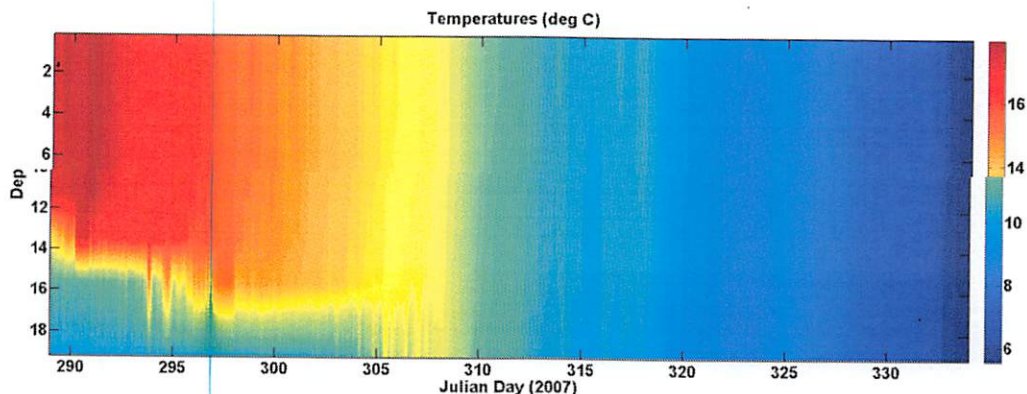


Glacial Lake Temperature Studies – 2007 - 2011

C.D. Troy, Associate Professor -
Purdue University, West Lafayette, IN

Professor Cary D. Troy, an associate professor of civil engineering at Purdue University in West Lafayette, approached the LMEC in 2007 to assist him in running a test study in Lake Maxinkuckee. The intent of his study here at Lake Maxinkuckee was to model a larger project to be conducted on Lake Michigan. Professor Troy was seeking an in-land glacial lake in which to test his theories by using thermistor lines and an automated underwater vehicle. During his four years at Lake Maxinkuckee, he was successful in disproving part of Professor Chrisman's earlier 1984 study by showing that Lake Maxinkuckee does indeed have what is known as a 'fall flip' - as demonstrated by the graph below - generated by 80 day's of research on Maxinkuckee.



While attempting to map the entire lake using the automated underwater vehicle (AUV), it became stuck in a weed bed near the lake outlet and drifted back northeast to Academy Bay. It was ultimately recovered but resulted in the cancellation of the mapping project. This AUV and the 80 foot thermistor line captured three years of air and lake data later used by Professor Troy for further studies conducted among several glacial lakes in the northern Indiana region.

