

# Studium znečištění atmosféry persistentními organickými polutanty (POPs)

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Čupr, Jana Klánová, Ivan Holoubek

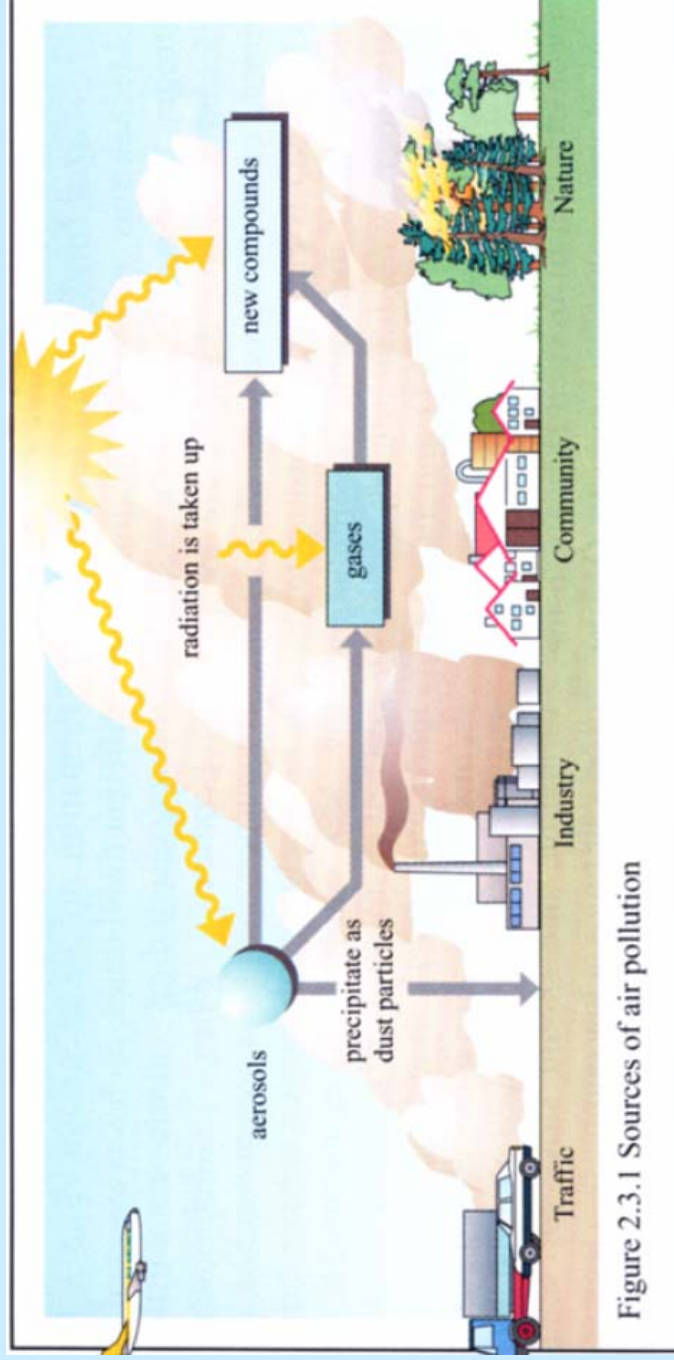
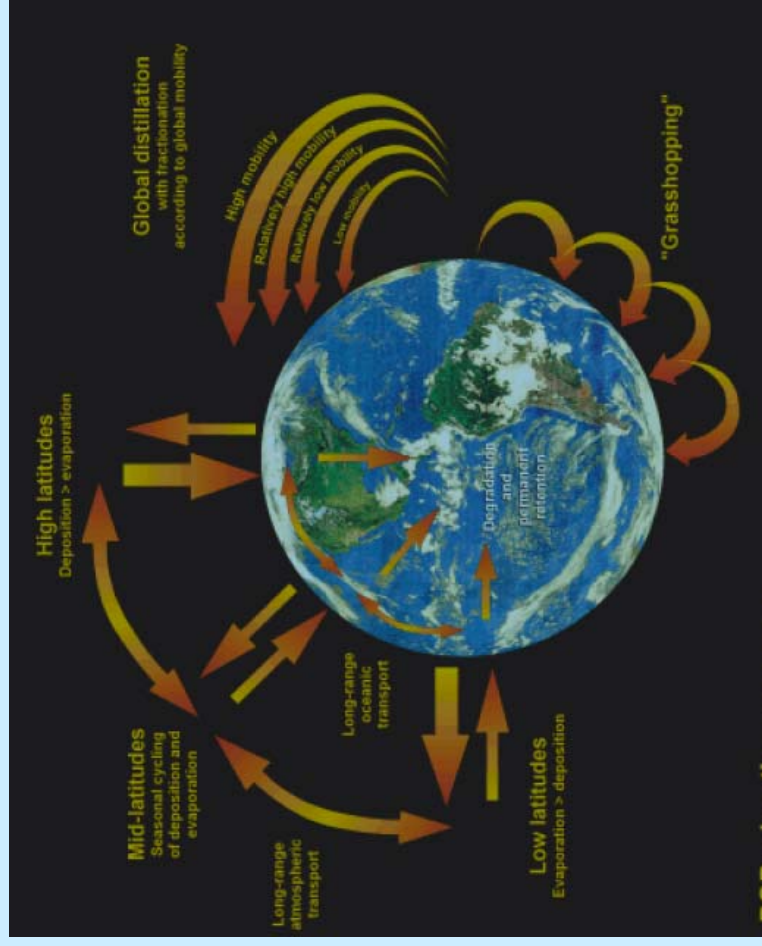
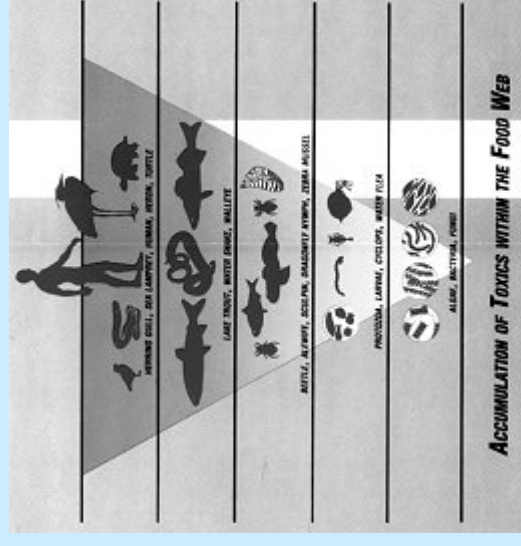


Figure 2.3.1 Sources of air pollution

# POPS



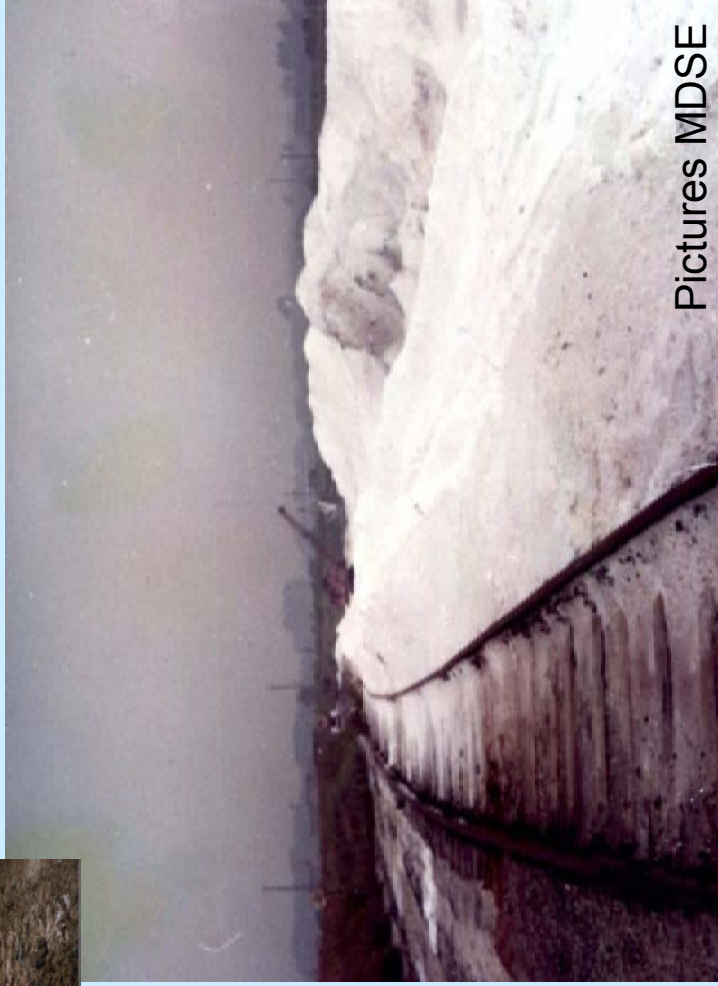
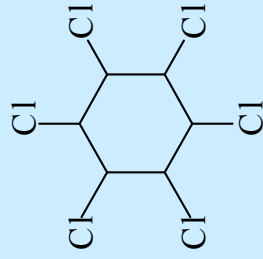
- V různých složkách prostředí
- Dlouhá doba života
- Potenciál k dálkovému transportu
- Hromadí se v tukových tkáních
- Různé typy účinků na organismy



John Vijgen, IHPA



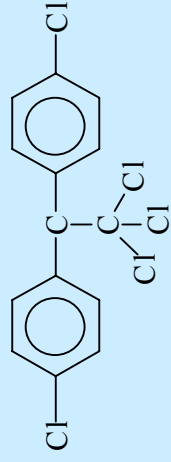
HCH



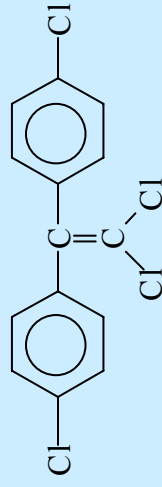
Pictures MDSE



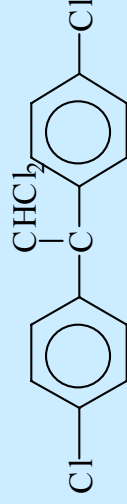
p,p' DDT



p,p' DDE

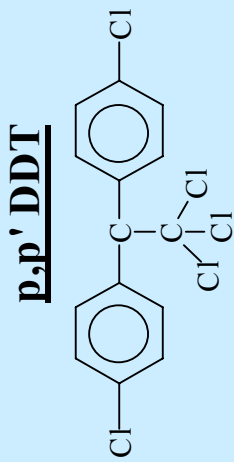


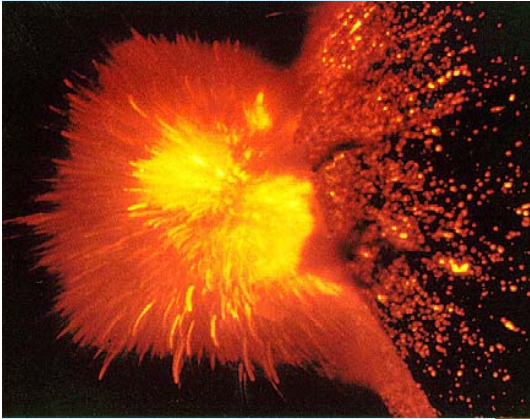
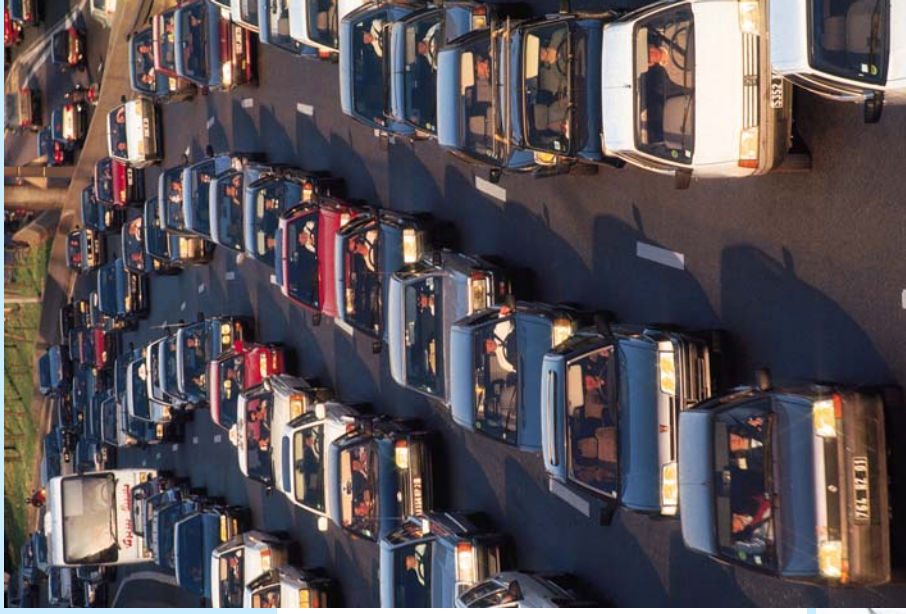
p,p' DDD



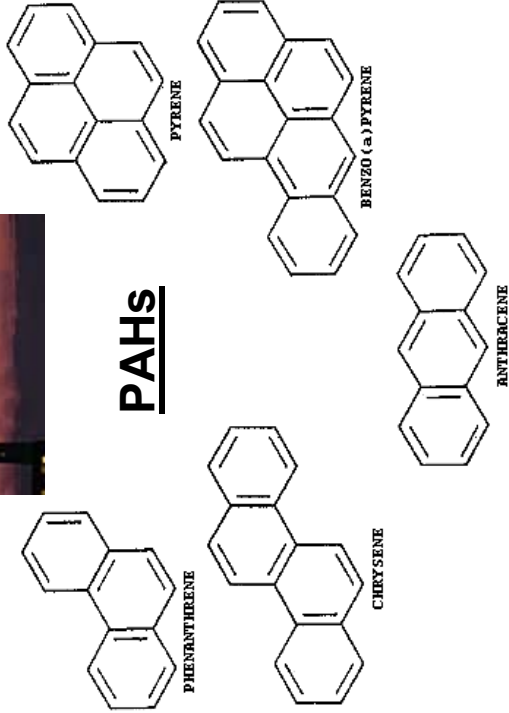


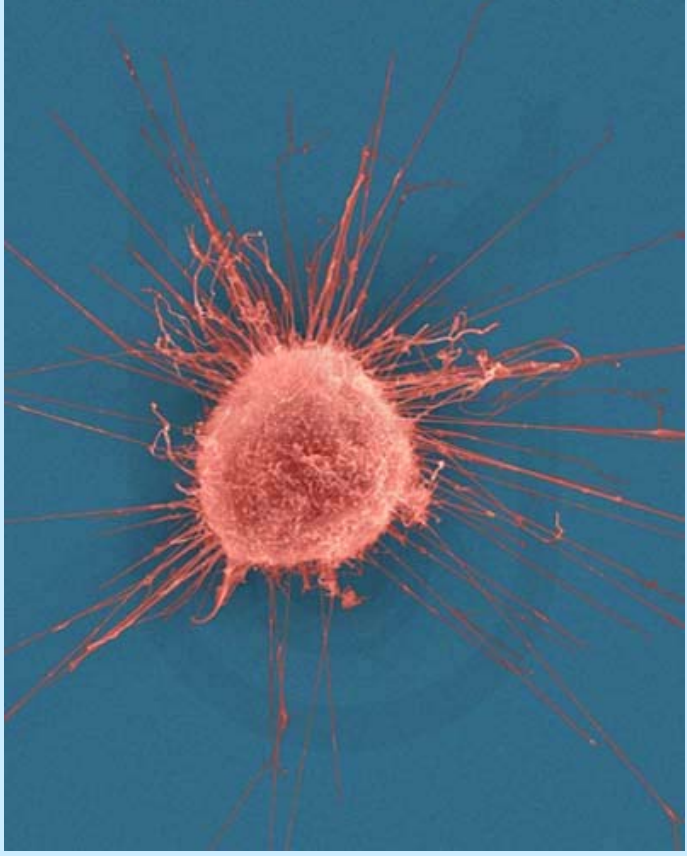
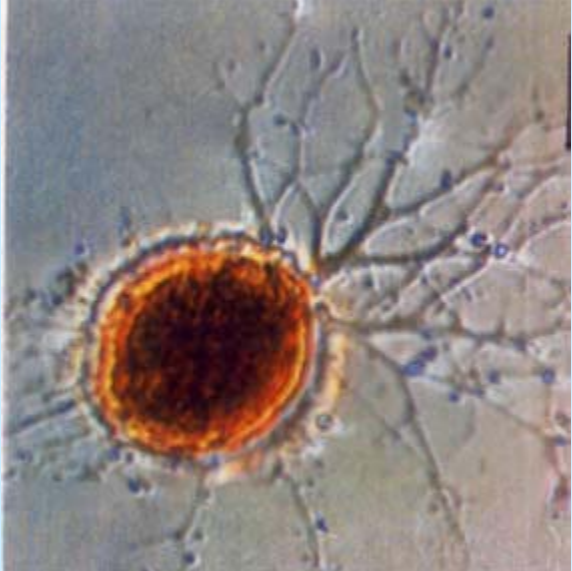
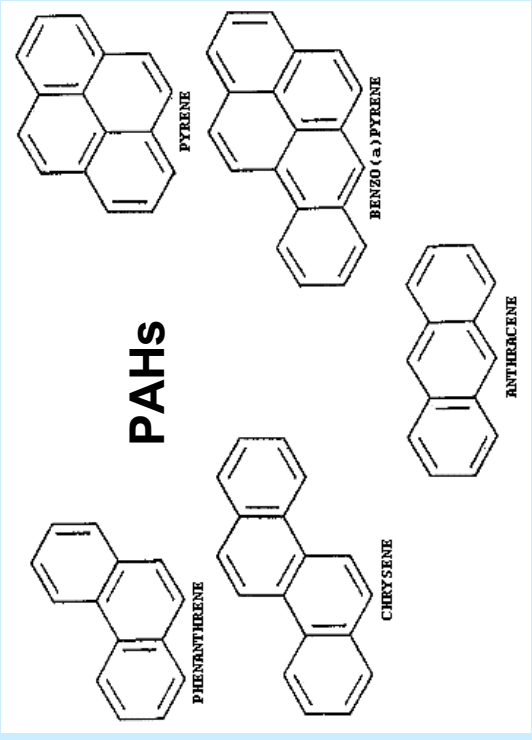
(c) Steve Maslowski, USFWS



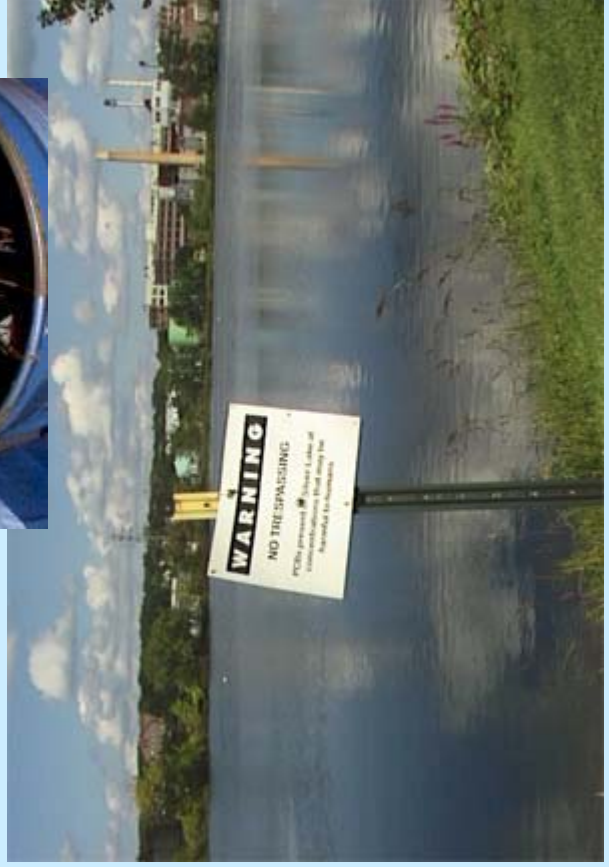
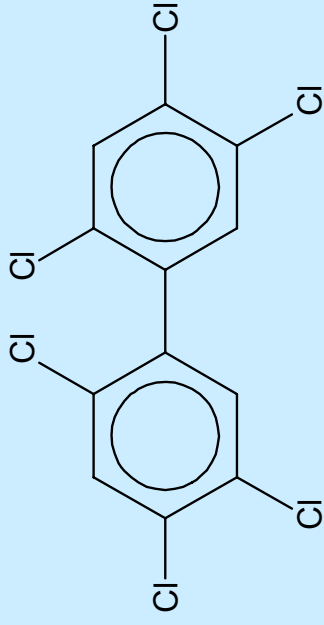


# PAHS



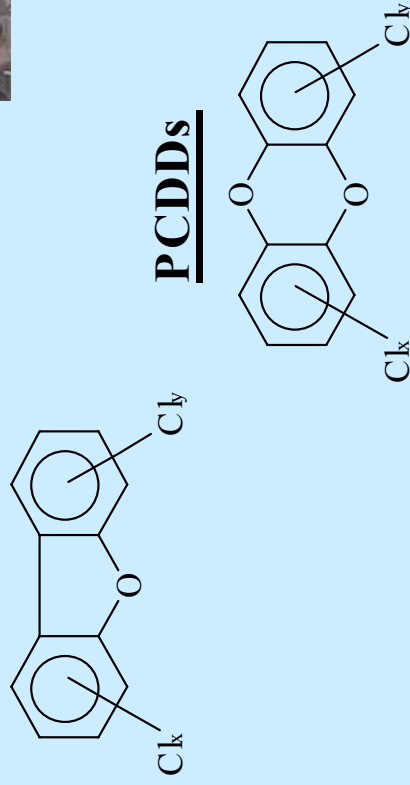


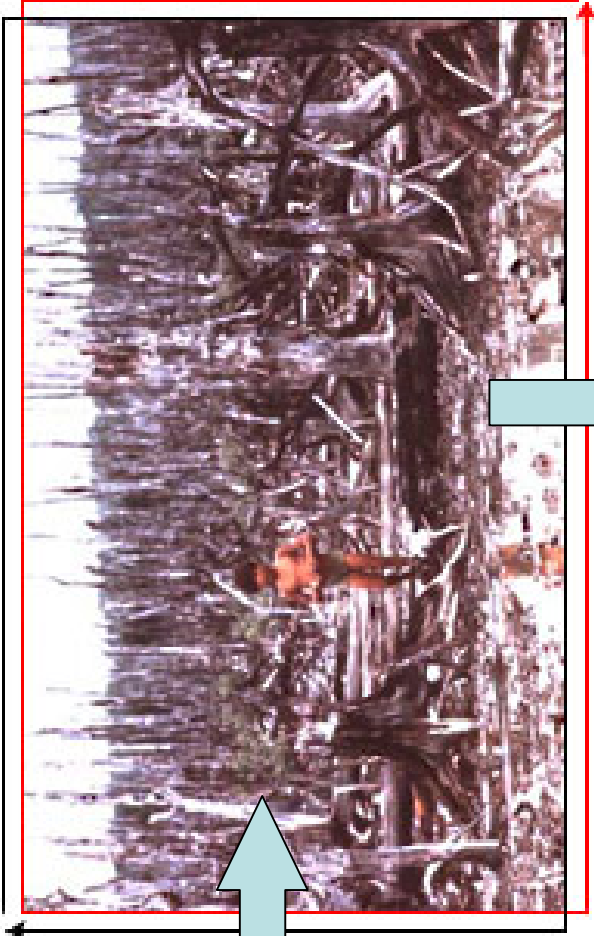
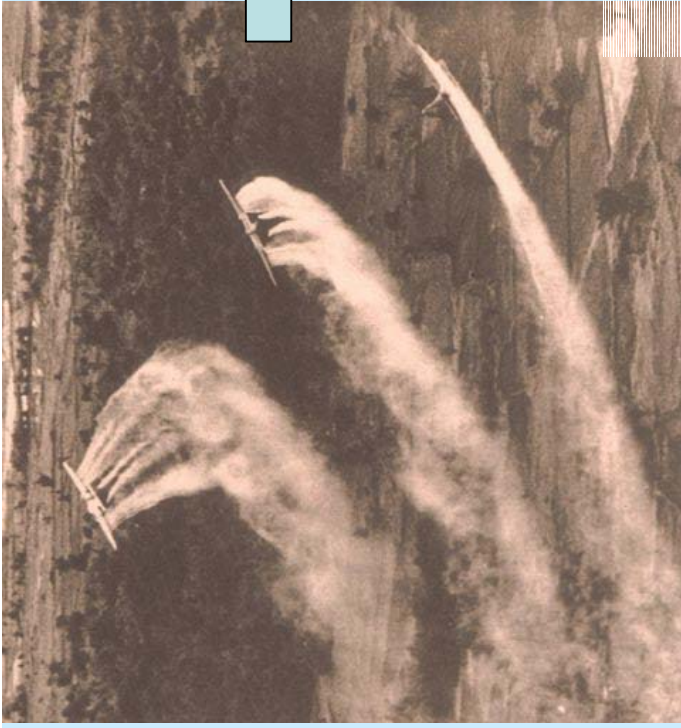
# PCBs



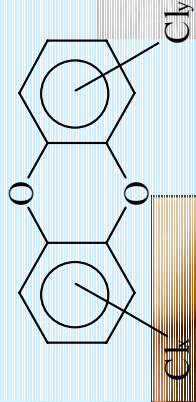








PCDDs



# Využití environmentálních dat



Výskyt a hladiny v prostředí

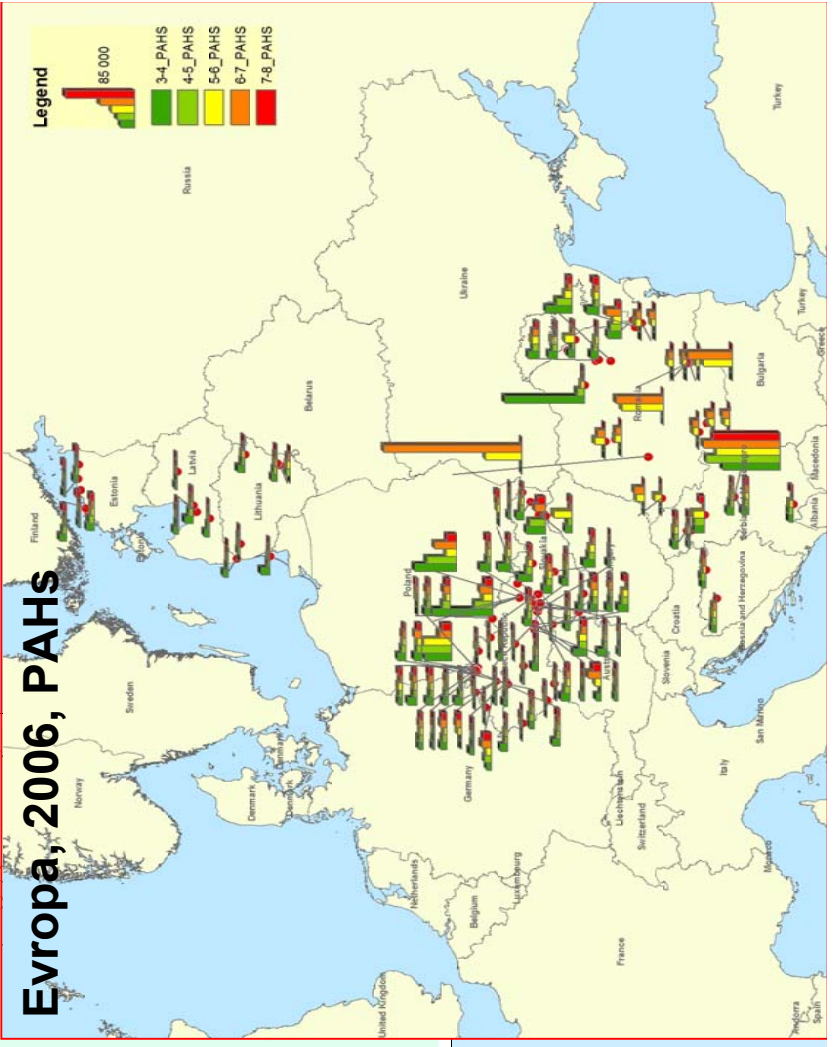
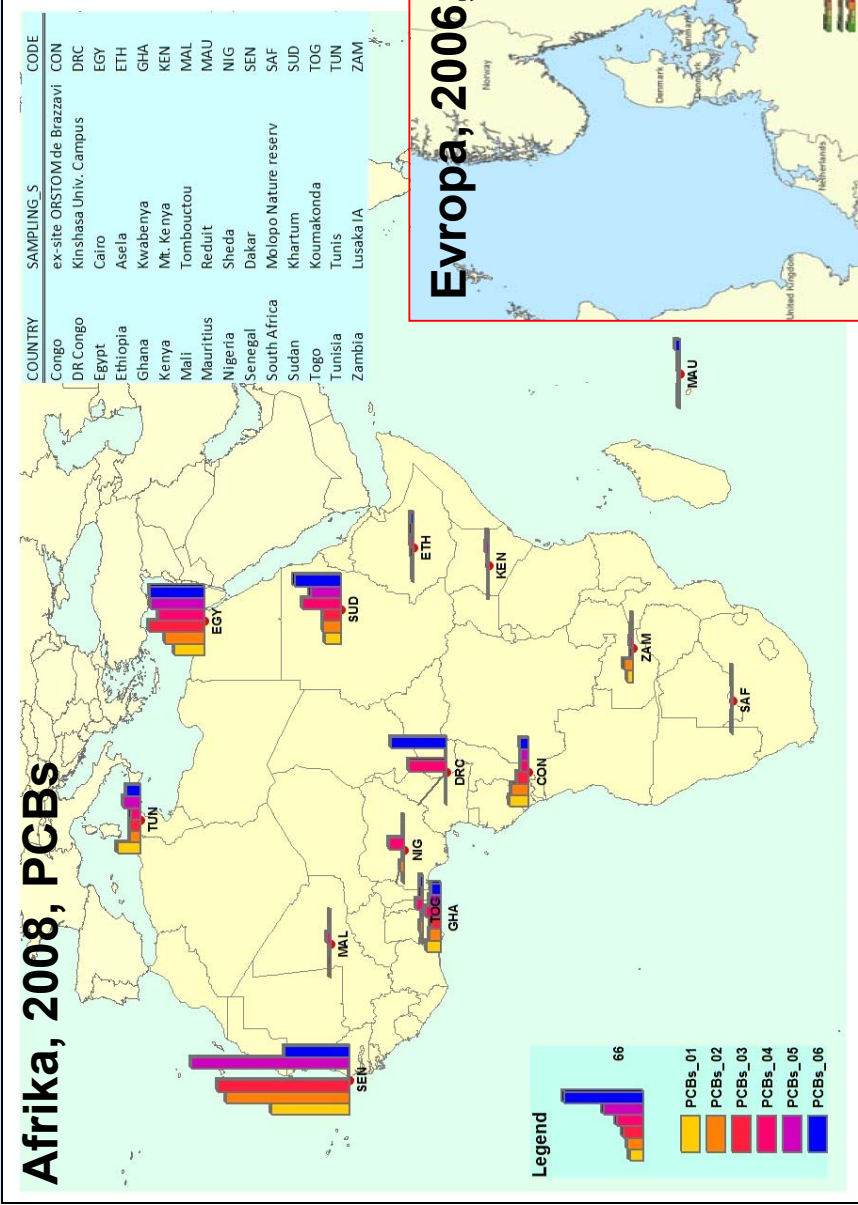
Studium osudu látek v prostředí (např. **transport a distribuce**)

Monitoring časových a prostorových trendů

**Srovnání modelů a měření**

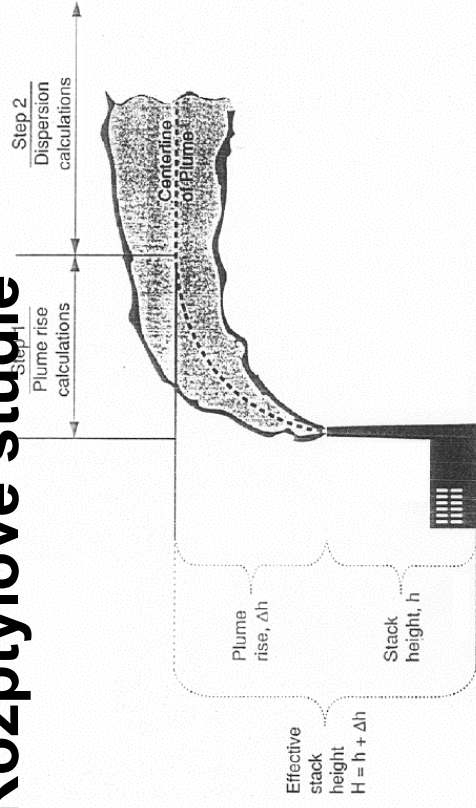
Rozhodovací procesy, cost-benefit analýza

# MONET – Síť pasivních vzorkovačů vzduchu



# RECETOX a IBA:

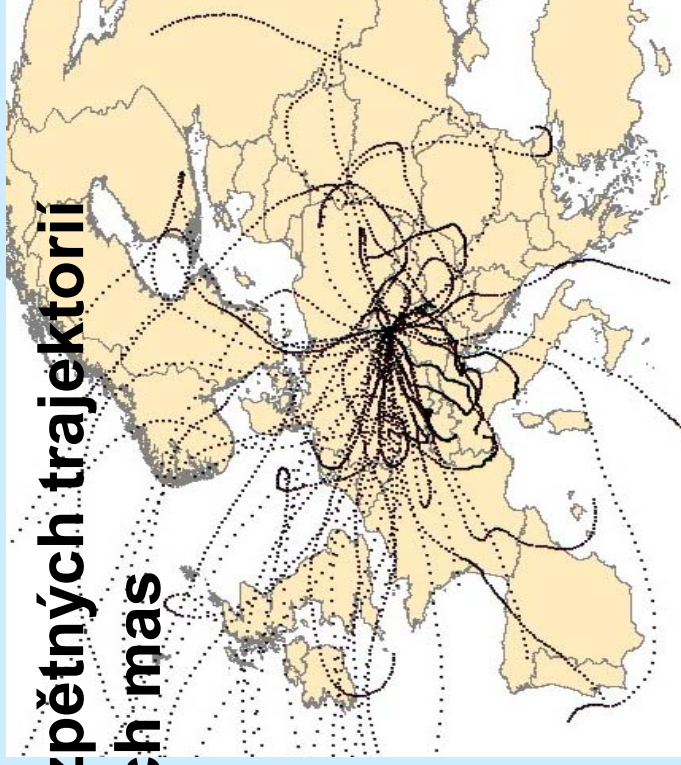
## Rozptylové studie



## Určování typů zdrojů

Source	k <sub>r</sub> ratio	Phase	Reference Method
<b>Combustion biomass</b>			
Almond pruning smoke	0.446	PM	Keshkar experimental
Rice straw smoke	0.504	PM	Keshkar experimental
Red maple (masonry fireplace, 11% moisture)	0.442	PM	Fine et al experimental
Northern red oak (masonry fireplace, 14% moisture)	0.451	PM	Fine et al experimental
Paper birch (masonry fireplace, 9% moisture)	0.482	PM	Fine et al experimental
Eastern white pine (masonry fireplace, 11% moist	0.503	PM	Fine et al experimental
Eastern hemlock (masonry fireplace, 30% moisture)	0.488	PM	Fine et al experimental
Balsam fir (masonry fireplace, 9% moisture)	0.474	PM	Fine et al experimental
Australian native wood (open fire)	0.362	PM	Freeman experimental
Australian native plants (open BBQ)	0.292	PM	Freeman experimental
Australian native and imported species and card	0.493	PM	Freeman experimental
Australian native plants (large-scale bush fire)	0.234	PM	Freeman experimental
Leaves from Australian native vegetation (open fi	0.394	PM	Freeman experimental
Wood from Australian native vegetation (open fir	0.297	PM	Freeman experimental
<b>Incineration</b>			
Pyrolysis of scrap tires (with air pollution control	0.904	total	Chen et al measurements of flue
Open burning of joss paper	0.416	total	Rau et al experimental
Open burning of joss paper	0.436	PM	Rau et al experimental
Paper and cardboard products (commercial indus	0.167	PM	Freeman experimental
Cigarette mainstream and sidestream smoke	0.333	PM	Freeman experimental
Cigarette sidestream smoke	0.395	PM	Freeman experimental
<b>Cooking</b>			
Meat (open BBQ with Australian native plants)	0.125	PM	Freeman experimental
<b>Traffic</b>			
Gasoline PC and LDV, conventional	0.661	Ntziachri literature review (BUW	
Gasoline PC and LDV, Euro I and on	0.448	Ntziachri literature review (BUW	
Diesel PC and LDV, DI	0.579	Ntziachri literature review (BUW	
Diesel PC and LDV, IDI	0.265	Ntziachri literature review (BUW	
Diesel HDV, DI	0.128	Ntziachri literature review (BUW	

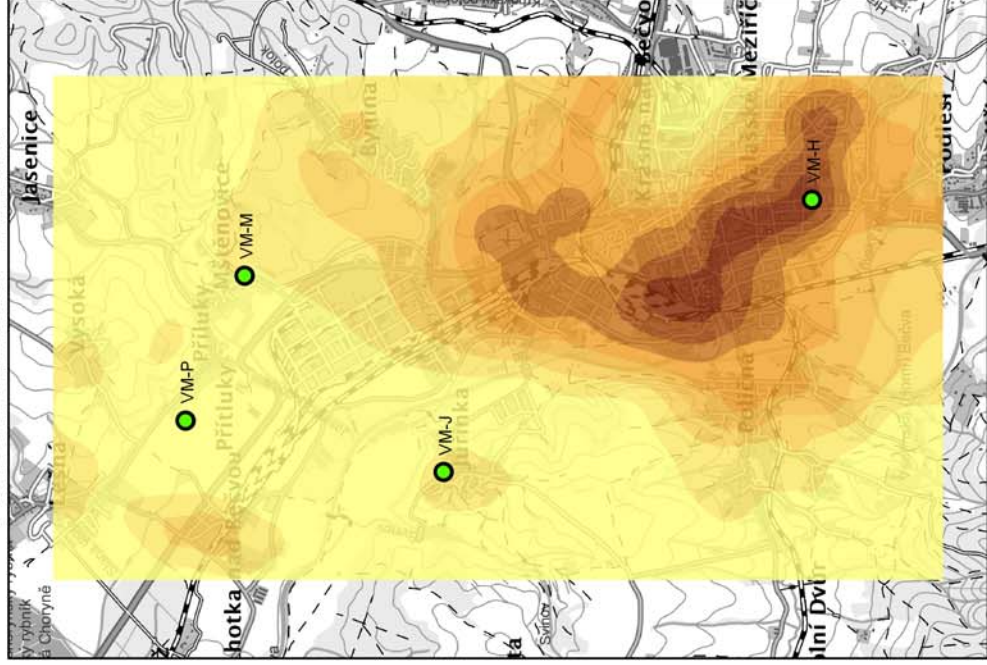
## Analýza zpětných trajektorií vzdušných mas



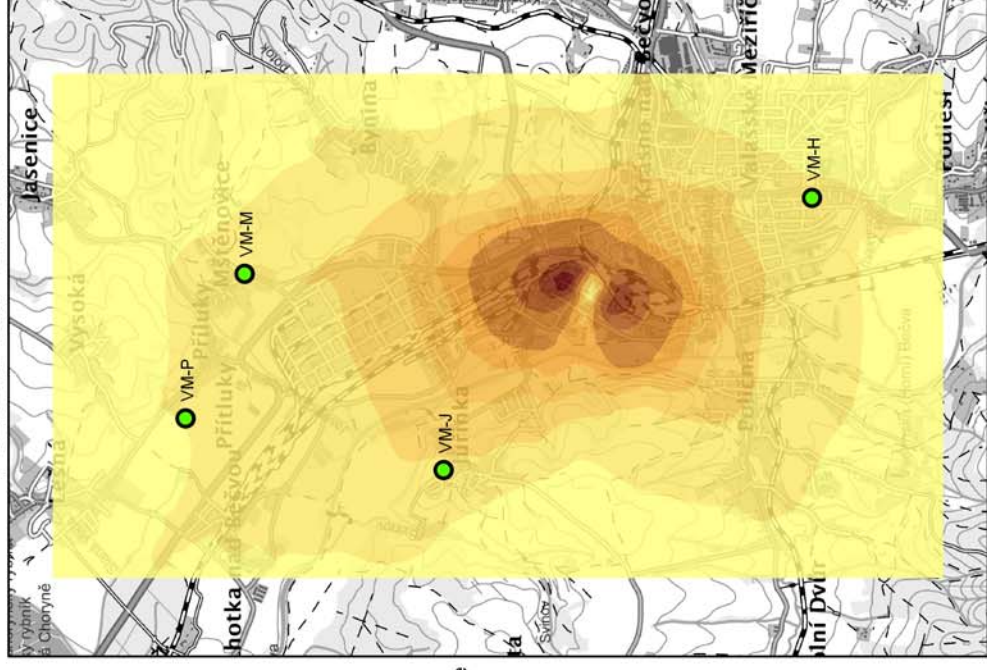
# SYMOS – Valašské Meziříčí

## PRŮMĚRNÉ KONCENTRACE BENZO(a)PYRENU VE VALAŠSKÉM MEZIŘÍČÍ

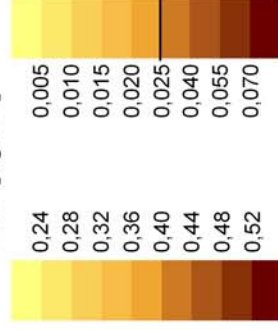
V OBDOBÍ 27.12.2005 - 24.1.2006



V OBDOBÍ 13.6. - 11.7.2006



BaP [ $\text{ng}\cdot\text{m}^{-3}$ ]



● pasivní vzorkovač

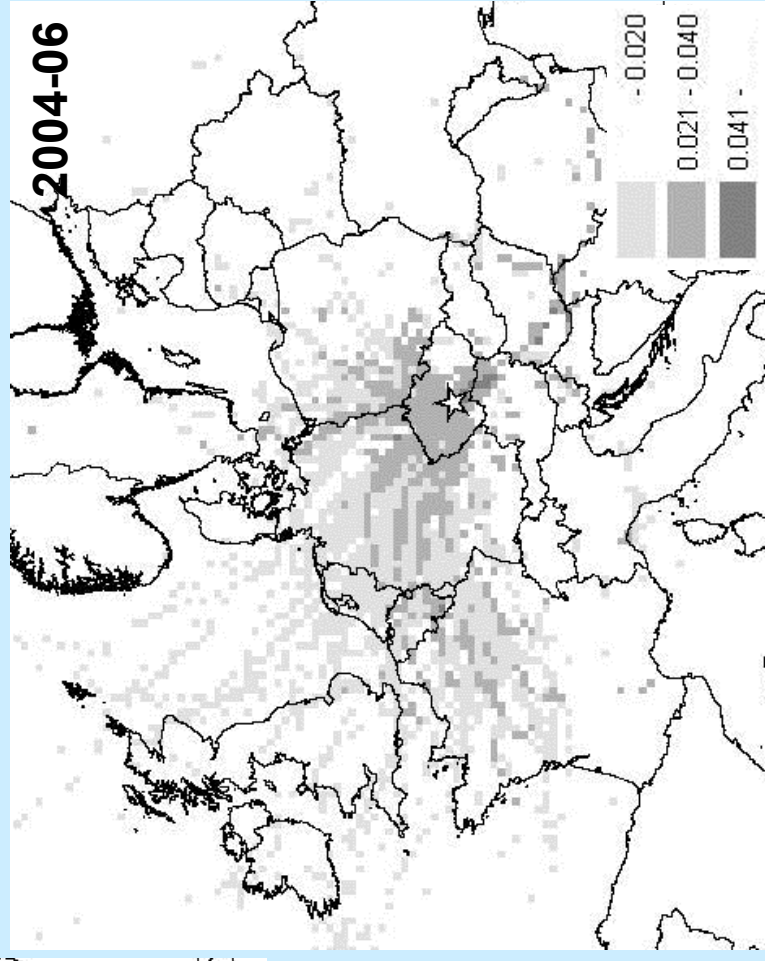
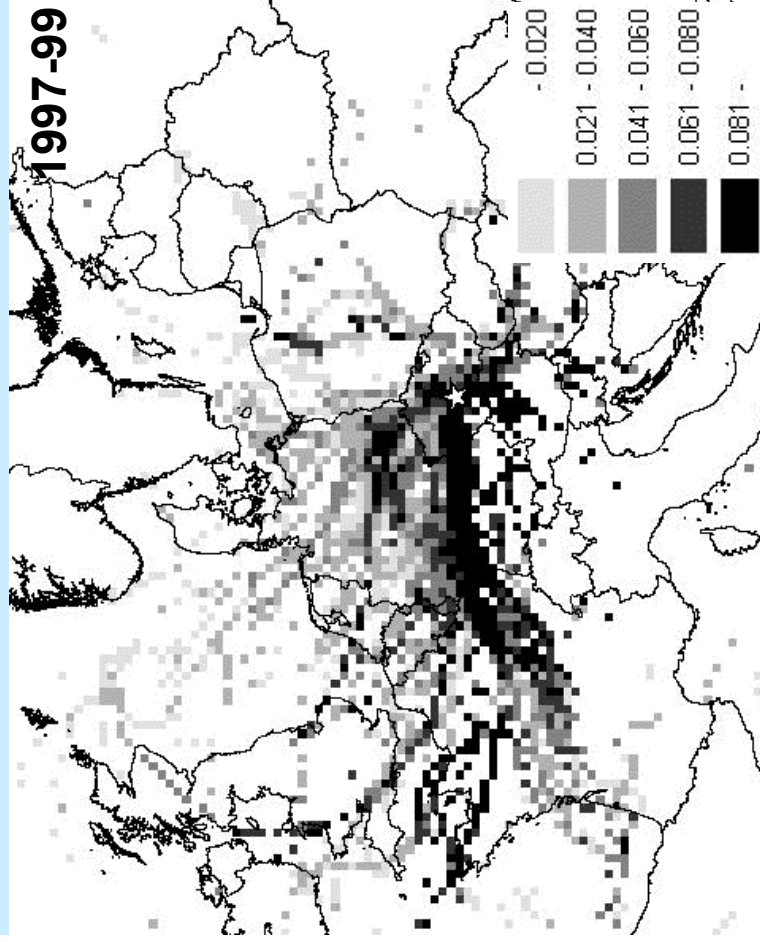
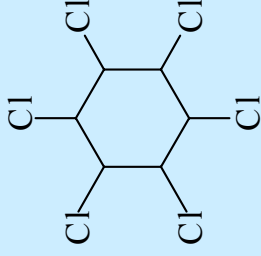
VM-P = Valašské Meziříčí Přiluky  
VM-M = Valašské Meziříčí Mštnovnice  
VM-J = Valašské Meziříčí Jurínka  
VM-H = Valašské Meziříčí hvězdárna

0 500 1 000 1 500 2 000 m

Podklad: VGHMÚŘ  
Ondřej SANKA, GÚ PIF MU,  
Brno, březen 2008

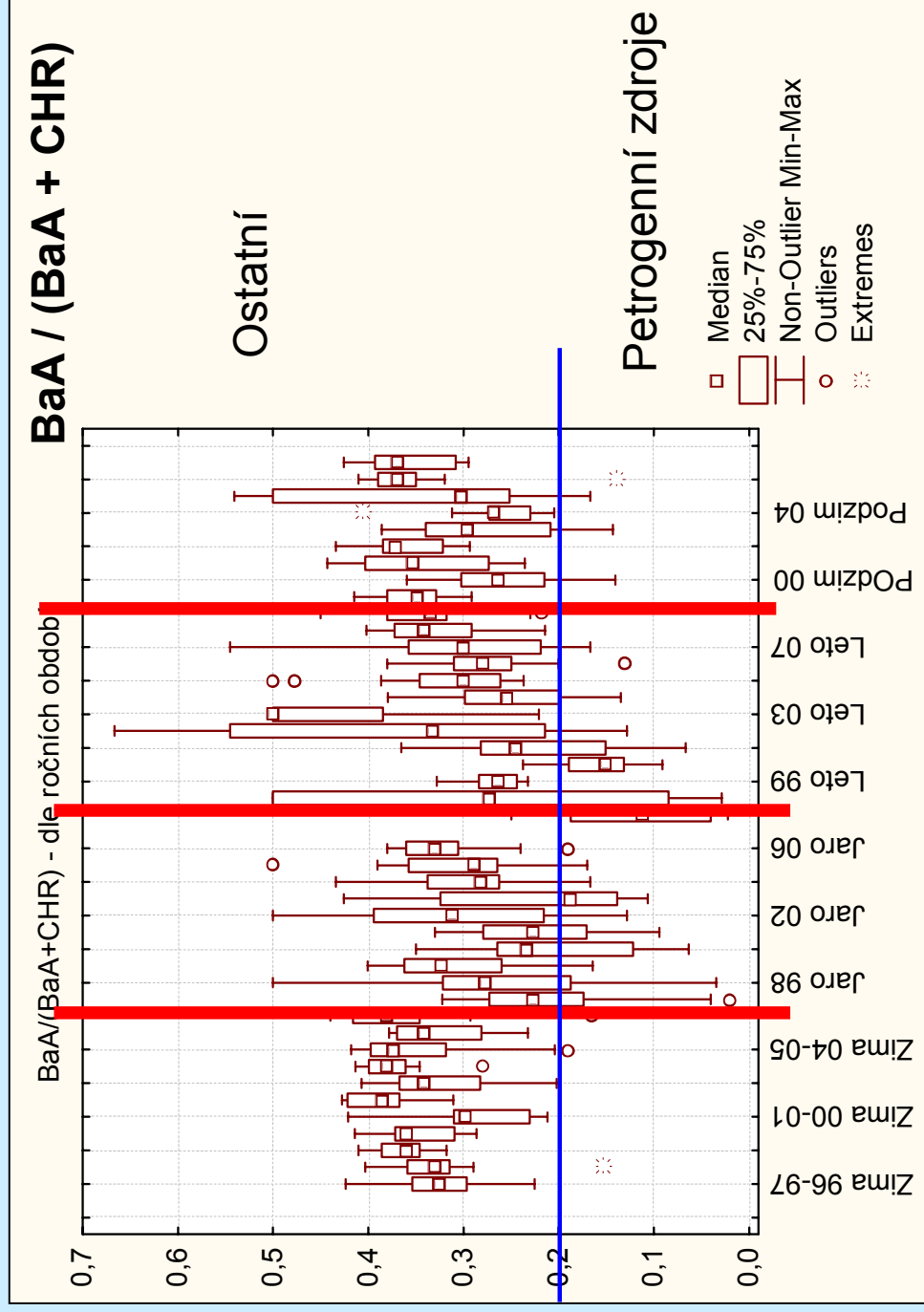
# gHCH (lindan), receptor - Košetice

HCH





# Určování typů zdrojů PAHs



Děkuji vám za pozornost

