

Lake Lacawac, Bruce R. Hargreaves, Lehigh University (brho@lehigh.edu/~brho) 41°22.5'N 75°17.3'W elevation 428m  
24 March 2012: platform moved to lake center, 12-1:00pm 13Nov 2011: platform moved to dock 12-1pm

H310 sensor depth & Lake level are based on differential pressure sensor with ca 0.1mm resolution & vertical position referenced to bottom of lake. Sensor PSID converted to depth using density of water at 40C (1.43321 psim)

The water level sensor (referenced to dock) settles for several days after moving platform to lake center and thus underestimates water level during this period. Dec11: Tw12 appears to be falling (drifting upward); need to check or replace when possible.

(Actual water level at dock varies seasonally with density of water column and hourly from precip, runoff, evaporation, seepage & outflow. Outflow also varies with status of beaver dam).

Summary table for Lake Lacawac data from 2010 to 2012. Columns include: Date, AvgTw, Tair, Tair-Hi, Tair-Hi-C, Rain-in, Rain-out, WS-max, WS-min, WDIR-deg, Barom-mb, Sum Rad W/m2, Sum PAR, Tw 0.1m F, Tw 0.5m F, Tw 1m F, Tw 2m F, Tw 3m F, Tw 4m F, Tw 5m F, Tw 6m F, Tw 8m F, Tw 10m F, Tw 12m F, H310 z (m), Lakelevel-mm (40C), cumul. rain-mm, Batt min-V, RH% CR10, RH% MUX. Includes a 'rain sum (in.) Aug-Sep2011= 17.42' and '5280 ft/mile 1609.3 m/mile' header.

Main data table with columns: Location, % records, Date, Day of Yr, Tair avg-C, Tair Hi-C, Tair Min-C, RHair-%, Rain-in, Rain-out, WS Max m/s, WDIR-deg, Barom-mb, Sum Rad J/m2, Sum PAR, Tw 0.1m, Tw 0.5m, Tw 1m, Tw 2m, TW3m, TW4m, TW5m, TW6m, TW8m, TW H310-C, H310 depth-m, Lakelevel-cumul. rain-mm (40C), Batt min-V, RH% CR10, RH% MUX. The table contains multiple rows of hourly data points.

Lake water & energy budget daily summary from hourly data (negative values: loss from lake; runoff & seepage term is residual after adjusting lake level change for all others)

Detailed daily summary table. Columns include: DATE, DayOfYr, AvgTair, AvgTw, AvgTw0.5, AvgTw2, AvgTw3, AvgTw4, AvgWS, SumRad, SumH2O, SumLk, SumRain, SumRunoff, SumSeepage, SumLake, SumTerreap2. It provides a detailed breakdown of energy and water fluxes for each day.

Summary and conversion tables. Includes: 'Ratio of lake watershed to lake area: 2.617658', 'Runoff & seepage as % of watershed area precip: 28.3%', 'Nominal diffuse %R from water=7%', 'SumTerreap2=Air PD.mbar/WS.m/s', 'CONVERT HEAT TO DEGREES: 4.184', and 'Slope intercept: 4.184'. Contains various conversion factors and summary statistics.