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#####
#Loading packages
# USING THRESHOLDS AS DEFINED BY White and al. PMID 27936024)
# CHECK GGIR VERSION, IF NECESSARY INSTALL VERSION 9
#####

#install.packages(c("devtools"))

#require(devtools)

#install_version("GGIR", version="1.5-9")

#install.packages(c ("GENERead", "zoo", "bitops", "data.table", "mmap"))

ev <- lapply("GGIR", library, character.only=T)

ev

search() # check if all is loaded

mode=c(1,2,3,4,5)

# Path for the folder where bin files are stored
datadir= "F:/DATA/Input"

#pathname to folder where output should be written to "
# Changed 17.08.2017 to have ndayswindow=14 and maxdur=0

outputdir="F:/DATA/Output"
studyname="COLAUS"
f0 = 1
f1 = 1 # f1 = c() for all
g.shell.GGIR (#-----
# General parameters
#-----
do.parallel = FALSE,
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mode=mode,  
datadir=datadir,  
outputdir=outputdir,  
studyname=studyname,  
f0=f0,  
f1=f1,  
overwrite = TRUE,  
do.imp=TRUE,  
idloc=1,  
print.filename=TRUE,  
storefolderstructure = FALSE,  
#-----  
# Part 1 parameters:  
#-----  
windowsizes = c(5,900,3600),  
#deziredtz="Europe/Bern",  
do.cal=TRUE,  
do.enmo = TRUE,  
do.anglez=TRUE,  
chunksize=1,  
printsummary=TRUE,  
#-----  
# Part 2 parameters:  
#-----  
strategy = 1,  
ndayswindow=14,  
hrs.del.start = 1,  
hrs.del.end = 1,  
maxdur = 15,  
includedaycrit = 16,  
L5M5window = c(0,24),
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M5L5res = 10,  
winhr = c(5),  
qlevels = c(c(1380/1440),c(1410/1440)),  
qwindow=c(0,24),  
ilevels = c(seq(0,400,by=50),8000),  
mvpthreshold =c(182),  
#-----  
# Part 3 parameters:  
#-----  
timethreshold= c(5),  
anglethreshold=5,  
ignorenonwear = TRUE,  
#-----  
# Part 4 parameters:  
#-----  
excludefirstlast = FALSE,  
includenightcrit = 16,  
def.noc.sleep = c(21,9),  
#loglocation= "pathname to a sleeplog - if using one",  
outliers.only = FALSE,  
criterror = 4,  
relyonsleeplog = FALSE,  
sleeplogidnum = TRUE,  
colid=1,  
coln1=2,  
do.visual = FALSE,  
nnights = 14,  
#-----  
# Part 5 parameters:  
#-----  
# Key functions: Merging physical activity with sleep analyses
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#threshold.lig = c(30,40,50),
#threshold.mod = c(100,120),
#threshold.vig = c(400,500),
threshold.lig = c(85),
threshold.mod = c(181),
threshold.vig = c(437),
boutcriter = 0.8,
boutcriter.in = 0.9,
boutcriter.lig = 0.8,
boutcriter.mvpa = 0.8,
#boutdur.in = c(10,20,30),
#boutdur.lig = c(1,5,10),
#boutdur.mvpa = c(1,5,10),
boutdur.in = c(10),
boutdur.lig = c(10),
boutdur.mvpa = c(10),
timewindow = c("WW"),
#-----
# Report generation
#-----
do.report=c(5))
```