Implementation of the EMEP/WGE monitoring strategy in France

Few (informal) insights

On behalf of Laurence Rouïl

French contribution to the EMEP monitoring network Called « MERA » in France

6 sites level 1 3 sites level 2-3

They are managed by local organizations in charge of air quality monitoring (coordination Ecole des Mines de Douai)





Synthesis of available mesurements

2013	Level 1							Level 2			
Station	Inorg rain	Inorg atm	Metals rain	PM10/P M2.5	Ozone	NO2	Meteo	Metals PM10	POP/H AP PM10	PM2.5 speciati on	VOC
Revin	Х	Х	Х	X/X	Х	Х	Х	Х	Х	Х	
Donon	Х						Х				
Montandon	Х						Х				
Casset	Х						Х				
Morvan	Х			X/0			Х				
Tardière	Х	Х		X/X			Х				Х
Peyrusse	Х	Х	Х	X/X	Х	Х	Х	Х	Х	Х	Х
montfranc	Х						Х				
Coulonche	Х			X/0			Х				

An attempt to assess the compliance of the French network with the EMEP requirements

 According to the methodology proposed by the CCC during the last TFMM meeting (Zagreb 2013)

Parameters	Time resolution	Variable nb	Nb of sites reporting measurements	Nb of variables x nb of sites	Weighed Time resolution	Index
Inorg in rain	Day/day	10/10	9/11	90	90	82%
Inorg in air	Day/day	8/11	3/11	24	24	20%
HM in rain	14 days/7days	7/7	2/11	14	7	9%
Ozone	Hour/hour	1/1	11/11	11	11	100%
PM (gravimetry)	Hour/hour	2/2 (3) and 1/2 (2)	5/11	8	22	38%
					Global index	55%

- The French monitoring strategy is to be revised and optimized by 2014-2015,
- Priorities put on PM speciation,
- Taking into account funding constraints.



The BRAMM network provides information on metal and nitrogen deposition via biomonitoring on mosses



Heavy metals:

Aluminium, Antimony, Arsenic, Cadmium, Chromium, copper, Iron, Lead, mercury, Nickel, Vanadium, Zinc

Since 2011: Nitrogen POP The RENECOFOR network provides information on long term changes in forests ecosystems

RENECOFOR - CATANEAT network : 27 out of 100 stands with atmospheric monitoring



- Chéne pédrocule (?) Chéne pédrocule (?) Chéne pédrocule (?) Chéne pédrocule (?) Diane sassile (?) Diane
 - Renecofor sites are part of the ICP Forests network

Modelling and measuring are both part of the monitoring strategy

- Monitoring (mesurement) strategy is defined accounting for the availability of modelling results which bring complementary information
- The CHIMERE model is the national model which allows to derive maps of indicators
- From the "Effects" point of view:
 - Renecofor sites are used to refine parameters for critical load calculations
 - BRAMM results are included in the ICP Vegetation database and analysis.

PREVAIR

