

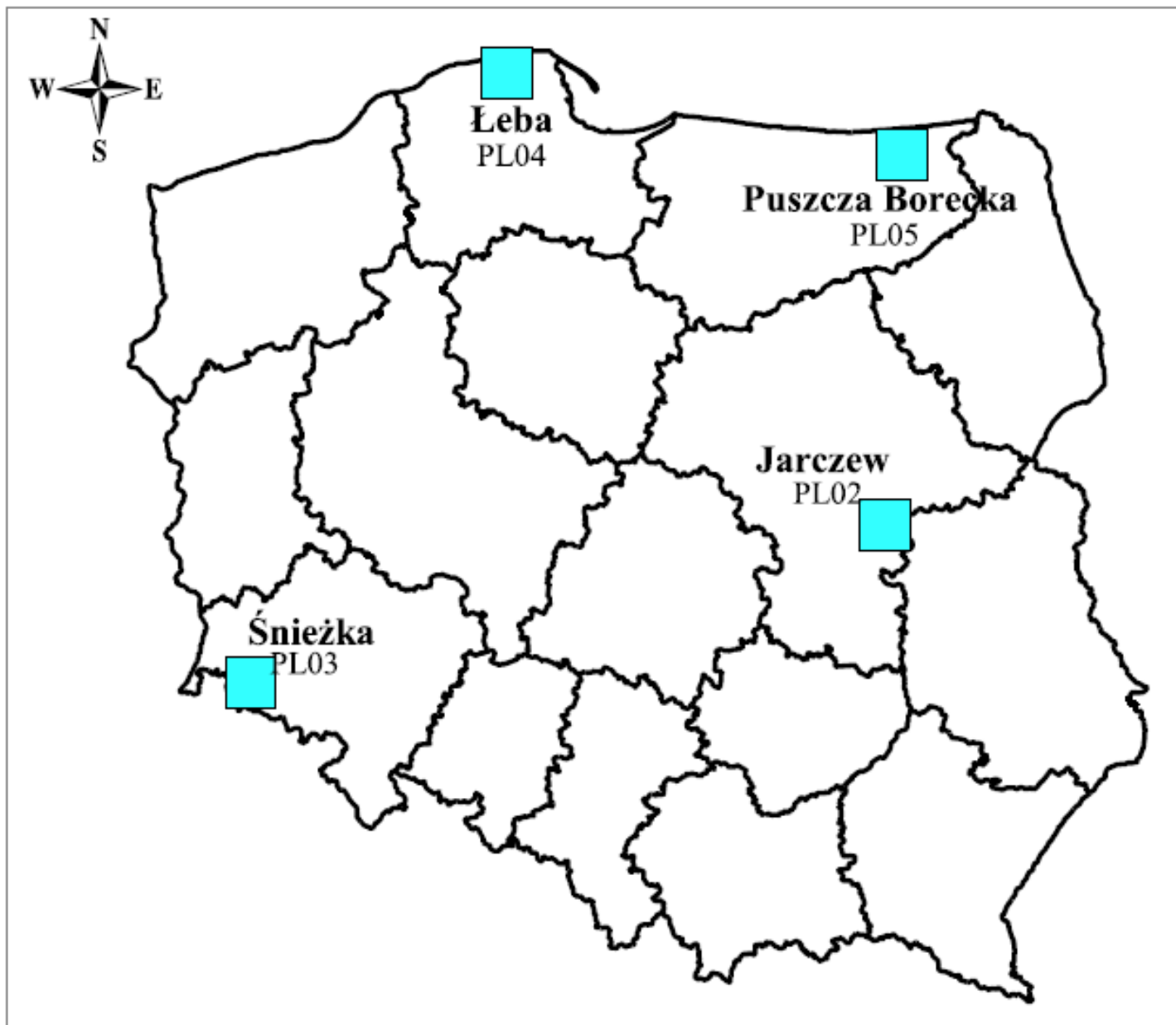
# EMEP MONITORING ACTIVITIES IN POLAND

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# ***Polish EMEP stations***



Level 1			
Programme	Parameters	Minimum time resolution	Stations
Inorganic compounds in precipitation	$\text{SO}_4^{--}$ , $\text{NO}_3^-$ , $\text{NH}_4^+$ , $\text{H}^+$ (pH), $\text{Na}^+$ , $\text{K}^+$ , $\text{Ca}^{++}$ , $\text{Mg}^{++}$ , $\text{Cl}^-$ , (conductivity)	Daily	<b>PL02, PL03, PL04, PL05</b>
Heavy metals in precipitation	Cd, Pb (1st priority), Cu, Zn, As, Cr, Ni (2nd priority)	Daily/weekly	<b>PL04, PL05</b>
Inorganic compounds in air	$\text{SO}_2$ , $\text{SO}_4^{--}$ , $\text{NO}_3^-$ , $\text{HNO}_3$ , $\text{NH}_4^+$ , $\text{NH}_3$ , (s $\text{NO}_3$ , s $\text{NH}_4$ ), $\text{Cl}^-$ , $\text{Na}^+$ , $\text{K}^+$ , $\text{Ca}^{++}$ , $\text{Mg}^{++}$	Daily	S and N compounds <b>PL02, PL03, PL04, PL05</b>
$\text{NO}_2$ in air	$\text{NO}_2$	Hourly/Daily	<b>PL02, PL03, PL04, PL05</b>
Ozone in air	$\text{O}_3$	Hourly	<b>PL02, PL03, PL04, PL05</b>
PM mass in air	$\text{PM}_{10}$ , $\text{PM}_{2.5}$	Hourly/Daily	<b>PL05</b>
Gas particle ratios of N species	$\text{NH}_3$ , $\text{NH}_4^+$ , $\text{HNO}_3$ , $\text{NO}_3^-$ (in combination with filter pack sampling)	Monthly	
Meteorology	Precipitation amount (RR), temperature (T), wind direction (dd), wind speed (ff),	Daily (RR), Hourly	<b>PL02, PL03, PL04, PL05</b>

Level 2			
Programme	Parameters	Minimum time resolution	Stations
<b>Heavy metals</b>			
Mercury in precipitation	Hg	Weekly	<b>PL05</b>
Mercury in air	Hg (TGM)	Hourly/Daily	<b>PL05</b>
Heavy metals in air	Cd, Pb (1st priority.), Cu, Zn, As, Cr, Ni (2nd priority)	Daily/Weekly	<b>PL05</b>
<b>Persistent organic pollutants</b>			
POPs in precipitation	PAHs, PCBs, HCB, chlordane, HCHs, DDT/DDE	Weekly	PAHs (monthly) <b>PL05</b>
POPs in air	PAHs, PCBs, HCB, chlordane, HCHs, DDT/DDE	Daily/Weekly	PAHs <b>PL05</b>
<b>Particulate matter</b>			
PM mass in air	PM <sub>1</sub>	Hourly/Daily	
Mineral dust in PM10	Si, Al, Fe, Ca	Daily/Weekly	
EC and OC in PM10	Elemental and Organic Carbon	Daily/Weekly	<b>PL05</b>

Level 3			
Programme	Parameters	Minimum time resolution	Stations
Greenhouse gases	CO <sub>2</sub> , N <sub>2</sub> O	Hourly	CO <sub>2</sub> <b>PL05</b>
Major inorganics in both PM2.5 and PM10	SO <sub>4</sub> <sup>-</sup> , NO <sub>3</sub> <sup>-</sup> , NH <sub>4</sub> <sup>+</sup> , Na <sup>+</sup> , K <sup>+</sup> , Ca <sup>++</sup> , Mg <sup>++</sup> , (Cl <sup>-</sup> )	Hourly/Daily	PM2,5 (weekly) <b>PL05</b>

For the purposes of HM, PAHs and PM<sub>2,5</sub> measurements under UE directives we have three rural background stations

- one of them is EMEP station (PL05)
- two of them are newly established