ReadMe for the Large Lake Statistical Water Balance Model (L2SWBM) Input Data

Data Sources
-ECCC: Environment and Climate Change Canada
-GLERL: National Oceanic and Atmospheric Adminstration (NOAA) Great Lakes Environmental Research Laboratory
-NWS: NOAA National Weather Service
-USACE: United States Army Corps of Engineers
-USGS: United States Geological Survey

Acronym Definitions
-AHPS: Advanced Hydrologic Prediction System
-BOM: Beginning of Month
-CaPA: Canadian Precipitation Analysis
-ERI: Lake Erie
-Evap: Evaporation
-GLM.HMD: Great Lakes Monthly Hydrometeorological Database
-IGLS: International Great Lakes Datum
-IGS: International Gauging Station
-LLO: Long Lac and Ogoki
-MHG: Lake Michigan-Huron including the Georgian Bay
-MM: Monthly Mean
-NBS: Net Basin Supply
-NWS.MPE: National Weather Service Multisensor Precipitation Estimates
-NYSBC: New York State Barge Canal
-ONT: Lake Ontario
-Prec: Precipitation
-STC: Lake St.Clair
-SUP: Lake Superior
-WCPS: Water Cycle Prediction System

File Descriptions
BOM_MM:
These files contain the beginning of month and monthly mean lakewide average water levels for the Great Lakes and Lake St.Clair. This data is coordinated every spring through December of the previous year. Units are in meters above the IGLD 1985. This data is updated on a monthly basis.

Evaporation:
This file contains the monthly averaged over lake evaporation in millimeters from 4 data sets: NOAA.GLERL.GLM.HMD, GLERL.AHPS.Provisional, USACE.AHPS, ECCC.WCPS. Evaporation data is updated on a monthly basis.

NBS:
This dataset contains the monthly averaged over lake net basin supply for each lake. The units are millimeters and is comprised of 7 datasets: NOAA.GLERL.GLM.HMD, GLERL.AHPS.Provisional, USACE.AHPS, ECCC.WCPS, ECCC.CaPA, ECCC.WATFLOOD, and Residual. This data is updated on a monthly basis.

Precipitation:
These are the monthly averaged over lake precipitation data files for each lake. The units are in millimeters and there are 8 datasets: NOAA.GLERL.GLM.HMD, GLERL.AHPS.Provisional, USACE.AHPS, ECCC.WCPS, ECCC.CaPA, NWS.MPE, Historical.Coordinated, and USACE-Thiessen. This data is updated on a monthly basis.

Runoff: This file contains the monthly averaged runoff in millimeters from 5 datasets: GLM.HMD.Hydromet, GLM.HMD.Provisional, USACE.AHPS, ECCC.WCPS, and ECCC.WATFLOOD. This file is updated on a monthly basis.

StMarysMonthlyMeanFlows:
This dataset contains the connecting channel monthly mean flow from 3 different sources for the St.Marys River. The first column after the Year and Month columns is the International Gauging Station flows. This data is updated on a daily basis. The fourth column uses flow accounting to calculate the flow. This data is updated on a monthly basis. The fifth column is the coordinated flow. The coordinated flows are available through 2008; coordination occurs on an as-needed basis. The units are in cubic meters per second (cms).

StClairMonthlyMeanFlows:
This dataset contains the connecting channel monthly mean flow from 3 different sources for the St.Clair River. The first column after the Year and Month columns is the International Gauging Station flows. This data is updated on a daily basis. The fourth column uses flow accounting to calculate the flow. This data is updated on a monthly basis. The fifth column is the coordinated flow. The coordinated flows are available through 2008; coordination occurs on an as-needed basis. The units are in cubic meters per second (cms).

DetroitMonthlyMeanFlows:
This dataset contains the connecting channel monthly mean flow from 3 different sources for the Detroit River. The first column after the Year and Month columns is the International Gauging Station flows. This data is updated on a daily basis. The fourth column uses flow accounting to calculate the flow. This data is updated on a monthly basis. The fifth column is the coordinated flow. The coordinated flows are available through 2008; coordination occurs on an as-needed basis. The units are in cubic meters per second (cms).

NiagaraWellandMonthlyMeanFlows:
This dataset contains the connecting channel monthly mean flow for Niagara River and the Welland Canal. The first column after the Year and Month columns uses stage fall discharge relationships to calculate the flow. This data is updated on a monthly basis. The fourth column is the coordinated flow.

The coordinated flows are available through 2008; coordination occurs on an as-needed basis. The units are in cubic meters per second (cms).

StLawrenceMonthlyMeanFlows:
This dataset contains the connecting channel monthly mean flow for the St.Lawrence River. The first column after the Year and Month columns uses stage fall discharge relationships or the ADVM method to calculate the flow. This data is updated on a monthly basis. The fourth column is the coordinated flow. The coordinated flows are available through 2008; coordination occurs on an as-needed basis. The units are in cubic meters per second (cms).

LongLacMonthlyMeanFlows:
This file shows the monthly averaged flows in cubic meters per second (cms) for Long Lac. This data is updated on a monthly basis.

OgokiMonthlyMeanFlows:
This file shows the monthly averaged flows in cubic meters per second (cms) for Ogoki. This data is updated on a monthly basis.

LongLacOgokiMonthlyMeanFlows:
This file shows the monthly averaged flows in cubic meters per second (cms) for Long Lac and Ogoki. This data is updated on a monthly basis.

ChicagoMonthlyMeanFlows:
This file shows the monthly averaged flows in cubic meters per second (cms) for Chicago. This data is updated on a monthly basis.

WellandMonthlyMeanFlows:
This file shows the monthly averaged flows in cubic meters per second (cms) for Welland Canal. This data is updated on a monthly basis.

NYSBCMonthlyMeanFlows:
This file shows the monthly averaged flows in cubic meters per second (cms) for the NYSBC. This data is updated on a monthly basis.

AllFilesZip:
This is a zip file that contains all of the data files and the README.

Note: GLERL maintains the GLM-HMD data.