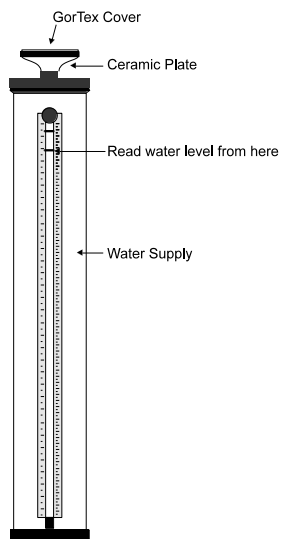


Manual Potential Evapotranspiration

(Last rev. 18/08/2014)

ETguage



Potential Evapotranspiration (PEt) is estimated using ceramic plate atmometers known as ETgages. ETgages estimate evapotranspiration by allowing water to be drawn up through a ceramic disk and out through a GorTex cover. A recent study by Fontain and Todd (Measuring Evaporation with Ceramic Bellani Plate Atmometers, 1993, Water Resources Bulletin, Vol. 29, No. 5, p. 785-795) found that such devices perform very well compared with more traditional methods of measuring evaporation.

There are three ETgages currently being used on BCI: two in the Clearing located at a height of 1.5m and a second on the top of the 40m tower near the Lutz weir. ETgages are read at approximately the same time of day and with the same frequency and the rain gauges on BCI: usually between 8:30 and 9:30am. PEt is recorded first as height of the water column on the ETgage. The difference between this reading and the previous is the PEt for the intervening period. The data series for these data have the following pattern: station_site_evap_man.



Since gauges are usually only read during work days, PEt is also available prorated evenly over the recording period. The PEt on the next recorded date (Monday, for example) is divided evenly among that day and the missing days (e.g. Saturday, Sunday and Monday). The data series for these data have the following pattern: station_site_evap_man_pr.

As an example, the following table:

Day	PEt	Prorated PEt
1	missing	5
2	missing	5
3	15	5