

# LISEM Prep

PAZ

15/10/2018

Merge all outlet data summarized by multi-day (Model book 00) with yClust (HydroMonit Book 10.3)

```
qmDay = read.csv("BEACH_R/allOut_multiDay_R00.csv")
qmDay = qmDay[, c("DayMoYr", "SubWeeks", "Volday.L", "SmpHrs",
                  "ConcSmOut_ugL.obs", "ConcSmOut_ugL.sd" ,
                  "SmOut_ug.obs", "SmOut_ug.sd",
                  "delta.obs", "delta.sd" )]

names(qmDay)

## [1] "DayMoYr"          "SubWeeks"          "Volday.L"
## [4] "SmpHrs"           "ConcSmOut_ugL.obs" "ConcSmOut_ugL.sd"
## [7] "SmOut_ug.obs"     "SmOut_ug.sd"       "delta.obs"
## [10] "delta.sd"

clust = read.csv(file.path(path, "Data/PCA4Lutz_R_Oct2018.csv"), sep = ";", dec = ",")

clust = clust[, c("Events", "WeekSubWeek", "Q.Ave", "T.Hrs", "Vol", "Q.Max", "Cluster", "EventLabel")]
names(clust)

## [1] "Events"          "WeekSubWeek"      "Q.Ave"            "T.Hrs"            "Vol"
## [6] "Q.Max"           "Cluster"          "EventLabel"

# Adding markers: ti and tf
out2 = out[, c("WeekSubWeek", "ti", "tf")]

outlet = merge(out2, clust, by = "WeekSubWeek", all = T)
outlet = merge(outlet, qmDay, by.x = "WeekSubWeek", by.y = "SubWeeks", all = T)
outlet$DayMoYr = as.POSIXct(strptime(outlet$DayMoYr, "%Y-%m-%d", tz="EST"))
outlet$ti = as.POSIXct(strptime(outlet$ti, "%Y-%m-%d %H:%M:%S", tz="EST"))

time = time[, c("Jdays", "DayMoYr")]

outlet = merge(time, outlet, by = "DayMoYr", all = F)
outlet = outlet[complete.cases(outlet$ti), ]

write.csv(outlet,
          'BEACH_R/visuals_b2l_R04.csv', row.names = F)

# For plotting Discharge against chemo-bars
q = read.csv2(file.path(path, "Data/groupAlteck2016_R.csv"))
q$Vol.L = q$Vol2min * 1000
q = q[, c("Date", "Q.HW1", "DayMoYr", "Vol.L", "SubWeeks" )]
q$Q.Ls = q$Q.HW1*1000/60

write.csv(q,
          'BEACH_R/visuals_qLisem_R04.csv', row.names = F)
```

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