



Fig. S1. Summary of clustering results. The figure shows clustering results of clustered time series maps under low temperature (A) and high temperature (B), and clustering results of clustered correlation heatmaps under low temperature (C) and high temperature (D). Each row depicts experiments 1-5, while each column depicts particle size channels 1-32. Size class 1 includes particle size channels 1-20, while size class 2 includes particle size channels 21-32, depicted in gray and black, respectively. Clusters 1 and 2 are depicted in light red and light blue, respectively.

Table S1. Particle Size Channel of FMPS (TSI 3091)

Size_index 1				Size_index 2	
Midpt Dp* (nm)	Channel	Midpt Dp (nm)	Channel	Midpt Dp (nm)	Channel
6.04	1	33.98	13	107.46	21
6.98	2	39.24	14	124.09	22
8.06	3	45.32	15	143.30	23
9.31	4	52.33	16	165.48	24
10.75	5	60.43	17	191.10	25
12.41	6	69.78	18	220.67	26
14.33	7	80.58	19	254.83	27
16.55	8	93.06	20	294.27	28
19.11	9			339.82	29
22.07	10			392.42	30
25.48	11			453.16	31
29.43	12			523.30	32

*Midpt Dp = midpoint particle diameter

Table S2. Functions Used for Clustering Analysis

Algorithm set-up	Parameters	Packages
Preprocessing	Normalization	
Clustering method	clustering_method = Ward.D2	
Distance metric	clustering_distance_row(col) = Euclidean	pheatmap
Number of clusters	Cutree_row(col) = 2	
Color scheme	RGB	