Geophysical Research Abstracts,
Vol. 11, EGU2009-3491, 2009
EGU General Assembly 2009

Modeling climatological circulation in Lake Michigan

D. Beletsky (1) and D. Schwab (2)
(1) University of Michigan, (2) NOAA GLERL

Climatological circulation in Lake Michigan is presented. It is based on continuous modeling of 3D lake circulation and thermal structure from 1998-2007 using observed meteorological data as the forcing function. Model results show a large-scale cyclonic circulation pattern during both stratified and unstratified conditions with current speeds of several cm/s. Model results are compared with long-term current observations. Mechanisms driving long-term lake circulation are discussed.