



**LAKE MICHIGAN WATER TEMPERATURE DATA
ST. JOSEPH, MICHIGAN 1936-1992**

Michael J. McCormick

Great Lakes Environmental Research Laboratory
Ann Arbor, Michigan
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Michael J. McCormick

Great Lakes Environmental Research Laboratory
2205 Commonwealth Blvd.
Ann Arbor, MI 48105
internet address: mccormick@glerl.noaa.gov

1. INTRODUCTION

Water temperature data from several sites around the Great Lakes were obtained to determine if any regional climatic changes or trends could be detected based upon these data sets. The study was partially supported by the NOAA Office of Global Programs. Site selection was based upon location and reasonable data access.

This technical memorandum contains data for St. Joseph, Michigan. The water temperature data were collected at the Water Intake Plant in St. Joseph, Michigan. The data set is from 1936, 1937, 1940-45, and 1960 to 1992. According to the plant manager, all data from 1938, 1939, and 1946 to 1959 were lost.

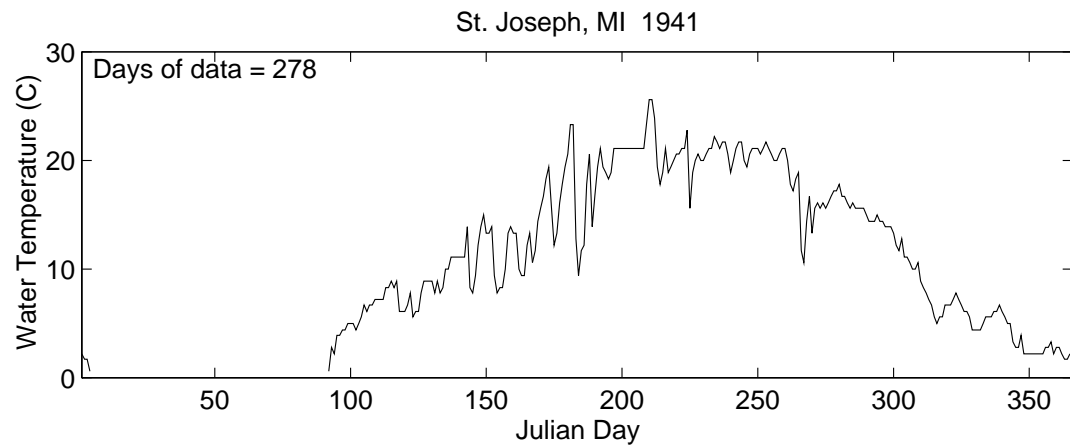
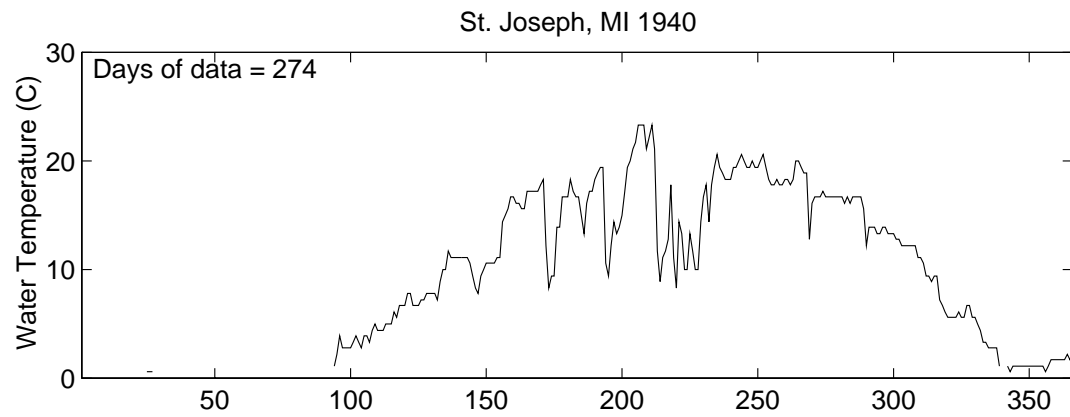
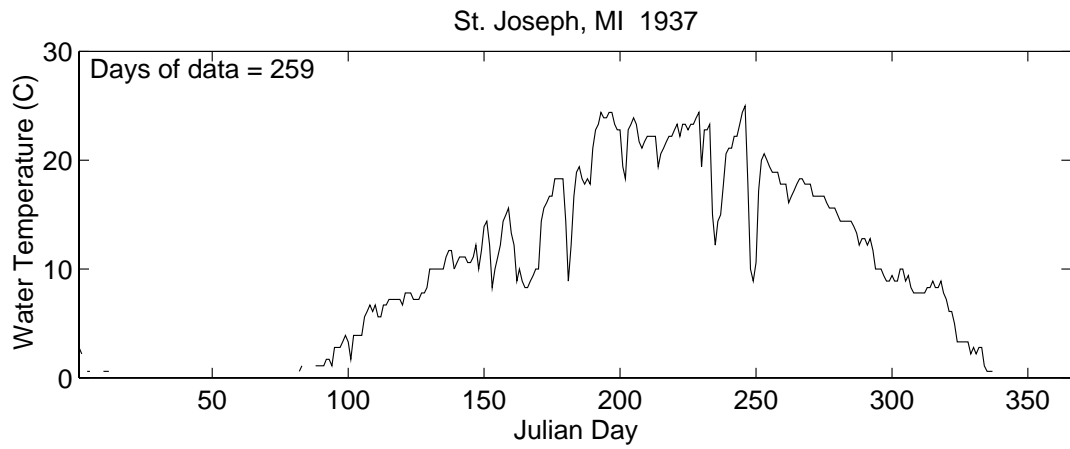
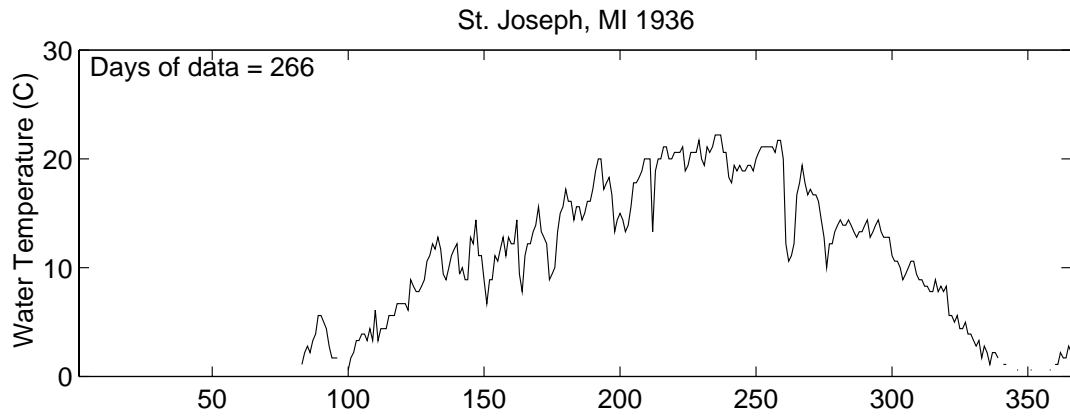
Temperatures were recorded in the plant once each morning. Prior to 1956, the water intake was located approximately 1500' from shore, at 12'-15' below the water surface. After 1956 the intake was shortened such that it extended only 1200' offshore.

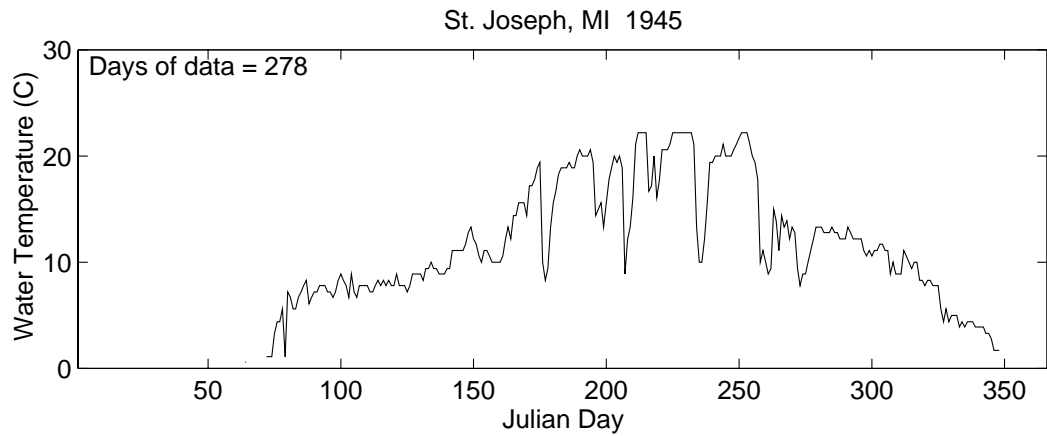
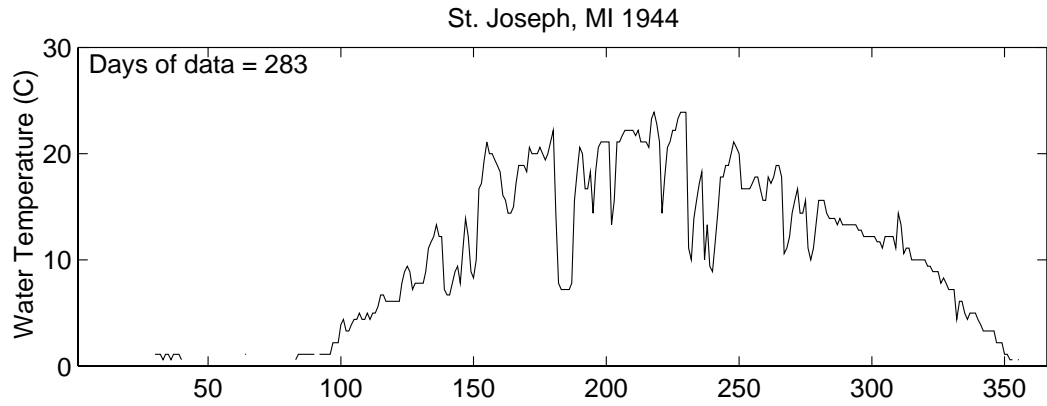
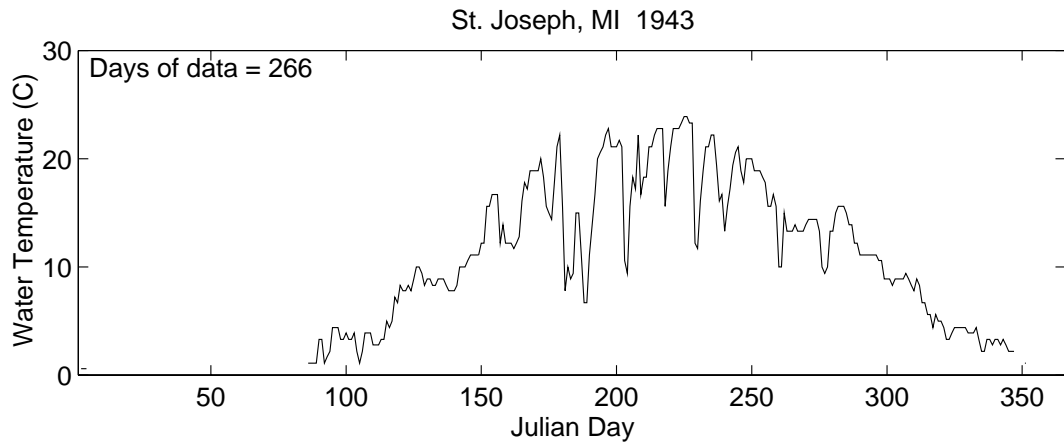
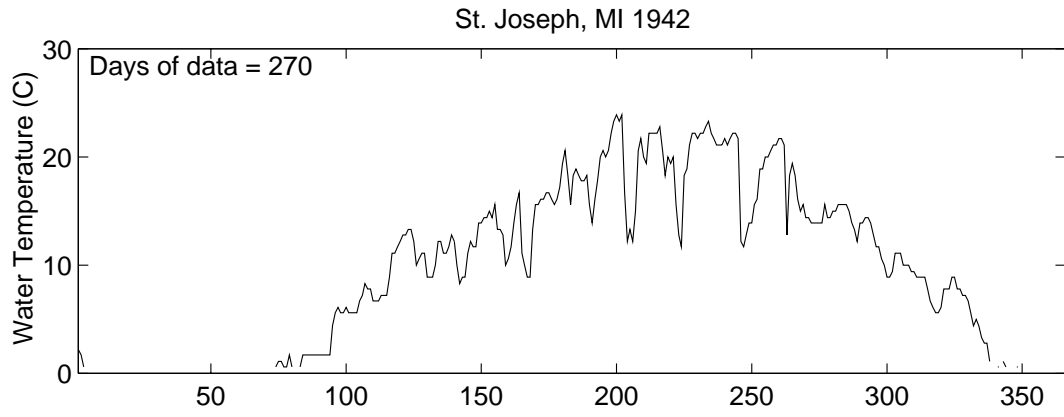
The data are plotted and shown in the accompanying figures. Prior to final plotting, all data were checked for consistency and all questionable values were deleted. **All missing data are denoted by -999.**

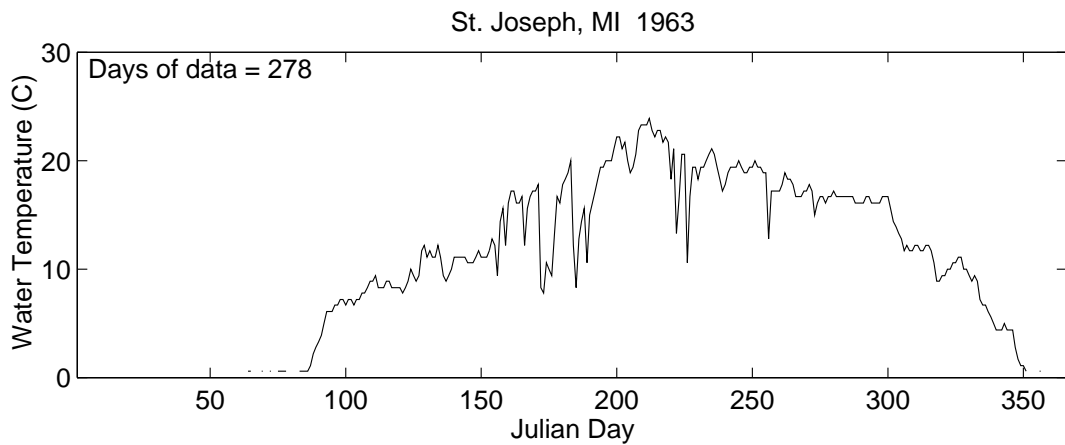
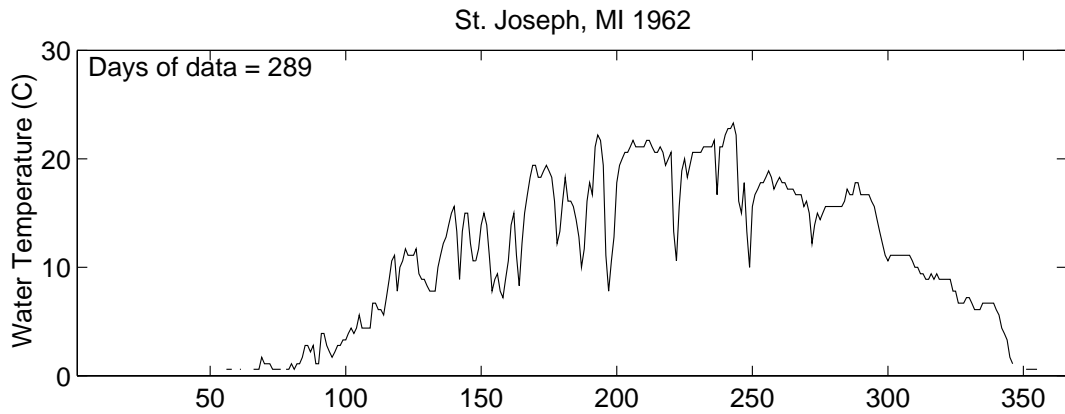
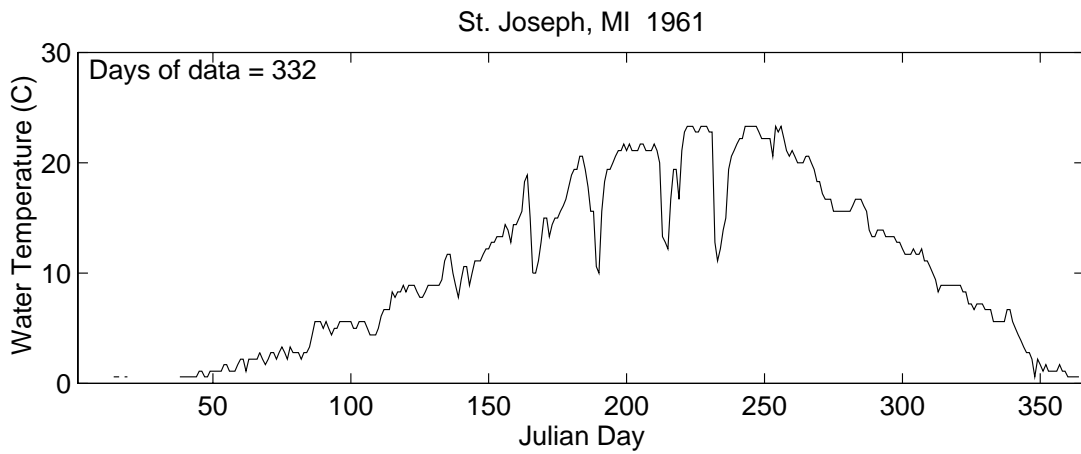
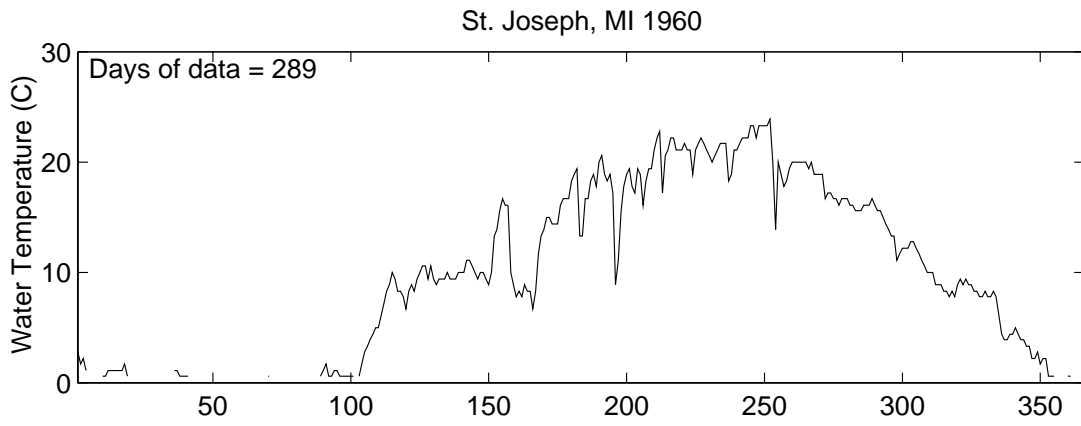
Data files are identified as TM096Dxx.edt where xx identifies the data year. Data are organized into four columns: month, day, year, and temperature. Although the data are reported to the nearest 0.1°C, a more reasonable estimate of their accuracy is 0.5°C, given all the uncertainties with the raw data.

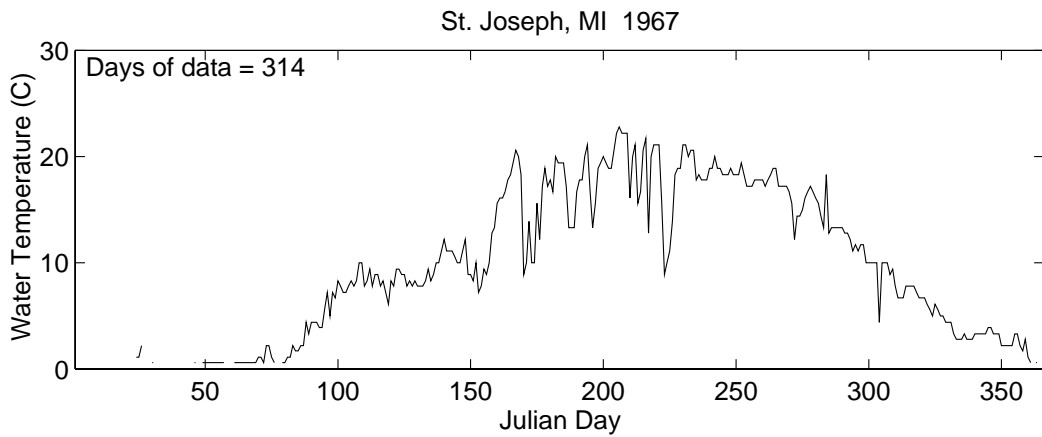
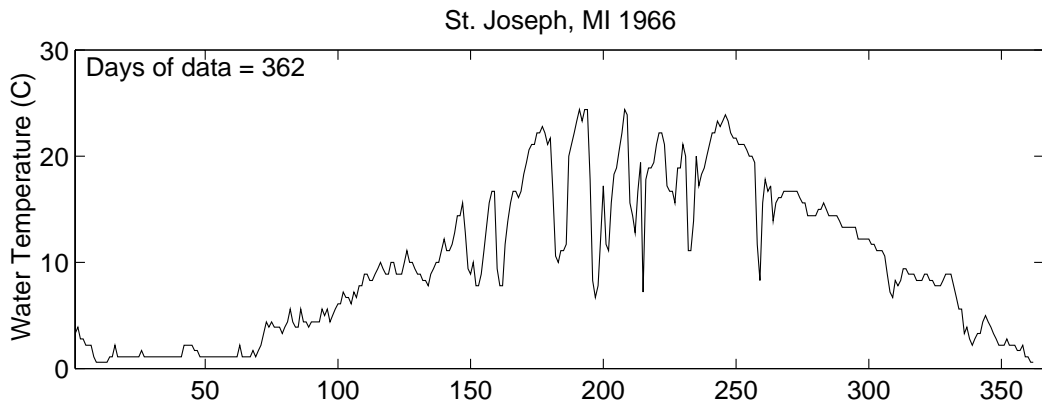
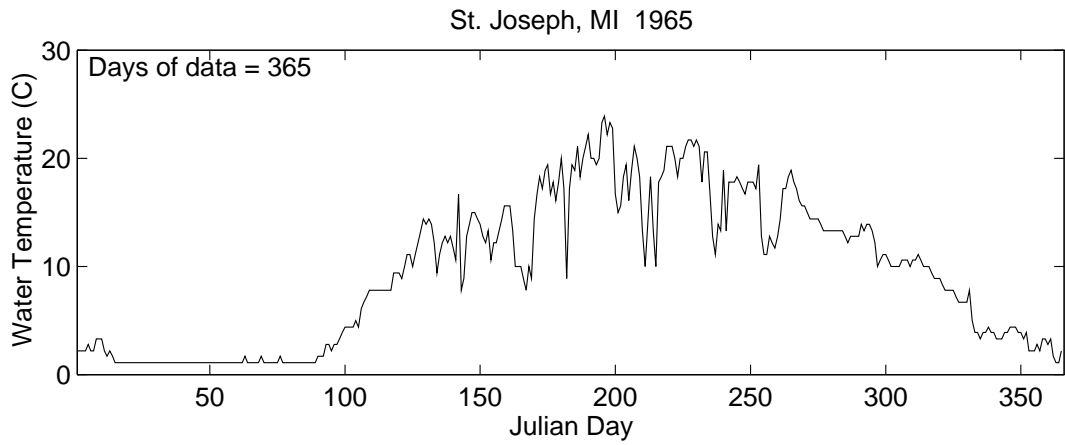
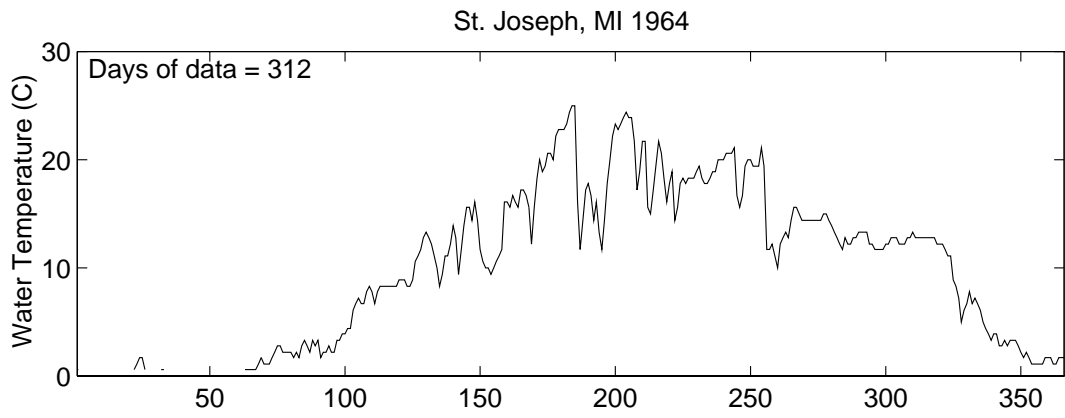
All data are available in a simple ASCII format. The data files are available from GLERL's WWW site or from the anonymous FTP site. From the GLERL home page (www.glerl.noaa.gov), select FTP server, **or** point your browser to: ftp://ftp.glerl.noaa.gov/publications/tech_reports/glerl-96.

Although great care has been used in checking these data, mistakes may still be present. If errors are found, please contact the author at michael.mccormick@noaa.gov.

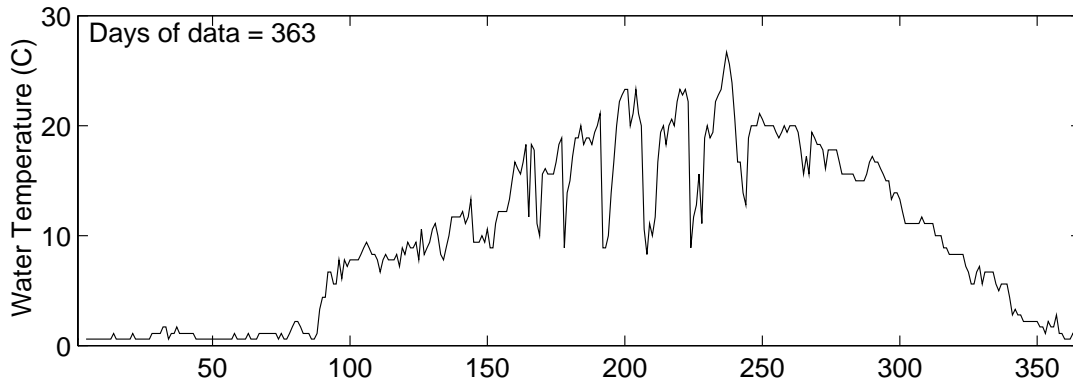




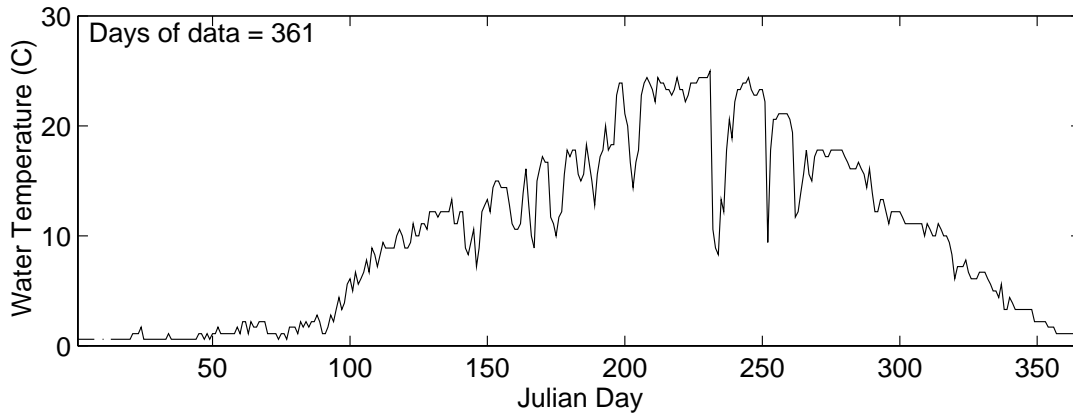




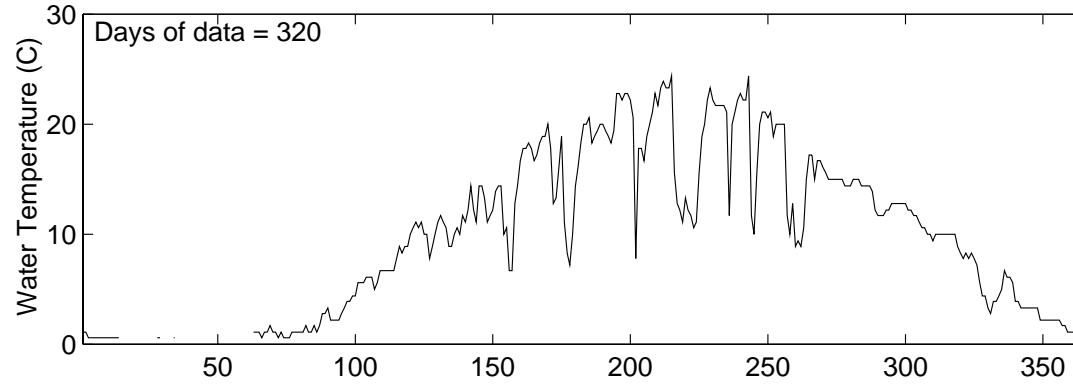
St. Joseph, MI 1968



St. Joseph, MI 1969



St. Joseph, MI 1970



St. Joseph, MI 1971

