## 1086-VI-2798

Vitaliy S Shvetsov<sup>\*</sup>, Department of Mathematics and Statistics, University of the District of Columbia, 4200 Connecticut Avenue, NW, Washington, DC 20008. *Effect of Potomac River on Salinity in Chesapeake Bay.* Preliminary report.

Water salinity affects weather, ecology and civil infrastructure. The Chesapeake Bay is the largest estuary in the coastal United States. It is a transitional environment between fresh and salt water. As fresh water flow the rivers increases, the salinity of the Bay decreases. High tides bring salt water from the Atlantic Ocean and increase salinity of the Bay. Salt water in the Bay extends deep into the rivers that run into it. The salt water boundary in the rivers is ever changing. In my master's thesis I am analyzing the effect of Potomac River on salinity in Chesapeake Bay. Method: Time series analysis, causal inference. (Received September 25, 2012)