

Supplement to: Real-Time Pollen Dynamics and Automated Detection: Novel insights from Wrocław (Poland) 2024–2025

Alnus										
hour	wind_2	wind_3	temp_2	temp_3	hum_2	hum_3	rain_2	rain_3	sun_2	sun_3
0									_*	
1			+*							
2			+*			_*		_*		
3								_*		
4								_*		
5								_*		
6								_*		
7								_*		
8					_*	_*				+**
9			+*		_*	_*				+*
10			+**	+*	_*					
11			+**	+*						
12			+*							
13			+***	+*						
14			+***							
15			+***	+*						
16			+***	+*				_*		
17			+**	+*				_*		
18			+*					_*		
19								_*		
20								_*		
21								_*		
22								_*		
23								_*		

Figure 1S. Hourly Spearman correlation matrix between meteorological variables and Alnus pollen concentrations.

Betula										
hour	wind_3	wind_4	temp_3	temp_4	hum_3	hum_4	rain_3	rain_4	sun_3	sun_4
0				+++	---	---				
1				**	---	---				
2				+++	---	---				*
3				**	---	---				*
4				*	---					
5					---					
6					---			*		
7					---					*
8			+++		---					+++
9			+++		---					+++
10		*	+++		---		*			**
11		**	+++		---					*
12		**	+++		---					*
13		**	+++		---					
14		**	+++		---					
15	*	*	+++		---					*
16		*	+++		---					
17			+++		---					
18			*	*	---					
19				**	---	---	*			
20				*	---	---				
21				*	---	---	*			
22				**	---	---	---			
23				+++	---	---	---			

Figure 2S. Hourly Spearman correlation matrix between meteorological variables and Betula pollen concentrations.

Fraxinus										
hour	wind_3	wind_4	temp_3	temp_4	hum_3	hum_4	rain_3	rain_4	sun_3	sun_4
0				***	**	*				
1				**	***	*				
2				***	**					
3					**					
4										
5										
6										
7			**		**					
8			***		**					
9			***	*	*					
10			**	**						
11			***							
12			***							
13			**							
14			***	*						
15			***	*						
16			**	*	*					
17			***	*	**					
18			**	**	**					
19			*	***	*					
20			**	**	**					
21			*	**	**	**		**		
22			**	***	**	**		***		
23				***	**	**		**		

Figure 3S. Hourly Spearman correlation matrix between meteorological variables and Fraxinus pollen concentrations.

Pinus										
hour	wind_4	wind_5	temp_4	temp_5	hum_4	hum_5	rain_4	rain_5	sun_4	sun_5
0						._***				
1						._***				
2				._**		._**				
3						._*				
4				._**						
5				._**		._*				
6				._*	._*	._*				
7					._**					
8										
9										
10										
11				._*						
12						._*				
13						._*				
14						._**				
15						._***				+*
16						._***				
17					._**	._***				+*
18						._***				
19				._*		._***				
20				._**		._***				
21				._*		._***				
22				._*		._***				
23				._*		._***				

Figure 4S. Hourly Spearman correlation matrix between meteorological variables and Pinus pollen concentrations.

Quercus										
hour	wind_4	wind_5	temp_4	temp_5	hum_4	hum_5	rain_4	rain_5	sun_4	sun_5
0			+***							
1			+***							
2			+***							
3			+***							
4			+***							
5			+***							
6			+***							
7			+***							
8			+***							
9			+***							
10			+***							
11			+***							
12			+***							
13			+***							
14			+***							
15			+***							
16			+***							
17			+***							
18			+***							
19			+***							
20			+***							
21			+***							
22			+***							
23			+***							

Figure 5S. Hourly Spearman correlation matrix between meteorological variables and Quercus pollen concentrations.