

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, 12:10pm 13 Nov 2011: platform move to dock 12:10pm
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.

H310 sensor depth & Lake level are based on differential pressure sensor with ca 0.1mm resolution & vertical position referenced to bottom of lake.
Sensor PS1C converted to depth using density of water at 40C (1.43321 psim)
Lake level is referenced also to lower frame of dock at SE corner (2003-May2005)
(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 with columns: Tair avg F, Tair max F, Tair min F, Rain-in, WS-Max-mpH, WS-max-mpH, Std pressure at sea level, Std pressure at 428m, Sum PAR, Sum Rad, Tw 0.1m, Tw 0.5m, Tw 1m, Tw 2m, Tw 3m, Tw 4m, Tw 5m, Tw 6m, Tw 8m, Tw 10m, Tw 12m, H310 z (m), Lakelevel, cumul. rain-mm, Batt min-V, RH% CR10, RH% MUX enc

Data table with columns: Location, % records, Date, Day of Yr, Tair avg-C, Tair Hi-C, Tair Min-C, RHair-%, Rain-mm, WS-Max-mpH, WS-Max-deg, WDIR-deg, Barom-mb, Sum Rad J/m2, Sum PAR, Sum Evap, Sum Lk, Sum Rain, Sum seepage, Sum Lake, Sum Terrepap2, Tw 0.1m, Tw 0.5m, Tw 1m, Tw 2m, Tw 3m, Tw 4m, Tw 5m, Tw 6m, Tw 8m, Tw 10m, Tw 12m, H310 depth-m, Lakelevel-cumul. rain-mm, Batt min-V, RH% CR10, RH% MUX

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)

Table showing Ratio of lake watershed to lake area: 2.6176758, Runoff & seepage as % of watershed area precip: 13.0%, Grand sum/avg values for Tair, Rain, WS, WDIR, Barom, Sum Rad, Sum PAR, Sum Evap, Sum Lk, Sum Rain, Sum seepage, Sum Lake, Sum Terrepap2, and Tw values.

Table with 4 main sections: 1. Scales and units (SCALE ADJ), 2. Conversion from Fahrenheit to Celsius, 3. Conversion from Fahrenheit to Degrees Celsius for heat, 4. Summary of solar heat input, absorption, evaporation loss, and fluxes.

Detailed data table with columns: DATE, Day/Off, AvgTair, AvgTw, AvgTw0.5, AvgTw2, Avg Tw2m, Avg Tw4m, AvgWS, AvgWS, SumRad, SumH Evap, Sum Lk, Sum Rain, Sum seepage, Sum Lake, Sum Terrepap2, Tw 0.1m, Tw 0.5m, Tw 1m, Tw 2m, Tw 3m, Tw 4m, Tw 5m, Tw 6m, Tw 8m, Tw 10m, Tw 12m, H310 depth-m, Lakelevel-cumul. rain-mm, Batt min-V, RH% CR10, RH% MUX