



## Abstract View

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## Experimental Studies of Relative Diffusion in Lake Huron

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### ABSTRACT

Experimental data were obtained in Lake Huron on the distribution of mean concentration and meansquare fluctuation about the center of gravity of a diffusing plume of fluorescent dye. Some of the mean concentration profiles showed a skewness attributable to the vertical current shear, while others were approximately Gaussian. The ratio of rms concentration fluctuation to local mean appears to be a quasi-universal distribution, in the sense that the typical amplitude of this ratio depends on turbulence intensity, but otherwise individual distributions are similar, their length-scale being equal to the length-scale of the mean concentration distribution.

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