Development of source identification method of environmental pollutants

In a case that the concentration of environmental contaminants is detected in urban / building space, quick identification of the source (position and strength) of the substance makes it possible to effectively cope with concentration and damage reduction.

We investigated tracer particle behavior in reverse flow field from a stochastic point of view and proposed a source identification method based on its diffusion properties.

We applied the proposed method to the diffusion problem in two-dimensional indoor space and examined its effectiveness.