities, based on the owner, Czech Republic, 2011

Zone / agglomeration	CHMI	ZÚ	ČEZ	P+S	KMon	SV	Total
Agglomeration Brno	6	2	–	–	5	–	13
Agglomeration Prague	15	6	–	–	–	–	21
Zone South Bohemian Region	8	2	–	–	–	–	10
Zone South Moravian Region	5	1	–	–	–	–	6
Zone Karlovy Vary Region	4	4	1	–	–	–	9
Zone Hradec Králové Region	9	1	–	–	–	–	10
Zone Liberec Region	8	2	–	–	–	–	10
Agglomeration Moravian-Silesian Region	17	2	2	–	1	6	28
Zone Olomouc Region	6	1	–	–	2	–	9
Zone Pardubice Region	5	2	1	–	–	1	9
Zone Plzeň Region	5	2	–	–	5	–	12
Zone Central Bohemian Region	10	6	–	2	–	–	18
Zone Ústí nad Labem Region	17	5	10	1	–	–	33
Zone Kraj Vysočina Region	7	3	–	–	–	–	10
Zone Zlín Region	4	–	–	–	4	–	8
Total	126	39	14	3	17	7	206

Explanatory notes:

- ZÚ Health Institute [incl. ZÚ Praha (11), HEL Cheb (1)]
- P+S industry [ČESRAF (1), Vápenka Čertovy schody, a.s. (1)] + education [SŠZE Žatec(1)]
- KMon municipal monitoring [MÚ Třinec (1), Město Plzeň (5), Město Šumperk (1), Město Olomouc (1), Město Zlín (1), Statutární město Brno(5), Město Valašské Meziříčí(1)]
- SV part-owners - ČHMÚ+Moravskoslezský kraj (4), ČHMÚ+Statutární město Pardubice (1), ZÚ+Statutární město Ostrava (2)

Tab. 2 Air pollution monitoring localities measuring basic pollutants, AMS, based on the owner, Czech Republic, 2011

Zone / agglomeration	SO ₂		NO, NO ₂ , NO _x		PM ₁₀		O ₃		CO		BTX	
	CHMI	¹ Ostatní/Others A	CHMI	¹ Others A, SŠZE Žatec, Vápenka Čertovy schody a.s.	CHMI	² Others B	CHMI	³ Others C	CHMI	⁴ Others D	CHMI	⁵ Others E
Agglomeration Brno	1	5	3	4	2	5	1	2	2	5	1	–
Agglomeration Prague	10	–	15	–	15	–	9	–	4	–	4	–
Zone South Bohemian Region	4	2	4	2	2	1	5	1	1	1	2	–
Zone South Moravian Region	2	–	2	–	2	1	2	–	1	–	1	–
Zone Karlovy Vary Region	3	1	4	1	4	1	2	–	1	–	1	–
Zone Hradec Králové Region	4	1	4	1	3	1	4	1	1	1	1	–
Zone Liberec Region	5	–	4	–	3	–	3	–	1	–	1	–
Agglomeration Moravian-Silesian Region	11	6	12	6	11	5	7	2	2	–	4	–
Zone Olomouc Region	3	2	4	2	4	1	3	2	1	–	1	–
Zone Pardubice Region	1	2	2	2	1	2	2	1	1	–	1	1
Zone Plzeň Region	2	6	2	7	1	7	2	4	1	4	–	1
Zone Central Bohemian Region	5	1	6	2	5	1	3	1	2	1	1	1
Zone Ústí nad Labem Region	13	10	15	11	12	5	9	1	3	–	4	–
Zone Kraj Vysočina Region	2	–	3	–	3	2	3	–	2	–	1	–
Zone Zlín Region	1	1	2	1	2	–	2	1	1	–	1	1
Total	67	37	82	39	70	32	57	16	24	12	24	4
Total	104		121		102		73		36		28	

Explanatory notes:

¹Others A: ZÚ, Město Plzeň, Statutární město Brno, ČHMÚ+Moravskoslezský kraj, ČEZ, Česká rafinérská a.s., Město Šumperk, Město Olomouc, Město Zlín, ČHMÚ+Statutární město Pardubice, ZÚ+Statutární město Ostrava

²Others B: ZÚ (vč. ZÚ Praha), Město Plzeň, Statutární město Brno, SŠZE Žatec, MÚ Třinec, ČEZ, ZÚ+Statutární město Ostrava, ČHMÚ+Moravskoslezský kraj

³Others C: ZÚ, Město Plzeň, Město Zlín, Město Šumperk, Město Olomouc, Statutární město Brno, SŠZE Žatec, Vápenka Čertovy schody a.s., ČHMÚ+Statutární město Pardubice, ZÚ+Statutární město Ostrava

⁴Others D: ZÚ, Město Plzeň, Statutární město Brno, Vápenka Čertovy schody a.s.

⁵Others E: Česká rafinérská a.s., Město Plzeň, Město Valašské Meziříčí, ČHMÚ+Statutární město Pardubice

BTX Includes measurement of aromatic hydrocarbons:
benzene, toluene, ethylbenzene, o-xylene, m-xylene, p-xylene, m,p-xylene.

Note: At certain stations the above measuring programme may be limited.

Tab. 3 Air pollution monitoring localities measuring other pollutants and supplementary quantities, AMS, based on the owner, Czech Republic 2011

Zone / agglomeration	PM _{2,5}		PM ₁	H ₂ S	NH ₃	NV	Meteo	
	CHMI	¹ Others A	Město Plzeň, Statutární město Brno	ZÚ+ Statutární město Ostrava	CHMI	CHMI, Město Plzeň	CHMI	² Others B
Agglomeration Brno	1	3	3	–	–	–	1	5
Agglomeration Prague	7	–	–	–	–	–	6	–
Zone South Bohemian Region	2	–	–	–	–	–	3	1
Zone South Moravian Region	2	–	–	–	1	–	2	–
Zone Karlovy Vary Region	1	–	–	–	–	–	4	1
Zone Hradec Králové Region	1	–	–	–	–	–	4	–
Zone Liberec Region	1	–	–	–	–	–	4	–
Agglomeration Moravian-Silesian Region	4	3	–	1	–	–	11	7
Zone Olomouc Region	1	–	–	–	–	–	4	–
Zone Pardubice Region	1	–	–	–	1	–	1	2
Zone Plzeň Region	–	2	1	–	–	1	1	3
Zone Central Bohemian Region	2	1	–	–	–	–	4	2
Zone Ústí nad Labem Region	3	1	–	–	1	1	13	11
Zone Kraj Vysočina Region	2	–	–	–	–	–	2	–
Zone Zlín Region	1	–	–	–	–	–	3	–
Total	29	10	4	1	3	2	63	32
Total		39		4	1	3	2	95

Explanatory notes:

¹Others A: ZÚ+Statutární město Ostrava, ČEZ, Město Plzeň, Statutární město Brno, Vápenka Čertovy schody a.s., ČHMÚ+Moravskoslezský kraj

²Others B: ZÚ+Statutární město Ostrava, ČEZ, Město Plzeň, Statutární město Brno, Vápenka Čertovy schody a.s., ČHMÚ+Moravskoslezský kraj, ZÚ, MÚ Třinec, SŠZE Žatec, Česká rafinérská a.s., ČHMÚ+Statutární město Pardubice

NV Measurement of number of vehicles

Meteo Measurement of meteorological parameters:

T10m - temperature 10 m above terrain, T2m - temperature 2 m above terrain, h - relative air humidity, p - atmospheric pressure, RAIN - precipitation amount, GLRD - global radiation, WV - wind velocity, WD - wind direction, WVm - short-term wind velocity maximum, WDM - short-term wind direction maximum.

Note: At certain stations the above measuring programme may be limited.

Tab. 4 Air pollution monitoring localities measuring basic pollutants, manual methods, based on the owner, Czech Republic 2011

Zone / agglomeration	SO ₂		NO ₂		PM ₁₀		HM		SPM	NO _x
	CHMI	ZÚ	CHMI	ZÚ	ČHMÚ CHMI	ZÚ, KMon, ČHMÚ +Moravskoslezský kraj	CHMI	ZÚ, ČHMÚ +Moravskoslezský kraj, ZÚ+Statutární město Ostrava	ZÚ+Statutární město Ostrava	ZÚ
Agglomeration Brno	1	–	3	2	4	2	1	2	–	–
Agglomeration Prague	1	–	1	6	2	6	1	7	1	–
Zone South Bohemian Region	2	–	2	–	3	–	2	1	–	–
Zone South Moravian Region	1	–	2	–	3	–	1	1	–	–
Zone Karlovy Vary Region	1	2	1	1	1	1	1	1	2	2
Zone Hradec Králové Region	3	–	3	–	6	–	1	1	–	–
Zone Liberec Region	3	–	3	–	5	2	3	2	–	–
Agglomeration Moravian-Silesian Region	6	–	5	1	9	2	5	4	2	–
Zone Olomouc Region	2	–	2	–	3	2	1	1	–	–
Zone Pardubice Region	4	–	4	–	5	–	2	2	–	–
Zone Plzeň Region	2	–	2	–	3	–	1	2	–	–
Zone Central Bohemian Region	5	–	5	3	5	6	1	7	–	–
Zone Ústí nad Labem Region	4	1	4	3	10	5	3	4	–	2
Zone Kraj Vysočina Region	3	–	4	–	4	1	1	3	–	1
Zone Zlín Region	1	–	1	–	2	2	1	–	–	–
Total	39	3	42	16	65	29	25	38	5	5
Total	42		58		94		63		5	5

Explanatory notes:

KMon municipal monitoring [Město Šumperk (1), Město Olomouc (1), Město Zlín (1), Město Valašské Meziříčí(2)]

ZÚ Health Institute [incl. ZÚ Praha, HEL Cheb]

TK/HM Includes measurement of the following elements:
As, Cd, Pb, Cr, Ni, Be, Mn, Fe, Cu, Zn, V, Se.

Note: Simultaneous HM in PM₁₀ and in PM_{2,5} and HM in PM₁₀ and in SPM are counted once
ZÚ only aggreg. 24-h data: CO: Prague - 1 measurement; ozone: Ústí nad Labem Region - 1 measurements
At certain stations the above measuring programme may be limited.

Tab. 5 Total number of monitoring localities with special measurements, manual methods, based on the owner, Czech Republic, 2011

Zone / agglomeration	VOC	POPs		PM _{2,5}		SNO ₃ ⁻	Hg		Hg ⁰	H ₂ S
	ČHMÚ CHMI	ČHMÚ CHMI	ZÚ, ZÚ SMOva	ČHMÚ CHMI	ZÚ	ČHMÚ CHMI	ČHMÚ CHMI	ZÚ	ZÚ	ZÚ
Agglomeration Brno	2	1	1	1	—	—	—	—	—	—
Agglomeration Prague	2	1	1	1	1	1	—	—	—	—
Zone South Bohemian Region	1	1	—	—	—	—	—	—	—	—
Zone South Moravian Region	—	2	—	—	—	—	—	—	—	—
Zone Karlovy Vary Region	1	1	—	—	—	—	—	—	—	—
Zone Hradec Králové Region	—	1	1	3	—	—	—	—	—	—
Zone Liberec Region	—	1	—	—	—	—	—	—	—	—
Agglomeration Moravian-Silesian Region	3	3	5	3	—	—	—	1	—	—
Zone Olomouc Region	—	2	—	1	—	—	—	—	—	—
Zone Pardubice Region	—	1	—	2	—	1	—	—	—	—
Zone Plzeň Region	1	1	1	—	—	—	—	—	—	—
Zone Central Bohemian Region	—	2	—	1	—	—	—	—	—	—
Zone Ústí nad Labem Region	2	3	1	4	—	—	—	—	—	1
Zone Kraj Vysočina Region	2	1	1	1	—	1	1	—	1	—
Zone Zlín Region	—	1	1	—	—	—	—	—	—	—
Total	14	22	12	17	1	3	1	1	1	1
Total	14	34		18		3		2	1	1

CHMI – Kraj Vysočina Region 1measurement: EC, OC, Ca (2+), K(+), Mg(2+), Na(+)

Explanatory notes:

- VOC Includes measurement of separately analyzed hydrocarbons:
benzene, methane, ethane, ethene, propane, propene, i-butane, n-butane, acetylene, sum of butene, i-pentane, n-pentane, sum of pentene,
methyl cyclopentane, n-hexane, cyclohexane, n-heptane, isoprene, toluene, ethylbenzene, m,p-xylene, o-xylene, xylene-sum, nonane, 2+3 methylpentane, 2+3 methylhexane, cyclopentane, 2,2-dimethylbutane, 2,3 dimethylbutane, 2+3 methylheptane, i-octane, n-octane.
- POPs Includes measurement of persistent organic pollutants:
anthracene, acenaphthene, acenaphthylene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, phenanthrene, fluorene, fluoranthene, ideno(1,2,3-cd)pyrene, napthalene, pyrene, alpha-HCH, beta-HCH, delta-HCH, gamma-HCH, hexachlorobenzene, PAHs, PCP28, PCB52, PCB101, PCB118, PCB138, PCB153, PCB180, p,p'-DDD, p,p'-DDE, p,p'-DDT, coronen.

Note: At certain stations the above measuring programme may be limited.

Tab. 6 Percentage of valid data from the stations with continuous measurement, 2011

	ČESRAF	ČEZ	CHMI	CHMI, MSK	MOLO	MPI	MŠUM	MÚTŘ	MVM	MZLÍ	SMBrno	SMPce, CHMI	SŠZE Žatec	VČs	ZÚ	ZÚ Praha	ZÚ, SMOva
BZN	1/- 0 %		24/23 95.8 %			1/1 100 %			1/1 100 %			1/1 100 %					
CO			24/24 100 %			3/3 100 %					5/2 40 %			1/1 100 %	3/3 100 %		
EBZN	1/- 0 %		3/2 66.7 %						1/1 100 %								
F0025- 3200			1/- 0 %														
H ₂ S																1/1 100 %	
Hg ⁰			1/- 0 %														
MPXY	1/- 0 %								1/1 100 %								
MXY			3/2 66.7 %														
NH ₃			3/2 66.7 %														
NO	1/1 100 %	14/14 100 %	82/81 98.8 %	2/2 100 %		5/3 60 %					4/4 100 %	1/1 100 %	1/- 0 %	1/1 100 %	7/4 57.1 %		2/2 100 %
NO ₂	1/1 100 %	14/14 100 %	82/81 98.8 %	2/2 100 %	1/1 100 %	5/3 60 %	1/1 100 %			1/1 100 %	4/4 100 %	1/1 100 %	1/- 0 %	1/1 100 %	7/4 57.1 %		2/2 100 %
NO _x	1/1 100 %	14/14 100 %	82/81 98.8 %	2/2 100 %		5/3 60 %				4/4 100 %	1/1 100 %	1/- 0 %	1/1 100 %	7/4 57.1 %			2/2 100 %
O ₃			57/56 98.2 %		1/1 100 %	3/3 100 %	1/1 100 %			1/1 100 %	2/2 100 %	1/1 100 %	1/1 100 %	1/- 0 %	4/2 50 %		2/2 100 %
OXY	1/- 0 %		3/2 66.7 %						1/1 100 %								
PM ₁						1/1 100 %					3/3 100 %						
PM ₁₀		4/4 100 %	70/67 95.7 %	2/2 100 %		5/5 100 %		1/1 100 %			5/5 100 %		1/- 0 %	11/10 90.9 %	1/1 100 %	2/2 100 %	
PM _{2,5}		1/1 100 %	29/26 89.7 %	2/2 100 %		2/2 100 %				3/3 100 %				1/1 100%		1/1 100 %	
PXY			3/2 66.7 %									1/1 100 %					
SO ₂	1/1 100 %	14/14 100 %	67/60 89.6 %	2/2 100 %	1/1 100 %	5/5 100 %	1/1 100 %			1/1 100 %	5/5 100 %	1/1 100 %			6/3 50 %		2/2 100 %
TLN	1/- 0 %		24/19 79.2 %			1/- 0 %			1/1 100 %			1/1 100 %					

Tab. 7 Percentage of valid data from the stations with manual measurement, 2011

	CHMI	CHMI, MSK	HEL Cheb	MOLO	MŠUM	MVM	MZLJ	ZÚ	ZÚ Praha	ZÚ, SMOva
As	30/29 96.7 %	1/1 100 %						24/21 87.5 %	11/11 100 %	4/ 0 %
BaP	23/22 95.7 %	2/2 100 %				1/1 100 %		7/7 100 %		2/2 100 %
BZN	19/8 42.1 %									2/2 100 %
Cd	30/29 96.7 %	1/1 100 %						24/21 87.5 %	11/11 100 %	4/ 0 %
CO	30/29 96.7 %	1/- 0 %						1/- 0 %		
EC	1/1 100 %									
H₂S								1/1 100 %		
Hg	1/1 100 %							1/1 100 %		
Hg⁰	1/1 100 %									
Ni	30/29 96.7 %	1/1 100 %						24/21 87.5 %	11/11 100 %	4/- 0 %
NO								2/2 100 %		
NO₂	34/34 100 %		1/1 100 %					3/3 100 %	5/4 80 %	
NO_x								3/3 100 %		
O₃								1/1 100 %		
OC	1/1 100 %									
Pb	30/29 96.7 %	1/1 100 %						24/21 87.5 %	11/11 100 %	4/- 0 %
PM₁₀	69/64 92.8 %	2/2 100 %	1/1 100 %	1/1 100 %	1/1 100 %	2/2 100 %	1/1 100 %	13/9 69.2 %	10/9 90 %	
PM_{2,5}	17/17 100 %							1/1 100 %		
SNH₄	2/2 100 %									
SNO₃	2/2 100 %									
SO₂	16/16 100 %							3/1 33.3 %		
SO₄⁽²⁻⁾	2/2 100 %									
SPM								2/2 100 %		2/- 0 %

Tab. 8 Percentage of valid data from the stations measuring meteorological parameters, 2011

	ČESRAF	ČEZ	CHMI	CHMI, MSK	MPI	MÚTř	SMBrno	SMPce, CHMI	SŠZE Žatec	VČs	ZÚ	ZÚ, SMOva
GLRD			49/46 93.9 %					1/1 100 %	1/1 100 %			
h	1/1 100 %		59/59 100 %	2/2 100 %	5/5 100 %		5/5 100 %	1/1 100 %	1/1 100 %	1/- 0 %	1/1 100 %	2/2 100 %
p							3/3 100 %					
T10m		14/14 100 %			3/3 100 %						1/1 100 %	
T2m	1/1 100 %		63/61 96.8 %	2/2 100 %	5/5 100 %	1/1 100 %	5/5 100 %	1/1 100 %	1/1 100 %	1/1 100 %	1/1 100 %	2/2 100 %
WV, WD	1/1 100 %	14/14 100 %	63/62 98.4 %	2/2 100 %	3/3 100 %	1/1 100 %	5/5 100 %	1/1 100 %	1/1 100 %	1/1 100 %	1/1 100 %	2/1 50 %

Tab. 9 Percentage of data from other measurements, 2011

		CHMI	CHMI, MSK	MVM	ZÚ	ZÚ Praha	ZÚ, SMOva
PAH	A	9/8 88.9 %	2/2 100 %	1/1 100 %	7/7 100 %		2/1 50 %
PAH	AC	1/1 100 %		1/1 100 %			
PAH	ACL	1/1 100 %					
PAH	BaA	9/8 88.9 %	2/2 100 %	1/1 100 %	7/7 100 %		2/2 100 %
PAH	BbF	23/22 95.7 %	2/2 100 %	1/1 100 %	7/7 100 %		2/2 100 %
PAH	BghiPRL	23/22 95.7 %	2/2 100 %	1/1 100 %	7/7 100 %		2/2 100 %
PAH	BkF	23/22 95.7 %	2/2 100 %	1/1 100 %	7/7 100 %		2/2 100 %
PAH	COR	22/21 95.5 %	2/2 100 %				
PAH	DBahA	23/22 95.7 %	2/2 100 %	1/1 100 %	7/7 100 %		2/2 100 %
PAH	Fen	9/8 88.9 %	2/2 100 %	1/1 100 %	7/7 100 %		2/1 50 %
PAH	Fl	9/8 88.9 %	2/2 100 %	1/1 100 %			
PAH	Flu	9/8 88.9 %	2/2 100 %	1/1 100 %	7/7 100 %		2/1 50 %
PAH	HCB	1/1 100 %					
PAH	HCH	1/1 100 %					
PAH	Chry	9/8 88.9 %	2/2 100 %	1/1 100 %	7/7 100 %		2/2 100 %
PAH	I123cdP	23/22 95.7 %	2/2 100 %	1/1 100 %	7/7 100 %		2/2 100 %
PAH	N	1/1 100 %					
PAH	PAHs	9/8 88.9 %	2/2 100 %	1/1 100 %	7/7 100 %		2/1 50 %
PAH	PAHs_TEQ				7/7 100 %		2/2 100 %
PAH	Pyr	9/8 88.9 %	2/2 100 %	1/1 100 %	7/7 100 %		2/1 50 %
PAH	STYR						2/2 100 %
PCB	alpha_HCH	1/1 100 %					
PCB	beta_HCH	1/- 0 %					
PCB	delta_HCH	1/- 0 %					
PCB	gamma_HCH	1/1 100 %					
PCB	PCB101	1/- 0 %					
PCB	PCB118	1/- 0 %					
PCB	PCB138	1/- 0 %					
PCB	PCB153	1/- 0 %					
PCB	PCB180	1/- 0 %					
PCB	PCB28	1/1 100 %					
PCB	PCB52	1/1 100 %					
PCB	PCBs	1/1 100 %					
PCB	PeCB	1/1 100 %					
PCB	pp_DDD	1/- 0 %					
PCB	pp_DDE	1/1 100 %					

		CHMI	CHMI, MSK	MVM	ZÚ	ZÚ Praha	ZÚ, SMOva
PCB	pp_DDT	1/- 0 %					
PRVKY	Be				4/2 50 %		
PRVKY	Ca(2+)	1/- 0 %					
PRVKY	Cr	30/29 96.7 %	1/- 0 %		24/21 87.5 %	11/11 100 %	4/- 0 %
PRVKY	Cu	30/29 96.7 %	1/1 100 %		5/3 60 %		
PRVKY	Fe	30/29 96.7 %	1/- 0 %		4/2 50 %		
PRVKY	K(+)	1/- 0 %					
PRVKY	Mg(2+)	1/- 0 %					
PRVKY	Mn	30/29 96.7 %	1/1 100 %		24/21 87.5 %	11/11 100 %	4/- 0 %
PRVKY	Na(+)	1/- 0 %					
PRVKY	Se	30/29 96.7 %	1/- 0 %				
PRVKY	V	30/29 96.7 %	1/- 0 %		4/2 50 %		
PRVKY	Zn	30/29 96.7 %	1/- 0 %		2/2 100 %		
VOC	ACET	2/- 0 %					
VOC	CP	2/- 0 %					
VOC	DMB22	2/- 0 %					
VOC	DMB23	2/- 0 %					
VOC	EZBN	2/- 0 %					2/2 100 %
VOC	ETAN	2/- 0 %					
VOC	ETEN	2/- 0 %					
VOC	CHEX	2/- 0 %					
VOC	I_OKT	2/- 0 %					
VOC	IBUT	2/- 0 %					
VOC	IPEN	2/- 0 %					
VOC	ISOP	2/- 0 %					
VOC	MCPT	2/- 0 %					
VOC	METAN	2/- 0 %					
VOC	MH23	2/- 0 %					
VOC	MHP23	2/- 0 %					
VOC	MP23	2/- 0 %					
VOC	MPXY	2/- 0 %					
VOC	N_OKT	2/- 0 %					
VOC	NBUT	2/- 0 %					
VOC	NHEP	2/- 0 %					
VOC	NHEX	2/- 0 %					
VOC	NONN	2/- 0 %					
VOC	NPEN	2/-					

		CHMI	CHMI, MSK	MVM	ZÚ	ZÚ Praha	ZÚ, SMOva
		0 %					
VOC	OXY	2/- 0 %					
VOC	PRPA	2/- 0 %					
VOC	PRPE	2/- 0 %					
VOC	SBUT	2/- 0 %					
VOC	SPTN	2/- 0 %					
VOC	TLN	2/- 0 %					2/2 100 %
VOC	XYs						2/2 100 %

Explanatory notes to Tables II.1.6-II.1.9:

The fraction indicates the number of stations registered in the given year / the number of stations meeting the condition NSV <= 40 days and MP >= 66 %, where

NSV – the longest lasting continuous failure in the given year

MP – minimum percentage of measurements in the given year