Introduction

Introduction

These instructions are aimed at people familiar with R and familiar with TCGA/GDC platforms and data types. They are intended to introduce the reader to producing a ZIP archive of an assessment, for use with the stand-alone Batch Effects Viewer. These instructions will only rarely, if ever, touch on the appropriateness of the assessment algorithm or interpretation of output.

Assessment

The MBatchUtils assessment function, mbatchRunFromConfig, uses a configuration file to run assessments in MBatch. This is followed by a call to buildSingleArchive to build a ZIP archive for use by the Batch Effects Viewer stand alone application.

Input

The configuration file used for this example is:

```
library(MBatch)
```

All sorting in this package requires using a Sys.setlocale("LC_COLLATE","C"). MBatch Version

```
library(MBatchUtils)
```

Loading required package: NGCHM

Attaching package: 'MBatchUtils'

The following objects are masked from 'package:MBatch':

```
    compareTwoMatrices, getTestInputDir, getTestOutputDir
  # set the paths
  inputDir <- getTestInputDir()
  theConfigFile=file.path(inputDir, "vignettes", "MBatchConfig.tsv")
  cat(readLines(theConfigFile), sep = '\n')
```

```
sampleidBatchType    Sample
batchTypesForMBatchArray     TSS,ShipDate
mutBatchFlag     FALSE
mutationsMutbatchFlag    FALSE
mutBatchMem 4000m
mutBatchThreads 5
mutBatchPvalueCutoff     .00001
mutBatchZscoreCutoff     1.96
filterMaxValue  50000
filterLogTransformFlag  TRUE
filterLogTransformFlag2 FALSE
filteringBatchType  null
filteringBatchesArray    null
CDP_Flag     TRUE
selectedBatchToCorrect  BatchId
selectedCorrection  EB_withPara
selectedCorrectionMinBatchSize  1
selectedDSCPermutations 2000
selectedDSCThreads  5
selectedDSCMinBatchSize 5
selectedDSCSeed 314
selectedDSCMaxGeneCount 10000
selectedBoxplotMaxGeneCount 5000
selectedNgchmFlag    TRUE
RBN_Only     FALSE
RBN_UseFirstAsInvariantFlag FALSE
RBN_InvariantId null
RBN_VariantId    null
RBN_Matched null
RBN_InvariantRepsArray  null
RBN_VariantRepsArray     null
EBNPlus_GroupId1     null
EBNPlus_GroupId2     null
EBNPlus_Seed     null
EBNPlus_MinSamples  null
title    MBatchUtils Test Run
```

##sampleidBatchType Sample This gives the column of the batch file that contains the sample ids.

##batchTypesForMBatchArray TSS,ShipDate Comma separated list of batch types, column names from batch file, to use for doing analysis.

##mutBatchFlag FALSE TRUE or FALSE flag telling whether or not do do "mutBatch" processing on a single dataset in Standardized Data format.

##mutationsMutbatchFlag FALSE TRUE or FALSE flag telling whether or not do do mutations "mutBatch" processing on multiple MAF files.

##mutBatchMem 4000m Memory to allocate to the Java process when mutBatch processing.

##mutBatchThreads 5 Number of threads to use for mutBatch processing.

##mutBatchPvalueCutoff .00001 P-value cutoff for mutBatch processing to find "significant" differences.

##mutBatchZscoreCutoff 1.96 Z-Score cutoff for mutBatch processing to find "significant" differences.

##filterMaxValue 0 Filtering settings for maximum number of rows times columns to use – 0 indicates "use all".

##filterLogTransformFlag TRUE TRUE or FALSE flag indicating whether to perform log transform on data file one.

##filterLogTransformFlag2 FALSE TRUE or FALSE flag indicating whether to perform log transform on data file two.

##filteringBatchType null Batch type (column name from batch file) to use to filter out specific batches.

##filteringBatchesArray null Comma delimited list of batches to remove from processing.

##CDP_Flag TRUE TRUE or FALSE flag indicating whether to generate the correlation density plot, usually used with EBN+.

##selectedBatchToCorrect BatchId When doing corrections, batch type on which to do corrections.

##selectedCorrection EB_withPara Correction algorithm to use and actual name of algorithm: EB_withPara Empirical Bayes with Parametric Priors EB_withNonpara Empirical Bayes with Non-Parametric Priors MP_overall Median Polish - Overall MP_batch Median Polish - By Batch ANOVA_adj ANOVA Adjusted ANOVA_unadj ANOVA Unadjusted RBN_Replicates RBN using Replicates RBN_Pseudoreps RBN using Pseudoreplicates (list of paired samples) EBN_Plus EBN Plus

##selectedCorrectionMinBatchSize 1 When doing corrections, the minimum batch size to consider valid.

##selectedDSCPermutations 2000 Number of permutations to perform to generate DSC values and p-values during PCA+

##selectedDSCThreads 5 Number of threads to use to generate DSC values and p-values during PCA+

##selectedDSCMinBatchSize 5 When generating DSC values and p-values during PCA+, the minimum batch size to consider valid.

##selectedDSCSeed 314 When generating DSC values and p-values during PCA+, the random number seed to use.

##selectedDSCMaxGeneCount 10000 When generating DSC values and p-values during PCA+, the maximum number of features to use. (0 means use all.)

##selectedBoxplotMaxGeneCount 5000 For boxplot calculations, the maximum number of features to use.

##selectedNgchmFlag TRUE TRUE or FALSE flag indicating whether to generate an NGCHM based on the hierarchical clustering settings.

##RBN_Only FALSE TRUE or FALSE flag indicating whether to only run RBN correction.

##RBN_UseFirstAsInvariantFlag FALSE TRUE or FALSE flag indicating whether to use the first dataset as invariant.

##RBN_InvariantId null Group name used for labelling invariant features when combining matrixes. (Use null if RBN not being run.)

##RBN_VariantId null Group name used for labelling variant features when combining matrixes. (Use null if RBN not being run.)

##RBN_Matched null TRUE or FALSE flag, if TRUE, indicates that NAs should be added for missing replicates. (Use null if RBN not being run.)

##RBN_InvariantRepsArray null Comma delimited list of sample ids to use for identifying pseudo-replicates. Should match in order pairs in variant array. (Use null if RBN not being run.)

##RBN_VariantRepsArray null Comma delimited list of sample ids to use for identifying pseudo-replicates. Should match in order pairs in invariant array. (Use null if RBN not being run.)

##EBNPlus_GroupId1 null The group name for data set 1 (for example, RNASeqV2). (Use null if EBN+ not being run.)

##EBNPlus_GroupId2 null The group name for data set 2 (for example, Agilent4502). (Use null if EBN+ not being run.)

##EBNPlus_Seed null NULL or a seed to use. This is passed to the standard R set.seed function. (Use null if EBN+ not being run.)

##EBNPlus_MinSamples null Defaults to 3. Any row (gene) with less than this number of samples is dropped. (Use null if EBN+ not being run.)

##title MBatchUtils Test Run String to use as title in diagrams.

Output

Create a ZIP file usable with the stand-alone Batch Effects Viewer, to use dynamic diagrams.

Example Call

```
{
  library(MBatch)
  library(MBatchUtils)

  # set the paths
  baseTestDir=getTestInputDir()
  baseOutputDir=getTestOutputDir()
  theOrigConfigFile=file.path(baseTestDir, "vignettes", "MBatchConfig.tsv")
  theOrigGeneFile=file.path(baseTestDir, "vignettes", "matrix_data.tsv")
  theOrigBatchFile=file.path(baseTestDir, "vignettes", "batches.tsv")
  theOutputDir=file.path(baseOutputDir, "ZIP_Archive")
  theOutputDirMBatch=file.path(theOutputDir, "MBatch")
  jarDir=file.path(baseTestDir, "exe")
  javaExe=getJava()
  jarFile=file.path(jarDir, "ShaidyMapGen.jar")
  jsFile=file.path(jarDir, "ngchmWidget-min.js")
  theDestConfigFile=file.path(theOutputDir, "MBatchConfig.tsv")
  theDestGeneFile=file.path(theOutputDir, "matrix_data.tsv")
  theDestBatchFile=file.path(theOutputDir, "batches.tsv")
  ####
  # make sure the output dir exists and is empty
  unlink(theOutputDir, recursive=TRUE)
  dir.create(theOutputDir, showWarnings=FALSE, recursive=TRUE)
  dir.create(theOutputDirMBatch, showWarnings=FALSE, recursive=TRUE)
  file.copy(theOrigConfigFile, theDestConfigFile)
  file.copy(theOrigGeneFile, theDestGeneFile)
  file.copy(theOrigBatchFile, theDestBatchFile)
  # config
  mbatchRunFromConfig(theConfigFile=theDestConfigFile,
                      theOutputDir=theOutputDirMBatch,
                      theNaStrings=c("null", "NA"),
                      theShaidyMapGen=jarFile,
                      theNgchmWidgetJs=jsFile,
                      theShaidyMapGenJava=javaExe,
                      theNGCHMShaidyMem="8G",
                      thePCAMem="4800m",
                      theBoxplotMem="8G",
                      theRunPostFlag=TRUE)
  buildSingleArchive("none", NULL, theOutputDirMBatch, theOutputDirMBatch)
}

## MBatchUtils BEA_VERSION_TIMESTAMP

## Changing LC_COLLATE to C for duration of run
```

```
## title MBatchUtils Test Run
## sampleidBatchType Sample
## batchTypesForMBatch TSS,ShipDate
## filterMaxValue 50000
## filterLogTransformFlag TRUE
## filterLogTransformFlag2 FALSE
## filteringBatchType null
## filteringBatches
## CDP_Flag TRUE
## selectedBatchToCorrect BatchId
## selectedCorrection EB_withPara
## selectedCorrectionMinBatchSize 1
## selectedDSCPermutations 2000
## selectedDSCThreads 5
## selectedDSCMinBatchSize 5
## selectedDSCSeed 314
## selectedDSCMaxGeneCount 10000
## selectedBoxplotMaxGeneCount 5000
## selectedNgchmFlag TRUE
## RBN_UseFirstAsInvariant FALSE
## RBN_InvariantId
## RBN_VariantId
## RBN_Matched
## RBN_InvariantReps
## RBN_VariantReps
## EBNPlus_GroupId1
## EBNPlus_GroupId2
## EBNPlus_Seed
## EBNPlus_MinSamples
## theOutputDir=/builds/BatchEffects_clean/BatchEffectsPackage/data/testing_dynamic/MBatchUt
## rename data
```

```
## preprocess data

## 2020 11 18 16:47:17.855 DEBUG ab7c64738d52 readAsDataFrame - thePar  -Xmx2000m
## 2020 11 18 16:47:17.855 DEBUG ab7c64738d52 readAsDataFrame - theFile  /builds/BatchEffect
## 2020 11 18 16:47:17.855 DEBUG ab7c64738d52 readAsDataFrame - Calling .jinit  /tmp/R/4/lib
## 2020 11 18 16:47:17.962 DEBUG ab7c64738d52 readAsDataFrame - .jinit complete
## 2020 11 18 16:47:17.962 DEBUG ab7c64738d52 readAsDataFrame before java
## 2020 11 18 16:47:18.016 DEBUG ab7c64738d52 readAsDataFrame after java
## 2020 11 18 16:47:18.018 DEBUG ab7c64738d52 readAsDataFrame - length(myData)  730
## 2020 11 18 16:47:18.018 DEBUG ab7c64738d52 readAsDataFrame - length(myCols)  10
## 2020 11 18 16:47:18.018 DEBUG ab7c64738d52 readAsDataFrame - length(myRows)  0
## 2020 11 18 16:47:18.018 DEBUG ab7c64738d52 readAsDataFrame - myCols  Sample, Patient, Typ
## 2020 11 18 16:47:18.019 DEBUG ab7c64738d52 readAsDataFrame - myRows
## 2020 11 18 16:47:18.021 DEBUG ab7c64738d52 Changing LC_COLLATE to C for duration of run
## 2020 11 18 16:47:18.022 INFO ab7c64738d52 \/ \/ \/ \/ \/ \/ \/ \/ \/ \/ \/ \/ \/
## 2020 11 18 16:47:18.022 INFO ab7c64738d52 Starting mbatchLoadStructures
## 2020 11 18 16:47:18.022 INFO ab7c64738d52 MBatch Version: BEA_VERSION_TIMESTAMP
## 2020 11 18 16:47:18.022 INFO ab7c64738d52 sort batches by gene file samples
## 2020 11 18 16:47:18.023 INFO ab7c64738d52 filter samples in batches using gene samples
## 2020 11 18 16:47:18.024 INFO ab7c64738d52 sort covariates by gene file samples
## 2020 11 18 16:47:18.046 INFO ab7c64738d52 Finishing mbatchLoadStructures
## 2020 11 18 16:47:18.047 INFO ab7c64738d52 ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
## 2020 11 18 16:47:18.047 DEBUG ab7c64738d52 Changing LC_COLLATE to C for duration of run
## 2020 11 18 16:47:18.048 INFO ab7c64738d52 \/ \/ \/ \/ \/ \/ \/ \/ \/ \/ \/ \/ \/
## 2020 11 18 16:47:18.048 INFO ab7c64738d52 mbatchTrimData Starting
## 2020 11 18 16:47:18.048 INFO ab7c64738d52 MBatch Version: BEA_VERSION_TIMESTAMP
## 2020 11 18 16:47:18.048 INFO ab7c64738d52 mbatchTrimData theMaxSize= 0
## 2020 11 18 16:47:18.048 INFO ab7c64738d52 mbatchTrimData ncol(theMatrix)= 73
## 2020 11 18 16:47:18.049 INFO ab7c64738d52 mbatchTrimData nrow(theMatrix)= 25014
## 2020 11 18 16:47:18.049 INFO ab7c64738d52 mbatchTrimData Finishing
## 2020 11 18 16:47:18.049 INFO ab7c64738d52 ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
## 2020 11 18 16:47:20.098 DEBUG ab7c64738d52 writeAsDataframe - thePar  -Xmx2000m
## 2020 11 18 16:47:20.099 DEBUG ab7c64738d52 writeAsDataframe - theFile  /builds/BatchEffec
## 2020 11 18 16:47:20.099 DEBUG ab7c64738d52 writeAsDataframe - length(myData)  730
## 2020 11 18 16:47:20.100 DEBUG ab7c64738d52 writeAsDataframe - length(myCols)  10
## 2020 11 18 16:47:20.100 DEBUG ab7c64738d52 writeAsDataframe - length(myRows)  0
## 2020 11 18 16:47:20.100 DEBUG ab7c64738d52 writeAsDataframe - Calling .jinit  /tmp/R/4/li
## 2020 11 18 16:47:20.102 DEBUG ab7c64738d52 writeAsDataframe - .jinit complete
## 2020 11 18 16:47:20.102 DEBUG ab7c64738d52 writeAsDataframe before java
## 2020 11 18 16:47:20.106 DEBUG ab7c64738d52 writeAsDataframe after java
## 2020 11 18 16:47:20.106 DEBUG ab7c64738d52 writeAsDataframe success= TRUE

## load data as needed

## Read regular data

## /builds/BatchEffects_clean/BatchEffectsPackage/data/testing_dynamic/MBatchUtils/ZIP_Archi
```

```
## /builds/BatchEffects_clean/BatchEffectsPackage/data/testing_dynamic/MBatchUtils/ZIP_Archi

## 2020 11 18 16:47:20.107 DEBUG ab7c64738d52 Changing LC_COLLATE to C for duration of run
## 2020 11 18 16:47:20.108 INFO ab7c64738d52 \/ \/ \/ \/ \/ \/ \/ \/ \/ \/ \/ \/ \/
## 2020 11 18 16:47:20.108 INFO ab7c64738d52 Starting mbatchLoadFiles
## 2020 11 18 16:47:20.108 INFO ab7c64738d52 MBatch Version: BEA_VERSION_TIMESTAMP
## 2020 11 18 16:47:20.108 INFO ab7c64738d52 read batch file= /builds/BatchEffects_clean/Bat
## 2020 11 18 16:47:20.109 INFO ab7c64738d52 read gene file= /builds/BatchEffects_clean/Batc
## 2020 11 18 16:47:20.957 INFO ab7c64738d52 filter samples in batches using gene samples
## 2020 11 18 16:47:20.958 INFO ab7c64738d52 sort batches by gene file samples
## 2020 11 18 16:47:20.966 INFO ab7c64738d52 Finishing mbatchLoadFiles
## 2020 11 18 16:47:20.967 INFO ab7c64738d52 ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
## 2020 11 18 16:47:20.967 INFO ab7c64738d52 EB_internal - starting
## 2020 11 18 16:47:20.968 DEBUG ab7c64738d52 checkCreateDir:  /builds/BatchEffects_clean/Ba
## 2020 11 18 16:47:21.173 DEBUG ab7c64738d52 starting BeaEB
## 2020 11 18 16:47:21.174 DEBUG ab7c64738d52 EB start
## 2020 11 18 16:47:21.174 DEBUG ab7c64738d52 convertDataFrameToSi start
## 2020 11 18 16:47:21.174 DEBUG ab7c64738d52 convertDataFrameToSi asmatrixWithIssues
## 2020 11 18 16:47:21.175 DEBUG ab7c64738d52 convertDataFrameToSi rownames
## 2020 11 18 16:47:21.175 DEBUG ab7c64738d52 convertDataFrameToSi colnames
## 2020 11 18 16:47:21.175 DEBUG ab7c64738d52 convertDataFrameToSi done
## 2020 11 18 16:47:21.216 DEBUG ab7c64738d52 EB check number of batches
## 2020 11 18 16:47:21.217 DEBUG ab7c64738d52 EB Check for missing values
## 2020 11 18 16:47:21.223 DEBUG ab7c64738d52 Check for genes with whole batch missing or no
## 2020 11 18 16:47:24.352 DEBUG ab7c64738d52 Standardizing Data across genes
## 2020 11 18 16:47:25.380 DEBUG ab7c64738d52 Standarization Model
## 2020 11 18 16:47:25.794 DEBUG ab7c64738d52 stand.mean
## 2020 11 18 16:47:25.840 DEBUG ab7c64738d52 Fitting L/S model and finding priors
## 2020 11 18 16:47:25.841 DEBUG ab7c64738d52 with NAs
## 2020 11 18 16:47:28.229 DEBUG ab7c64738d52 Find priors
## 2020 11 18 16:47:28.247 DEBUG ab7c64738d52 Plot empirical and parametric priors
## 2020 11 18 16:47:28.248 DEBUG ab7c64738d52 Print prior plots at  /builds/BatchEffects_cle

## 2020 11 18 16:47:29.148 DEBUG ab7c64738d52 finished prior plots
## 2020 11 18 16:47:29.248 DEBUG ab7c64738d52 Find EB batch adjustments
## 2020 11 18 16:47:29.248 DEBUG ab7c64738d52 Finding parametric adjustments
## 2020 11 18 16:47:31.271 DEBUG ab7c64738d52 Adjusting the Data
## 2020 11 18 16:47:31.327 DEBUG ab7c64738d52 add back the removed genes with missing data i
## 2020 11 18 16:47:31.343 DEBUG ab7c64738d52 EB done
## 2020 11 18 16:47:31.344 DEBUG ab7c64738d52 finishing BeaEB
## 2020 11 18 16:47:31.344 TIMING ab7c64738d52   10.022      10.171       EBwithParametricPri
## 2020 11 18 16:47:31.345 DEBUG ab7c64738d52 Write to file  /builds/BatchEffects_clean/Batc
## 2020 11 18 16:47:33.013 DEBUG ab7c64738d52 Finished write to file  /builds/BatchEffects_c
## 2020 11 18 16:47:33.013 INFO ab7c64738d52 EB_internal - completed
## 2020 11 18 16:47:33.878 DEBUG ab7c64738d52 Changing LC_COLLATE to C for duration of run
## 2020 11 18 16:47:33.879 INFO ab7c64738d52 \/ \/ \/ \/ \/ \/ \/ \/ \/ \/ \/ \/ \/
## 2020 11 18 16:47:33.879 INFO ab7c64738d52 Starting mbatchLoadStructures
```

```
## 2020 11 18 16:47:33.879 INFO ab7c64738d52 MBatch Version: BEA_VERSION_TIMESTAMP
## 2020 11 18 16:47:33.879 INFO ab7c64738d52 sort batches by gene file samples
## 2020 11 18 16:47:33.880 INFO ab7c64738d52 filter samples in batches using gene samples
## 2020 11 18 16:47:33.881 INFO ab7c64738d52 sort covariates by gene file samples
## 2020 11 18 16:47:33.889 INFO ab7c64738d52 Finishing mbatchLoadStructures
## 2020 11 18 16:47:33.889 INFO ab7c64738d52 ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
## 2020 11 18 16:47:33.890 DEBUG ab7c64738d52 Changing LC_COLLATE to C for duration of run
## 2020 11 18 16:47:33.890 INFO ab7c64738d52 \/ \/ \/ \/ \/ \/ \/ \/ \/ \/ \/ \/ \/
## 2020 11 18 16:47:33.891 INFO ab7c64738d52 mbatchFilterData Starting
## 2020 11 18 16:47:33.891 INFO ab7c64738d52 MBatch Version: BEA_VERSION_TIMESTAMP
## 2020 11 18 16:47:33.891 DEBUG ab7c64738d52 rows pre filter  25014
## 2020 11 18 16:47:37.487 DEBUG ab7c64738d52 rows post filter  22488
## 2020 11 18 16:47:37.488 DEBUG ab7c64738d52 mbatchFilterData Prefilter, gene data had  250
## 2020 11 18 16:47:37.488 DEBUG ab7c64738d52 mbatchFilterData Prefilter, batch data had  73
## 2020 11 18 16:47:37.489 DEBUG ab7c64738d52 mbatchFilterData Before removing batch types,
## 2020 11 18 16:47:37.489 DEBUG ab7c64738d52 mbatchFilterData Before removing batch types,
## 2020 11 18 16:47:37.489 DEBUG ab7c64738d52 mbatchFilterData removing batch types ( Patien
## 2020 11 18 16:47:37.490 DEBUG ab7c64738d52 mbatchFilterData After removing batch types, b
## 2020 11 18 16:47:37.494 DEBUG ab7c64738d52 mbatchFilterData After removing batch types, g
## 2020 11 18 16:47:37.495 INFO ab7c64738d52 mbatchFilterData Finishing
## 2020 11 18 16:47:37.495 INFO ab7c64738d52 ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
## 2020 11 18 16:47:37.495 DEBUG ab7c64738d52 Changing LC_COLLATE to C for duration of run
## 2020 11 18 16:47:37.495 INFO ab7c64738d52 \/ \/ \/ \/ \/ \/ \/ \/ \/ \/ \/ \/ \/
## 2020 11 18 16:47:37.496 INFO ab7c64738d52 mbatchFilterData Starting
## 2020 11 18 16:47:37.496 INFO ab7c64738d52 MBatch Version: BEA_VERSION_TIMESTAMP
## 2020 11 18 16:47:37.496 DEBUG ab7c64738d52 rows pre filter  25014
## 2020 11 18 16:47:41.059 DEBUG ab7c64738d52 rows post filter  22488
## 2020 11 18 16:47:41.060 DEBUG ab7c64738d52 mbatchFilterData Prefilter, gene data had  250
## 2020 11 18 16:47:41.061 DEBUG ab7c64738d52 mbatchFilterData Prefilter, batch data had  73
## 2020 11 18 16:47:41.061 DEBUG ab7c64738d52 mbatchFilterData Before removing batch types,
## 2020 11 18 16:47:41.061 DEBUG ab7c64738d52 mbatchFilterData Before removing batch types,
## 2020 11 18 16:47:41.061 DEBUG ab7c64738d52 mbatchFilterData removing batch types ( Patien
## 2020 11 18 16:47:41.062 DEBUG ab7c64738d52 mbatchFilterData After removing batch types, b
## 2020 11 18 16:47:41.066 DEBUG ab7c64738d52 mbatchFilterData After removing batch types, g
## 2020 11 18 16:47:41.067 INFO ab7c64738d52 mbatchFilterData Finishing
## 2020 11 18 16:47:41.067 INFO ab7c64738d52 ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
## 2020 11 18 16:47:41.067 DEBUG ab7c64738d52 Changing LC_COLLATE to C for duration of run
## 2020 11 18 16:47:41.067 INFO ab7c64738d52 \/ \/ \/ \/ \/ \/ \/ \/ \/ \/ \/ \/ \/
## 2020 11 18 16:47:41.068 INFO ab7c64738d52 mbatchTrimData Starting
## 2020 11 18 16:47:41.068 INFO ab7c64738d52 MBatch Version: BEA_VERSION_TIMESTAMP
## 2020 11 18 16:47:42.588 INFO ab7c64738d52 mbatchTrimData theMaxSize= 50000
## 2020 11 18 16:47:42.588 INFO ab7c64738d52 mbatchTrimData ncol(theMatrix)= 73
## 2020 11 18 16:47:42.588 INFO ab7c64738d52 mbatchTrimData nrow(theMatrix)= 684
## 2020 11 18 16:47:42.589 INFO ab7c64738d52 mbatchTrimData Finishing
## 2020 11 18 16:47:42.589 INFO ab7c64738d52 ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
## 2020 11 18 16:47:42.590 DEBUG ab7c64738d52 Changing LC_COLLATE to C for duration of run
```

```
## 2020 11 18 16:47:42.590 INFO ab7c64738d52 \/ \/ \/ \/ \/ \/ \/ \/ \/ \/ \/ \/ \/
## 2020 11 18 16:47:42.590 INFO ab7c64738d52 mbatchFilterData Starting
## 2020 11 18 16:47:42.591 INFO ab7c64738d52 MBatch Version: BEA_VERSION_TIMESTAMP
## 2020 11 18 16:47:42.591 DEBUG ab7c64738d52 rows pre filter  684
## 2020 11 18 16:47:42.694 DEBUG ab7c64738d52 rows post filter  684
## 2020 11 18 16:47:42.695 DEBUG ab7c64738d52 mbatchFilterData Prefilter, gene data had  684
## 2020 11 18 16:47:42.696 DEBUG ab7c64738d52 mbatchFilterData Prefilter, batch data had  73
## 2020 11 18 16:47:42.696 INFO ab7c64738d52 mbatchFilterData Finishing
## 2020 11 18 16:47:42.696 INFO ab7c64738d52 ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
## 2020 11 18 16:47:42.697 DEBUG ab7c64738d52 createBatchEffectsOutput_pca
## 2020 11 18 16:47:42.698 DEBUG ab7c64738d52 Calling .jinit for PCA
## 2020 11 18 16:47:42.698 DEBUG ab7c64738d52 classpath=, /tmp/R/4/lib/MBatch/DscJava/DscJav
## 2020 11 18 16:47:42.700 DEBUG ab7c64738d52 Changing LC_COLLATE to C for duration of run
## 2020 11 18 16:47:42.701 DEBUG ab7c64738d52 doSamplePcaCall - pre-filter matrix size= 684,
## 2020 11 18 16:47:42.702 DEBUG ab7c64738d52 filterTheGeneDataOnBatchSize theMinBatchSize=
## 2020 11 18 16:47:42.703 DEBUG ab7c64738d52 filterBasedOnGeneLimit theGeneLimit= 10000
## 2020 11 18 16:47:42.703 DEBUG ab7c64738d52 filterBasedOnGeneLimit theMatrixGeneData nrow=
## 2020 11 18 16:47:42.703 DEBUG ab7c64738d52 filterBasedOnGeneLimit theMatrixGeneData ncol=
## 2020 11 18 16:47:42.704 DEBUG ab7c64738d52 doSamplePcaCall - pre-filter matrix size= 684,
## 2020 11 18 16:47:42.704 DEBUG ab7c64738d52 doSamplePcaCall - no-NA matrix length= 680
## 2020 11 18 16:47:42.715 DEBUG ab7c64738d52 doSamplePcaCall - max(theCompPairList)= 4
## 2020 11 18 16:47:42.715 DEBUG ab7c64738d52 doSamplePcaCall - pca scores size= 73,73
## 2020 11 18 16:47:42.716 DEBUG ab7c64738d52 checkCreateDir:  /builds/BatchEffects_clean/Ba
## 2020 11 18 16:47:42.716 DEBUG ab7c64738d52 checkCreateDir:  /builds/BatchEffects_clean/Ba
## 2020 11 18 16:47:42.717 DEBUG ab7c64738d52 call pvalueDSC
## 2020 11 18 16:47:42.717 DEBUG ab7c64738d52 pvalueDSC start
## 2020 11 18 16:47:42.717 DEBUG ab7c64738d52 pvalueDSC component A < 1
## 2020 11 18 16:47:42.718 DEBUG ab7c64738d52 pvalueDSC call pvalueDSCwithExcerpt
## 2020 11 18 16:47:42.718 DEBUG ab7c64738d52 pvalueDSCwithExcerpt start
## 2020 11 18 16:47:42.718 DEBUG ab7c64738d52 nrow(thePcaDataExcerpt)= 73
## 2020 11 18 16:47:42.719 DEBUG ab7c64738d52 ncol(thePcaDataExcerpt)= 73
## 2020 11 18 16:47:42.719 DEBUG ab7c64738d52 length(theBatchIdsForSamples)= 73
## 2020 11 18 16:47:42.722 DEBUG ab7c64738d52 getDSCwithExcerpt before java
## 2020 11 18 16:47:42.765 DEBUG ab7c64738d52 getDSCwithExcerpt after java
## 2020 11 18 16:47:42.766 DEBUG ab7c64738d52 pvalueDSCwithExcerpt after getDSCwithExcerpt
## 2020 11 18 16:47:42.766 DEBUG ab7c64738d52 pvalueDSCwithExcerpt length(unique(theBatchIds
## 2020 11 18 16:47:42.767 DEBUG ab7c64738d52 pvalueDSCwithExcerpt call doDscPerms
## 2020 11 18 16:47:42.767 DEBUG ab7c64738d52 doDscPerms before java
## 2020 11 18 16:47:43.682 DEBUG ab7c64738d52 doDscPerms after java
## 2020 11 18 16:47:43.987 DEBUG ab7c64738d52 doDscPerms length(resultsList)= 2000
## 2020 11 18 16:47:43.987 DEBUG ab7c64738d52 pvalueDSCwithExcerpt length(permResults)= 2000
## 2020 11 18 16:47:44.077 DEBUG ab7c64738d52 p-value run time =  1.31023645401001
## 2020 11 18 16:47:44.078 DEBUG ab7c64738d52 p-value is  0.002
## 2020 11 18 16:47:44.078 DEBUG ab7c64738d52 pvalueDSCwithExcerpt 2222 length(permResults)=
## 2020 11 18 16:47:44.078 DEBUG ab7c64738d52 pvalueDSCwithExcerpt PCA-PVALUE-DSC
## 2020 11 18 16:47:44.253 DEBUG ab7c64738d52 openAndWriteDscPermsFile -- start
```

```
## 2020 11 18 16:47:44.254 DEBUG ab7c64738d52 openAndWriteDscPermsFile -- redo name
## 2020 11 18 16:47:44.254 DEBUG ab7c64738d52 openAndWriteDscPermsFile -- check file
## 2020 11 18 16:47:44.254 DEBUG ab7c64738d52 openAndWriteDscPermsFile -- no file, write
## 2020 11 18 16:47:44.827 DEBUG ab7c64738d52 write writePcaDataFilesForDataset
## 2020 11 18 16:47:44.827 DEBUG ab7c64738d52 checkCreateDir:  /builds/BatchEffects_clean/Ba
## 2020 11 18 16:47:44.828 DEBUG ab7c64738d52 writePCAValuesTSV
## 2020 11 18 16:47:44.828 DEBUG ab7c64738d52 writePCAValuesTSV outputFile
## 2020 11 18 16:47:44.828 DEBUG ab7c64738d52 writePCAValuesTSV components
## 2020 11 18 16:47:44.828 DEBUG ab7c64738d52 writePCAValuesTSV myDataFrame
## 2020 11 18 16:47:44.829 DEBUG ab7c64738d52 writePCAValuesTSV - values
## 2020 11 18 16:47:44.829 DEBUG ab7c64738d52 writePCAValuesTSV - matrix
## 2020 11 18 16:47:44.830 DEBUG ab7c64738d52 writePCAValuesTSV - write
## 2020 11 18 16:47:44.831 DEBUG ab7c64738d52 writePCAValuesTSV finished  /builds/BatchEffec
## 2020 11 18 16:47:44.832 DEBUG ab7c64738d52 writePCAAnnotations
## 2020 11 18 16:47:44.832 DEBUG ab7c64738d52 writePCAAnnotations - header and all data
## 2020 11 18 16:47:44.888 DEBUG ab7c64738d52 write writeSharedFveWeightScoresFiles
## 2020 11 18 16:47:44.980 DEBUG ab7c64738d52 createBatchEffectsOutput_pca loop
## 2020 11 18 16:47:44.981 DEBUG ab7c64738d52 doInternalPca before filter - Number of rownam
## 2020 11 18 16:47:44.982 DEBUG ab7c64738d52 doInternalPca before filter - length of batch
## 2020 11 18 16:47:44.982 DEBUG ab7c64738d52 doInternalPca - filtering batch size of  5
## 2020 11 18 16:47:44.983 DEBUG ab7c64738d52 doInternalPca after filter - Number of rowname
## 2020 11 18 16:47:44.983 DEBUG ab7c64738d52 doInternalPca after filter - length of batch i
## 2020 11 18 16:47:44.983 DEBUG ab7c64738d52 doInternalPca - pvalueDSC
## 2020 11 18 16:47:44.984 DEBUG ab7c64738d52 pvalueDSC start
## 2020 11 18 16:47:44.984 DEBUG ab7c64738d52 pvalueDSC transpose
## 2020 11 18 16:47:44.984 DEBUG ab7c64738d52 pvalueDSC call pvalueDSCwithExcerpt
## 2020 11 18 16:47:44.984 DEBUG ab7c64738d52 pvalueDSCwithExcerpt start
## 2020 11 18 16:47:44.985 DEBUG ab7c64738d52 nrow(thePcaDataExcerpt)= 2
## 2020 11 18 16:47:44.985 DEBUG ab7c64738d52 ncol(thePcaDataExcerpt)= 73
## 2020 11 18 16:47:44.985 DEBUG ab7c64738d52 length(theBatchIdsForSamples)= 73
## 2020 11 18 16:47:44.986 DEBUG ab7c64738d52 getDSCwithExcerpt before java
## 2020 11 18 16:47:44.986 DEBUG ab7c64738d52 getDSCwithExcerpt after java
## 2020 11 18 16:47:44.987 DEBUG ab7c64738d52 pvalueDSCwithExcerpt after getDSCwithExcerpt
## 2020 11 18 16:47:44.987 DEBUG ab7c64738d52 pvalueDSCwithExcerpt length(unique(theBatchIds
## 2020 11 18 16:47:44.988 DEBUG ab7c64738d52 pvalueDSCwithExcerpt call doDscPerms
## 2020 11 18 16:47:44.988 DEBUG ab7c64738d52 doDscPerms before java
## 2020 11 18 16:47:45.176 DEBUG ab7c64738d52 doDscPerms after java
## 2020 11 18 16:47:45.530 DEBUG ab7c64738d52 doDscPerms length(resultsList)= 2000
## 2020 11 18 16:47:45.531 DEBUG ab7c64738d52 pvalueDSCwithExcerpt length(permResults)= 2000
## 2020 11 18 16:47:45.537 DEBUG ab7c64738d52 p-value run time =  0.549607515335083
## 2020 11 18 16:47:45.538 DEBUG ab7c64738d52 p-value is  0.002
## 2020 11 18 16:47:45.538 DEBUG ab7c64738d52 pvalueDSCwithExcerpt 2222 length(permResults)=
## 2020 11 18 16:47:45.538 DEBUG ab7c64738d52 pvalueDSCwithExcerpt PCA-PVALUE-DSC
## 2020 11 18 16:47:45.540 DEBUG ab7c64738d52 openAndWriteDscPermsFile -- start
## 2020 11 18 16:47:45.540 DEBUG ab7c64738d52 openAndWriteDscPermsFile -- redo name
## 2020 11 18 16:47:45.540 DEBUG ab7c64738d52 openAndWriteDscPermsFile -- check file
```

```
## 2020 11 18 16:47:45.541 DEBUG ab7c64738d52 openAndWriteDscPermsFile -- no file, write
## 2020 11 18 16:47:46.136 DEBUG ab7c64738d52 writePCAAnnotations
## 2020 11 18 16:47:46.136 DEBUG ab7c64738d52 writePCAAnnotations - data  PC1,PC2
## 2020 11 18 16:47:46.139 DEBUG ab7c64738d52 writePcaAnalysis_Image - Number of rownames fo
## 2020 11 18 16:47:46.140 DEBUG ab7c64738d52 writePcaAnalysis_Image - length of batch ids f

## 2020 11 18 16:47:46.222 DEBUG ab7c64738d52 mbatchStandardLegend - Calling .jinit  /tmp/R/
## 2020 11 18 16:47:46.224 DEBUG ab7c64738d52 mbatchStandardLegend - .jinit complete
## 2020 11 18 16:47:46.225 DEBUG ab7c64738d52 mbatchStandardLegend - theTitle  Points: TSS (
## 2020 11 18 16:47:46.225 DEBUG ab7c64738d52 mbatchStandardLegend - theVersion  MBatch 1.7.
## 2020 11 18 16:47:46.225 DEBUG ab7c64738d52 mbatchStandardLegend - theFilenamePath  /build
## 2020 11 18 16:47:46.226 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendNames  AF (10)
## 2020 11 18 16:47:46.226 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendNames  2
## 2020 11 18 16:47:46.226 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendColors  2
## 2020 11 18 16:47:46.226 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendSymbols  2
## 2020 11 18 16:47:46.227 DEBUG ab7c64738d52 mbatchStandardLegend - myColors  #b30000,#00b3
## 2020 11 18 16:47:46.227 DEBUG ab7c64738d52 mbatchStandardLegend before java
## 2020 11 18 16:47:46.387 DEBUG ab7c64738d52 mbatchStandardLegend after java
## 2020 11 18 16:47:46.388 DEBUG ab7c64738d52 mbatchStandardLegend - Calling .jinit  /tmp/R/
## 2020 11 18 16:47:46.390 DEBUG ab7c64738d52 mbatchStandardLegend - .jinit complete
## 2020 11 18 16:47:46.390 DEBUG ab7c64738d52 mbatchStandardLegend - theTitle  Dispersion Me
## 2020 11 18 16:47:46.391 DEBUG ab7c64738d52 mbatchStandardLegend - theVersion  MBatch 1.7.
## 2020 11 18 16:47:46.391 DEBUG ab7c64738d52 mbatchStandardLegend - theFilenamePath  /build
## 2020 11 18 16:47:46.392 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendNames  First F
## 2020 11 18 16:47:46.392 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendNames  14
## 2020 11 18 16:47:46.392 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendColors  0
## 2020 11 18 16:47:46.392 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendSymbols  0
## 2020 11 18 16:47:46.393 DEBUG ab7c64738d52 mbatchStandardLegend - myColors
## 2020 11 18 16:47:46.393 DEBUG ab7c64738d52 mbatchStandardLegend before java
## 2020 11 18 16:47:46.544 DEBUG ab7c64738d52 mbatchStandardLegend after java
## 2020 11 18 16:47:46.545 DEBUG ab7c64738d52 mbatchStandardCombineLegends - Calling .jinit
## 2020 11 18 16:47:46.547 DEBUG ab7c64738d52 mbatchStandardCombineLegends - .jinit complete
## 2020 11 18 16:47:46.547 DEBUG ab7c64738d52 mbatchStandardCombineLegends - theTitle  MBatc
## 2020 11 18 16:47:46.547 DEBUG ab7c64738d52 mbatchStandardCombineLegends - theFilenamePath
## 2020 11 18 16:47:46.548 DEBUG ab7c64738d52 mbatchStandardCombineLegends - theListOfFiles
## 2020 11 18 16:47:46.548 DEBUG ab7c64738d52 mbatchStandardLegend before java
## 2020 11 18 16:47:46.800 DEBUG ab7c64738d52 mbatchStandardLegend after java
## 2020 11 18 16:47:46.802 DEBUG ab7c64738d52 doInternalPca before filter - Number of rownam
## 2020 11 18 16:47:46.802 DEBUG ab7c64738d52 doInternalPca before filter - length of batch
## 2020 11 18 16:47:46.802 DEBUG ab7c64738d52 doInternalPca - filtering batch size of  5
## 2020 11 18 16:47:46.803 DEBUG ab7c64738d52 doInternalPca after filter - Number of rowname
## 2020 11 18 16:47:46.803 DEBUG ab7c64738d52 doInternalPca after filter - length of batch i
## 2020 11 18 16:47:46.804 DEBUG ab7c64738d52 doInternalPca - pvalueDSC
## 2020 11 18 16:47:46.804 DEBUG ab7c64738d52 pvalueDSC start
## 2020 11 18 16:47:46.804 DEBUG ab7c64738d52 pvalueDSC transpose
## 2020 11 18 16:47:46.804 DEBUG ab7c64738d52 pvalueDSC call pvalueDSCwithExcerpt
```

```
## 2020 11 18 16:47:46.805 DEBUG ab7c64738d52 pvalueDSCwithExcerpt start
## 2020 11 18 16:47:46.805 DEBUG ab7c64738d52 nrow(thePcaDataExcerpt)= 2
## 2020 11 18 16:47:46.805 DEBUG ab7c64738d52 ncol(thePcaDataExcerpt)= 73
## 2020 11 18 16:47:46.805 DEBUG ab7c64738d52 length(theBatchIdsForSamples)= 73
## 2020 11 18 16:47:46.806 DEBUG ab7c64738d52 getDSCwithExcerpt before java
## 2020 11 18 16:47:46.807 DEBUG ab7c64738d52 getDSCwithExcerpt after java
## 2020 11 18 16:47:46.807 DEBUG ab7c64738d52 pvalueDSCwithExcerpt after getDSCwithExcerpt
## 2020 11 18 16:47:46.807 DEBUG ab7c64738d52 pvalueDSCwithExcerpt length(unique(theBatchIds
## 2020 11 18 16:47:46.808 DEBUG ab7c64738d52 pvalueDSCwithExcerpt call doDscPerms
## 2020 11 18 16:47:46.808 DEBUG ab7c64738d52 doDscPerms before java
## 2020 11 18 16:47:46.996 DEBUG ab7c64738d52 doDscPerms after java
## 2020 11 18 16:47:47.301 DEBUG ab7c64738d52 doDscPerms length(resultsList)= 2000
## 2020 11 18 16:47:47.302 DEBUG ab7c64738d52 pvalueDSCwithExcerpt length(permResults)= 2000
## 2020 11 18 16:47:47.307 DEBUG ab7c64738d52 p-value run time =  0.499536037445068
## 2020 11 18 16:47:47.308 DEBUG ab7c64738d52 p-value is  0.003
## 2020 11 18 16:47:47.308 DEBUG ab7c64738d52 pvalueDSCwithExcerpt 2222 length(permResults)=
## 2020 11 18 16:47:47.308 DEBUG ab7c64738d52 pvalueDSCwithExcerpt PCA-PVALUE-DSC
## 2020 11 18 16:47:47.310 DEBUG ab7c64738d52 openAndWriteDscPermsFile -- start
## 2020 11 18 16:47:47.310 DEBUG ab7c64738d52 openAndWriteDscPermsFile -- redo name
## 2020 11 18 16:47:47.311 DEBUG ab7c64738d52 openAndWriteDscPermsFile -- check file
## 2020 11 18 16:47:47.311 DEBUG ab7c64738d52 openAndWriteDscPermsFile -- no file, write
## 2020 11 18 16:47:47.901 DEBUG ab7c64738d52 writePCAAnnotations
## 2020 11 18 16:47:47.902 DEBUG ab7c64738d52 writePCAAnnotations - data  PC1,PC3
## 2020 11 18 16:47:47.904 DEBUG ab7c64738d52 writePcaAnalysis_Image - Number of rownames f
## 2020 11 18 16:47:47.905 DEBUG ab7c64738d52 writePcaAnalysis_Image - length of batch ids f

## 2020 11 18 16:47:47.981 DEBUG ab7c64738d52 mbatchStandardLegend - Calling .jinit  /tmp/R/
## 2020 11 18 16:47:47.983 DEBUG ab7c64738d52 mbatchStandardLegend - .jinit complete
## 2020 11 18 16:47:47.983 DEBUG ab7c64738d52 mbatchStandardLegend - theTitle  Points: TSS
## 2020 11 18 16:47:47.984 DEBUG ab7c64738d52 mbatchStandardLegend - theVersion  MBatch 1.7.
## 2020 11 18 16:47:47.984 DEBUG ab7c64738d52 mbatchStandardLegend - theFilenamePath  /build
## 2020 11 18 16:47:47.985 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendNames  AF (10)
## 2020 11 18 16:47:47.985 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendNames  2
## 2020 11 18 16:47:47.985 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendColors  2
## 2020 11 18 16:47:47.985 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendSymbols  2
## 2020 11 18 16:47:47.986 DEBUG ab7c64738d52 mbatchStandardLegend - myColors  #b30000,#00b3
## 2020 11 18 16:47:47.986 DEBUG ab7c64738d52 mbatchStandardLegend before java
## 2020 11 18 16:47:48.004 DEBUG ab7c64738d52 mbatchStandardLegend after java
## 2020 11 18 16:47:48.005 DEBUG ab7c64738d52 mbatchStandardLegend - Calling .jinit  /tmp/R/
## 2020 11 18 16:47:48.007 DEBUG ab7c64738d52 mbatchStandardLegend - .jinit complete
## 2020 11 18 16:47:48.007 DEBUG ab7c64738d52 mbatchStandardLegend - theTitle  Dispersion Me
## 2020 11 18 16:47:48.008 DEBUG ab7c64738d52 mbatchStandardLegend - theVersion  MBatch 1.7.
## 2020 11 18 16:47:48.008 DEBUG ab7c64738d52 mbatchStandardLegend - theFilenamePath  /build
## 2020 11 18 16:47:48.008 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendNames  First F
## 2020 11 18 16:47:48.009 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendNames  14
## 2020 11 18 16:47:48.009 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendColors  0
```

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## 2020 11 18 16:47:48.009 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendSymbols  0
## 2020 11 18 16:47:48.009 DEBUG ab7c64738d52 mbatchStandardLegend - myColors
## 2020 11 18 16:47:48.010 DEBUG ab7c64738d52 mbatchStandardLegend before java
## 2020 11 18 16:47:48.152 DEBUG ab7c64738d52 mbatchStandardLegend after java
## 2020 11 18 16:47:48.153 DEBUG ab7c64738d52 mbatchStandardCombineLegends - Calling .jinit
## 2020 11 18 16:47:48.155 DEBUG ab7c64738d52 mbatchStandardCombineLegends - .jinit complete
## 2020 11 18 16:47:48.155 DEBUG ab7c64738d52 mbatchStandardCombineLegends - theTitle  MBatc
## 2020 11 18 16:47:48.155 DEBUG ab7c64738d52 mbatchStandardCombineLegends - theFilenamePath
## 2020 11 18 16:47:48.155 DEBUG ab7c64738d52 mbatchStandardCombineLegends - theListOfFiles
## 2020 11 18 16:47:48.156 DEBUG ab7c64738d52 mbatchStandardLegend before java
## 2020 11 18 16:47:48.356 DEBUG ab7c64738d52 mbatchStandardLegend after java
## 2020 11 18 16:47:48.357 DEBUG ab7c64738d52 doInternalPca before filter - Number of rownam
## 2020 11 18 16:47:48.358 DEBUG ab7c64738d52 doInternalPca before filter - length of batch
## 2020 11 18 16:47:48.358 DEBUG ab7c64738d52 doInternalPca - filtering batch size of  5
## 2020 11 18 16:47:48.359 DEBUG ab7c64738d52 doInternalPca after filter - Number of rowname
## 2020 11 18 16:47:48.359 DEBUG ab7c64738d52 doInternalPca after filter - length of batch i
## 2020 11 18 16:47:48.359 DEBUG ab7c64738d52 doInternalPca - pvalueDSC
## 2020 11 18 16:47:48.360 DEBUG ab7c64738d52 pvalueDSC start
## 2020 11 18 16:47:48.360 DEBUG ab7c64738d52 pvalueDSC transpose
## 2020 11 18 16:47:48.360 DEBUG ab7c64738d52 pvalueDSC call pvalueDSCwithExcerpt
## 2020 11 18 16:47:48.360 DEBUG ab7c64738d52 pvalueDSCwithExcerpt start
## 2020 11 18 16:47:48.361 DEBUG ab7c64738d52 nrow(thePcaDataExcerpt)= 2
## 2020 11 18 16:47:48.361 DEBUG ab7c64738d52 ncol(thePcaDataExcerpt)= 73
## 2020 11 18 16:47:48.361 DEBUG ab7c64738d52 length(theBatchIdsForSamples)= 73
## 2020 11 18 16:47:48.362 DEBUG ab7c64738d52 getDSCwithExcerpt before java
## 2020 11 18 16:47:48.362 DEBUG ab7c64738d52 getDSCwithExcerpt after java
## 2020 11 18 16:47:48.363 DEBUG ab7c64738d52 pvalueDSCwithExcerpt after getDSCwithExcerpt
## 2020 11 18 16:47:48.363 DEBUG ab7c64738d52 pvalueDSCwithExcerpt length(unique(theBatchIds
## 2020 11 18 16:47:48.363 DEBUG ab7c64738d52 pvalueDSCwithExcerpt call doDscPerms
## 2020 11 18 16:47:48.364 DEBUG ab7c64738d52 doDscPerms before java
## 2020 11 18 16:47:48.549 DEBUG ab7c64738d52 doDscPerms after java
## 2020 11 18 16:47:48.872 DEBUG ab7c64738d52 doDscPerms length(resultsList)= 2000
## 2020 11 18 16:47:48.872 DEBUG ab7c64738d52 pvalueDSCwithExcerpt length(permResults)= 2000
## 2020 11 18 16:47:48.878 DEBUG ab7c64738d52 p-value run time =  0.514857292175293
## 2020 11 18 16:47:48.879 DEBUG ab7c64738d52 p-value is  0.001
## 2020 11 18 16:47:48.879 DEBUG ab7c64738d52 pvalueDSCwithExcerpt 2222 length(permResults)=
## 2020 11 18 16:47:48.879 DEBUG ab7c64738d52 pvalueDSCwithExcerpt PCA-PVALUE-DSC
## 2020 11 18 16:47:48.881 DEBUG ab7c64738d52 openAndWriteDscPermsFile -- start
## 2020 11 18 16:47:48.881 DEBUG ab7c64738d52 openAndWriteDscPermsFile -- redo name
## 2020 11 18 16:47:48.882 DEBUG ab7c64738d52 openAndWriteDscPermsFile -- check file
## 2020 11 18 16:47:48.882 DEBUG ab7c64738d52 openAndWriteDscPermsFile -- no file, write
## 2020 11 18 16:47:49.468 DEBUG ab7c64738d52 writePCAAnnotations
## 2020 11 18 16:47:49.468 DEBUG ab7c64738d52 writePCAAnnotations - data  PC1,PC4
## 2020 11 18 16:47:49.471 DEBUG ab7c64738d52 writePcaAnalysis_Image - Number of rownames fo
## 2020 11 18 16:47:49.471 DEBUG ab7c64738d52 writePcaAnalysis_Image - length of batch ids f
```

```
## 2020 11 18 16:47:49.549 DEBUG ab7c64738d52 mbatchStandardLegend - Calling .jinit /tmp/R/
## 2020 11 18 16:47:49.551 DEBUG ab7c64738d52 mbatchStandardLegend - .jinit complete
## 2020 11 18 16:47:49.551 DEBUG ab7c64738d52 mbatchStandardLegend - theTitle  Points: TSS (
## 2020 11 18 16:47:49.551 DEBUG ab7c64738d52 mbatchStandardLegend - theVersion  MBatch 1.7.
## 2020 11 18 16:47:49.552 DEBUG ab7c64738d52 mbatchStandardLegend - theFilenamePath  /build
## 2020 11 18 16:47:49.552 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendNames  AF (10)
## 2020 11 18 16:47:49.552 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendNames  2
## 2020 11 18 16:47:49.553 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendColors  2
## 2020 11 18 16:47:49.553 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendSymbols  2
## 2020 11 18 16:47:49.553 DEBUG ab7c64738d52 mbatchStandardLegend - myColors  #b30000,#00b3
## 2020 11 18 16:47:49.554 DEBUG ab7c64738d52 mbatchStandardLegend before java
## 2020 11 18 16:47:49.572 DEBUG ab7c64738d52 mbatchStandardLegend after java
## 2020 11 18 16:47:49.573 DEBUG ab7c64738d52 mbatchStandardLegend - Calling .jinit /tmp/R/
## 2020 11 18 16:47:49.574 DEBUG ab7c64738d52 mbatchStandardLegend - .jinit complete
## 2020 11 18 16:47:49.575 DEBUG ab7c64738d52 mbatchStandardLegend - theTitle  Dispersion Me
## 2020 11 18 16:47:49.575 DEBUG ab7c64738d52 mbatchStandardLegend - theVersion  MBatch 1.7.
## 2020 11 18 16:47:49.576 DEBUG ab7c64738d52 mbatchStandardLegend - theFilenamePath  /build
## 2020 11 18 16:47:49.576 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendNames  First F
## 2020 11 18 16:47:49.576 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendNames  14
## 2020 11 18 16:47:49.576 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendColors  0
## 2020 11 18 16:47:49.577 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendSymbols  0
## 2020 11 18 16:47:49.577 DEBUG ab7c64738d52 mbatchStandardLegend - myColors
## 2020 11 18 16:47:49.577 DEBUG ab7c64738d52 mbatchStandardLegend before java
## 2020 11 18 16:47:49.719 DEBUG ab7c64738d52 mbatchStandardLegend after java
## 2020 11 18 16:47:49.720 DEBUG ab7c64738d52 mbatchStandardCombineLegends - Calling .jinit
## 2020 11 18 16:47:49.722 DEBUG ab7c64738d52 mbatchStandardCombineLegends - .jinit complete
## 2020 11 18 16:47:49.723 DEBUG ab7c64738d52 mbatchStandardCombineLegends - theTitle  MBatc
## 2020 11 18 16:47:49.723 DEBUG ab7c64738d52 mbatchStandardCombineLegends - theFilenamePath
## 2020 11 18 16:47:49.723 DEBUG ab7c64738d52 mbatchStandardCombineLegends - theListOfFiles
## 2020 11 18 16:47:49.723 DEBUG ab7c64738d52 mbatchStandardLegend before java
## 2020 11 18 16:47:49.926 DEBUG ab7c64738d52 mbatchStandardLegend after java
## 2020 11 18 16:47:49.927 DEBUG ab7c64738d52 doInternalPca before filter - Number of rownam
## 2020 11 18 16:47:49.927 DEBUG ab7c64738d52 doInternalPca before filter - length of batch
## 2020 11 18 16:47:49.928 DEBUG ab7c64738d52 doInternalPca - filtering batch size of  5
## 2020 11 18 16:47:49.929 DEBUG ab7c64738d52 doInternalPca after filter - Number of rowname
## 2020 11 18 16:47:49.929 DEBUG ab7c64738d52 doInternalPca after filter - length of batch i
## 2020 11 18 16:47:49.929 DEBUG ab7c64738d52 doInternalPca - pvalueDSC
## 2020 11 18 16:47:49.929 DEBUG ab7c64738d52 pvalueDSC start
## 2020 11 18 16:47:49.930 DEBUG ab7c64738d52 pvalueDSC transpose
## 2020 11 18 16:47:49.930 DEBUG ab7c64738d52 pvalueDSC call pvalueDSCwithExcerpt
## 2020 11 18 16:47:49.930 DEBUG ab7c64738d52 pvalueDSCwithExcerpt start
## 2020 11 18 16:47:49.930 DEBUG ab7c64738d52 nrow(thePcaDataExcerpt)= 2
## 2020 11 18 16:47:49.931 DEBUG ab7c64738d52 ncol(thePcaDataExcerpt)= 73
## 2020 11 18 16:47:49.931 DEBUG ab7c64738d52 length(theBatchIdsForSamples)= 73
## 2020 11 18 16:47:49.932 DEBUG ab7c64738d52 getDSCwithExcerpt before java
## 2020 11 18 16:47:49.932 DEBUG ab7c64738d52 getDSCwithExcerpt after java
```

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## 2020 11 18 16:47:49.933 DEBUG ab7c64738d52 pvalueDSCwithExcerpt after getDSCwithExcerpt
## 2020 11 18 16:47:49.933 DEBUG ab7c64738d52 pvalueDSCwithExcerpt length(unique(theBatchIds
## 2020 11 18 16:47:49.933 DEBUG ab7c64738d52 pvalueDSCwithExcerpt call doDscPerms
## 2020 11 18 16:47:49.934 DEBUG ab7c64738d52 doDscPerms before java
## 2020 11 18 16:47:50.118 DEBUG ab7c64738d52 doDscPerms after java
## 2020 11 18 16:47:50.424 DEBUG ab7c64738d52 doDscPerms length(resultsList)= 2000
## 2020 11 18 16:47:50.425 DEBUG ab7c64738d52 pvalueDSCwithExcerpt length(permResults)= 2000
## 2020 11 18 16:47:50.431 DEBUG ab7c64738d52 p-value run time =  0.497474193572998
## 2020 11 18 16:47:50.431 DEBUG ab7c64738d52 p-value is  0.0115
## 2020 11 18 16:47:50.432 DEBUG ab7c64738d52 pvalueDSCwithExcerpt 2222 length(permResults)=
## 2020 11 18 16:47:50.432 DEBUG ab7c64738d52 pvalueDSCwithExcerpt PCA-PVALUE-DSC
## 2020 11 18 16:47:50.434 DEBUG ab7c64738d52 openAndWriteDscPermsFile -- start
## 2020 11 18 16:47:50.434 DEBUG ab7c64738d52 openAndWriteDscPermsFile -- redo name
## 2020 11 18 16:47:50.434 DEBUG ab7c64738d52 openAndWriteDscPermsFile -- check file
## 2020 11 18 16:47:50.434 DEBUG ab7c64738d52 openAndWriteDscPermsFile -- no file, write
## 2020 11 18 16:47:51.029 DEBUG ab7c64738d52 writePCAAnnotations
## 2020 11 18 16:47:51.030 DEBUG ab7c64738d52 writePCAAnnotations - data  PC2,PC3
## 2020 11 18 16:47:51.032 DEBUG ab7c64738d52 writePcaAnalysis_Image - Number of rownames fo
## 2020 11 18 16:47:51.033 DEBUG ab7c64738d52 writePcaAnalysis_Image - length of batch ids f

## 2020 11 18 16:47:51.110 DEBUG ab7c64738d52 mbatchStandardLegend - Calling .jinit  /tmp/R/
## 2020 11 18 16:47:51.112 DEBUG ab7c64738d52 mbatchStandardLegend - .jinit complete
## 2020 11 18 16:47:51.113 DEBUG ab7c64738d52 mbatchStandardLegend - theTitle  Points: TSS (
## 2020 11 18 16:47:51.113 DEBUG ab7c64738d52 mbatchStandardLegend - theVersion  MBatch 1.7.
## 2020 11 18 16:47:51.114 DEBUG ab7c64738d52 mbatchStandardLegend - theFilenamePath  /build
## 2020 11 18 16:47:51.114 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendNames  AF (10)
## 2020 11 18 16:47:51.114 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendNames  2
## 2020 11 18 16:47:51.114 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendColors  2
## 2020 11 18 16:47:51.115 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendSymbols  2
## 2020 11 18 16:47:51.115 DEBUG ab7c64738d52 mbatchStandardLegend - myColors  #b30000,#00b3
## 2020 11 18 16:47:51.115 DEBUG ab7c64738d52 mbatchStandardLegend before java
## 2020 11 18 16:47:51.133 DEBUG ab7c64738d52 mbatchStandardLegend after java
## 2020 11 18 16:47:51.134 DEBUG ab7c64738d52 mbatchStandardLegend - Calling .jinit  /tmp/R/
## 2020 11 18 16:47:51.136 DEBUG ab7c64738d52 mbatchStandardLegend - .jinit complete
## 2020 11 18 16:47:51.136 DEBUG ab7c64738d52 mbatchStandardLegend - theTitle  Dispersion Me
## 2020 11 18 16:47:51.136 DEBUG ab7c64738d52 mbatchStandardLegend - theVersion  MBatch 1.7.
## 2020 11 18 16:47:51.137 DEBUG ab7c64738d52 mbatchStandardLegend - theFilenamePath  /build
## 2020 11 18 16:47:51.137 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendNames  First P
## 2020 11 18 16:47:51.138 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendNames  14
## 2020 11 18 16:47:51.138 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendColors  0
## 2020 11 18 16:47:51.138 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendSymbols  0
## 2020 11 18 16:47:51.138 DEBUG ab7c64738d52 mbatchStandardLegend - myColors
## 2020 11 18 16:47:51.138 DEBUG ab7c64738d52 mbatchStandardLegend before java
## 2020 11 18 16:47:51.281 DEBUG ab7c64738d52 mbatchStandardLegend after java
## 2020 11 18 16:47:51.281 DEBUG ab7c64738d52 mbatchStandardCombineLegends - Calling .jinit
## 2020 11 18 16:47:51.283 DEBUG ab7c64738d52 mbatchStandardCombineLegends - .jinit complete
```

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## 2020 11 18 16:47:51.284 DEBUG ab7c64738d52 mbatchStandardCombineLegends - theTitle  MBatc
## 2020 11 18 16:47:51.284 DEBUG ab7c64738d52 mbatchStandardCombineLegends - theFilenamePath
## 2020 11 18 16:47:51.284 DEBUG ab7c64738d52 mbatchStandardCombineLegends - theListOfFiles
## 2020 11 18 16:47:51.284 DEBUG ab7c64738d52 mbatchStandardLegend before java
## 2020 11 18 16:47:51.485 DEBUG ab7c64738d52 mbatchStandardLegend after java
## 2020 11 18 16:47:51.486 DEBUG ab7c64738d52 doInternalPca before filter - Number of rownam
## 2020 11 18 16:47:51.486 DEBUG ab7c64738d52 doInternalPca before filter - length of batch
## 2020 11 18 16:47:51.486 DEBUG ab7c64738d52 doInternalPca - filtering batch size of  5
## 2020 11 18 16:47:51.487 DEBUG ab7c64738d52 doInternalPca after filter - Number of rowname
## 2020 11 18 16:47:51.488 DEBUG ab7c64738d52 doInternalPca after filter - length of batch i
## 2020 11 18 16:47:51.488 DEBUG ab7c64738d52 doInternalPca - pvalueDSC
## 2020 11 18 16:47:51.488 DEBUG ab7c64738d52 pvalueDSC start
## 2020 11 18 16:47:51.488 DEBUG ab7c64738d52 pvalueDSC transpose
## 2020 11 18 16:47:51.489 DEBUG ab7c64738d52 pvalueDSC call pvalueDSCwithExcerpt
## 2020 11 18 16:47:51.489 DEBUG ab7c64738d52 pvalueDSCwithExcerpt start
## 2020 11 18 16:47:51.489 DEBUG ab7c64738d52 nrow(thePcaDataExcerpt)= 2
## 2020 11 18 16:47:51.489 DEBUG ab7c64738d52 ncol(thePcaDataExcerpt)= 73
## 2020 11 18 16:47:51.490 DEBUG ab7c64738d52 length(theBatchIdsForSamples)= 73
## 2020 11 18 16:47:51.490 DEBUG ab7c64738d52 getDSCwithExcerpt before java
## 2020 11 18 16:47:51.491 DEBUG ab7c64738d52 getDSCwithExcerpt after java
## 2020 11 18 16:47:51.491 DEBUG ab7c64738d52 pvalueDSCwithExcerpt after getDSCwithExcerpt
## 2020 11 18 16:47:51.492 DEBUG ab7c64738d52 pvalueDSCwithExcerpt length(unique(theBatchIds
## 2020 11 18 16:47:51.492 DEBUG ab7c64738d52 pvalueDSCwithExcerpt call doDscPerms
## 2020 11 18 16:47:51.493 DEBUG ab7c64738d52 doDscPerms before java
## 2020 11 18 16:47:51.677 DEBUG ab7c64738d52 doDscPerms after java
## 2020 11 18 16:47:52.003 DEBUG ab7c64738d52 doDscPerms length(resultsList)= 2000
## 2020 11 18 16:47:52.003 DEBUG ab7c64738d52 pvalueDSCwithExcerpt length(permResults)= 2000
## 2020 11 18 16:47:52.009 DEBUG ab7c64738d52 p-value run time =  0.517284870147705
## 2020 11 18 16:47:52.010 DEBUG ab7c64738d52 p-value is  0.0075
## 2020 11 18 16:47:52.010 DEBUG ab7c64738d52 pvalueDSCwithExcerpt 2222 length(permResults)=
## 2020 11 18 16:47:52.011 DEBUG ab7c64738d52 pvalueDSCwithExcerpt PCA-PVALUE-DSC
## 2020 11 18 16:47:52.012 DEBUG ab7c64738d52 openAndWriteDscPermsFile -- start
## 2020 11 18 16:47:52.013 DEBUG ab7c64738d52 openAndWriteDscPermsFile -- redo name
## 2020 11 18 16:47:52.013 DEBUG ab7c64738d52 openAndWriteDscPermsFile -- check file
## 2020 11 18 16:47:52.013 DEBUG ab7c64738d52 openAndWriteDscPermsFile -- no file, write
## 2020 11 18 16:47:52.673 DEBUG ab7c64738d52 writePCAAnnotations
## 2020 11 18 16:47:52.674 DEBUG ab7c64738d52 writePCAAnnotations - data  PC2,PC4
## 2020 11 18 16:47:52.676 DEBUG ab7c64738d52 writePcaAnalysis_Image - Number of rownames fo
## 2020 11 18 16:47:52.677 DEBUG ab7c64738d52 writePcaAnalysis_Image - length of batch ids f

## 2020 11 18 16:47:52.756 DEBUG ab7c64738d52 mbatchStandardLegend - Calling .jinit  /tmp/R/
## 2020 11 18 16:47:52.758 DEBUG ab7c64738d52 mbatchStandardLegend - .jinit complete
## 2020 11 18 16:47:52.759 DEBUG ab7c64738d52 mbatchStandardLegend - theTitle  Points: TSS (
## 2020 11 18 16:47:52.759 DEBUG ab7c64738d52 mbatchStandardLegend - theVersion  MBatch 1.7.
## 2020 11 18 16:47:52.760 DEBUG ab7c64738d52 mbatchStandardLegend - theFilenamePath  /build
## 2020 11 18 16:47:52.760 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendNames  AF (10)
```

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## 2020 11 18 16:47:52.760 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendNames  2
## 2020 11 18 16:47:52.761 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendColors  2
## 2020 11 18 16:47:52.761 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendSymbols  2
## 2020 11 18 16:47:52.761 DEBUG ab7c64738d52 mbatchStandardLegend - myColors  #b30000,#00b3
## 2020 11 18 16:47:52.761 DEBUG ab7c64738d52 mbatchStandardLegend before java
## 2020 11 18 16:47:52.780 DEBUG ab7c64738d52 mbatchStandardLegend after java
## 2020 11 18 16:47:52.781 DEBUG ab7c64738d52 mbatchStandardLegend - Calling .jinit  /tmp/R/
## 2020 11 18 16:47:52.782 DEBUG ab7c64738d52 mbatchStandardLegend - .jinit complete
## 2020 11 18 16:47:52.783 DEBUG ab7c64738d52 mbatchStandardLegend - theTitle  Dispersion Me
## 2020 11 18 16:47:52.783 DEBUG ab7c64738d52 mbatchStandardLegend - theVersion  MBatch 1.7.
## 2020 11 18 16:47:52.784 DEBUG ab7c64738d52 mbatchStandardLegend - theFilenamePath  /build
## 2020 11 18 16:47:52.784 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendNames  First F
## 2020 11 18 16:47:52.784 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendNames  14
## 2020 11 18 16:47:52.785 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendColors  0
## 2020 11 18 16:47:52.785 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendSymbols  0
## 2020 11 18 16:47:52.785 DEBUG ab7c64738d52 mbatchStandardLegend - myColors
## 2020 11 18 16:47:52.785 DEBUG ab7c64738d52 mbatchStandardLegend before java
## 2020 11 18 16:47:52.928 DEBUG ab7c64738d52 mbatchStandardLegend after java
## 2020 11 18 16:47:52.929 DEBUG ab7c64738d52 mbatchStandardCombineLegends - Calling .jinit
## 2020 11 18 16:47:52.931 DEBUG ab7c64738d52 mbatchStandardCombineLegends - .jinit complete
## 2020 11 18 16:47:52.931 DEBUG ab7c64738d52 mbatchStandardCombineLegends - theTitle  MBatc
## 2020 11 18 16:47:52.932 DEBUG ab7c64738d52 mbatchStandardCombineLegends - theFilenamePath
## 2020 11 18 16:47:52.932 DEBUG ab7c64738d52 mbatchStandardCombineLegends - theListOfFiles
## 2020 11 18 16:47:52.932 DEBUG ab7c64738d52 mbatchStandardLegend before java
## 2020 11 18 16:47:53.134 DEBUG ab7c64738d52 mbatchStandardLegend after java
## 2020 11 18 16:47:53.135 DEBUG ab7c64738d52 doInternalPca before filter - Number of rownam
## 2020 11 18 16:47:53.135 DEBUG ab7c64738d52 doInternalPca before filter - length of batch
## 2020 11 18 16:47:53.135 DEBUG ab7c64738d52 doInternalPca - filtering batch size of  5
## 2020 11 18 16:47:53.136 DEBUG ab7c64738d52 doInternalPca after filter - Number of rowname
## 2020 11 18 16:47:53.137 DEBUG ab7c64738d52 doInternalPca after filter - length of batch i
## 2020 11 18 16:47:53.137 DEBUG ab7c64738d52 doInternalPca - pvalueDSC
## 2020 11 18 16:47:53.137 DEBUG ab7c64738d52 pvalueDSC start
## 2020 11 18 16:47:53.138 DEBUG ab7c64738d52 pvalueDSC transpose
## 2020 11 18 16:47:53.138 DEBUG ab7c64738d52 pvalueDSC call pvalueDSCwithExcerpt
## 2020 11 18 16:47:53.138 DEBUG ab7c64738d52 pvalueDSCwithExcerpt start
## 2020 11 18 16:47:53.138 DEBUG ab7c64738d52 nrow(thePcaDataExcerpt)= 2
## 2020 11 18 16:47:53.139 DEBUG ab7c64738d52 ncol(thePcaDataExcerpt)= 73
## 2020 11 18 16:47:53.139 DEBUG ab7c64738d52 length(theBatchIdsForSamples)= 73
## 2020 11 18 16:47:53.139 DEBUG ab7c64738d52 getDSCwithExcerpt before java
## 2020 11 18 16:47:53.140 DEBUG ab7c64738d52 getDSCwithExcerpt after java
## 2020 11 18 16:47:53.141 DEBUG ab7c64738d52 pvalueDSCwithExcerpt after getDSCwithExcerpt
## 2020 11 18 16:47:53.141 DEBUG ab7c64738d52 pvalueDSCwithExcerpt length(unique(theBatchIds
## 2020 11 18 16:47:53.141 DEBUG ab7c64738d52 pvalueDSCwithExcerpt call doDscPerms
## 2020 11 18 16:47:53.142 DEBUG ab7c64738d52 doDscPerms before java
## 2020 11 18 16:47:53.393 DEBUG ab7c64738d52 doDscPerms after java
## 2020 11 18 16:47:53.752 DEBUG ab7c64738d52 doDscPerms length(resultsList)= 2000
```

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## 2020 11 18 16:47:53.752 DEBUG ab7c64738d52 pvalueDSCwithExcerpt length(permResults)= 2000
## 2020 11 18 16:47:53.761 DEBUG ab7c64738d52 p-value run time =  0.619179248809814
## 2020 11 18 16:47:53.761 DEBUG ab7c64738d52 p-value is  0.1035
## 2020 11 18 16:47:53.761 DEBUG ab7c64738d52 pvalueDSCwithExcerpt 2222 length(permResults)=
## 2020 11 18 16:47:53.762 DEBUG ab7c64738d52 pvalueDSCwithExcerpt PCA-PVALUE-DSC
## 2020 11 18 16:47:53.763 DEBUG ab7c64738d52 openAndWriteDscPermsFile -- start
## 2020 11 18 16:47:53.764 DEBUG ab7c64738d52 openAndWriteDscPermsFile -- redo name
## 2020 11 18 16:47:53.764 DEBUG ab7c64738d52 openAndWriteDscPermsFile -- check file
## 2020 11 18 16:47:53.764 DEBUG ab7c64738d52 openAndWriteDscPermsFile -- no file, write
## 2020 11 18 16:47:54.382 DEBUG ab7c64738d52 writePCAAnnotations
## 2020 11 18 16:47:54.383 DEBUG ab7c64738d52 writePCAAnnotations - data  PC3,PC4
## 2020 11 18 16:47:54.385 DEBUG ab7c64738d52 writePcaAnalysis_Image - Number of rownames fo
## 2020 11 18 16:47:54.385 DEBUG ab7c64738d52 writePcaAnalysis_Image - length of batch ids f

## 2020 11 18 16:47:54.462 DEBUG ab7c64738d52 mbatchStandardLegend - Calling .jinit  /tmp/R/
## 2020 11 18 16:47:54.464 DEBUG ab7c64738d52 mbatchStandardLegend - .jinit complete
## 2020 11 18 16:47:54.464 DEBUG ab7c64738d52 mbatchStandardLegend - theTitle  Points: TSS
## 2020 11 18 16:47:54.465 DEBUG ab7c64738d52 mbatchStandardLegend - theVersion  MBatch 1.7.
## 2020 11 18 16:47:54.465 DEBUG ab7c64738d52 mbatchStandardLegend - theFilenamePath  /build
## 2020 11 18 16:47:54.466 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendNames  AF (10)
## 2020 11 18 16:47:54.466 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendNames  2
## 2020 11 18 16:47:54.466 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendColors  2
## 2020 11 18 16:47:54.466 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendSymbols  2
## 2020 11 18 16:47:54.467 DEBUG ab7c64738d52 mbatchStandardLegend - myColors  #b30000,#00b3
## 2020 11 18 16:47:54.467 DEBUG ab7c64738d52 mbatchStandardLegend before java
## 2020 11 18 16:47:54.485 DEBUG ab7c64738d52 mbatchStandardLegend after java
## 2020 11 18 16:47:54.486 DEBUG ab7c64738d52 mbatchStandardLegend - Calling .jinit  /tmp/R/
## 2020 11 18 16:47:54.487 DEBUG ab7c64738d52 mbatchStandardLegend - .jinit complete
## 2020 11 18 16:47:54.488 DEBUG ab7c64738d52 mbatchStandardLegend - theTitle  Dispersion Me
## 2020 11 18 16:47:54.488 DEBUG ab7c64738d52 mbatchStandardLegend - theVersion  MBatch 1.7.
## 2020 11 18 16:47:54.489 DEBUG ab7c64738d52 mbatchStandardLegend - theFilenamePath  /build
## 2020 11 18 16:47:54.489 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendNames  First F
## 2020 11 18 16:47:54.489 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendNames  14
## 2020 11 18 16:47:54.490 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendColors  0
## 2020 11 18 16:47:54.490 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendSymbols  0
## 2020 11 18 16:47:54.490 DEBUG ab7c64738d52 mbatchStandardLegend - myColors
## 2020 11 18 16:47:54.490 DEBUG ab7c64738d52 mbatchStandardLegend before java
## 2020 11 18 16:47:54.634 DEBUG ab7c64738d52 mbatchStandardLegend after java
## 2020 11 18 16:47:54.635 DEBUG ab7c64738d52 mbatchStandardCombineLegends - Calling .jinit
## 2020 11 18 16:47:54.636 DEBUG ab7c64738d52 mbatchStandardCombineLegends - .jinit complete
## 2020 11 18 16:47:54.637 DEBUG ab7c64738d52 mbatchStandardCombineLegends - theTitle  MBatc
## 2020 11 18 16:47:54.637 DEBUG ab7c64738d52 mbatchStandardCombineLegends - theFilenamePath
## 2020 11 18 16:47:54.637 DEBUG ab7c64738d52 mbatchStandardCombineLegends - theListOfFiles
## 2020 11 18 16:47:54.638 DEBUG ab7c64738d52 mbatchStandardLegend before java
## 2020 11 18 16:47:54.849 DEBUG ab7c64738d52 mbatchStandardLegend after java
## 2020 11 18 16:47:54.850 DEBUG ab7c64738d52 doSamplePcaCall - pre-filter matrix size= 684,
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## 2020 11 18 16:47:54.850 DEBUG ab7c64738d52 filterTheGeneDataOnBatchSize theMinBatchSize=
## 2020 11 18 16:47:54.851 DEBUG ab7c64738d52 filterBasedOnGeneLimit theGeneLimit= 10000
## 2020 11 18 16:47:54.852 DEBUG ab7c64738d52 filterBasedOnGeneLimit theMatrixGeneData nrow=
## 2020 11 18 16:47:54.852 DEBUG ab7c64738d52 filterBasedOnGeneLimit theMatrixGeneData ncol=
## 2020 11 18 16:47:54.852 DEBUG ab7c64738d52 doSamplePcaCall - pre-filter matrix size= 684,
## 2020 11 18 16:47:54.853 DEBUG ab7c64738d52 doSamplePcaCall - no-NA matrix length= 681
## 2020 11 18 16:47:54.863 DEBUG ab7c64738d52 doSamplePcaCall - max(theCompPairList)= 4
## 2020 11 18 16:47:54.864 DEBUG ab7c64738d52 doSamplePcaCall - pca scores size= 69,69
## 2020 11 18 16:47:54.864 DEBUG ab7c64738d52 checkCreateDir:  /builds/BatchEffects_clean/Ba
## 2020 11 18 16:47:54.865 DEBUG ab7c64738d52 checkCreateDir:  /builds/BatchEffects_clean/Ba
## 2020 11 18 16:47:54.865 DEBUG ab7c64738d52 call pvalueDSC
## 2020 11 18 16:47:54.866 DEBUG ab7c64738d52 pvalueDSC start
## 2020 11 18 16:47:54.866 DEBUG ab7c64738d52 pvalueDSC component A < 1
## 2020 11 18 16:47:54.866 DEBUG ab7c64738d52 pvalueDSC call pvalueDSCwithExcerpt
## 2020 11 18 16:47:54.867 DEBUG ab7c64738d52 pvalueDSCwithExcerpt start
## 2020 11 18 16:47:54.867 DEBUG ab7c64738d52 nrow(thePcaDataExcerpt)= 69
## 2020 11 18 16:47:54.867 DEBUG ab7c64738d52 ncol(thePcaDataExcerpt)= 69
## 2020 11 18 16:47:54.867 DEBUG ab7c64738d52 length(theBatchIdsForSamples)= 69
## 2020 11 18 16:47:54.868 DEBUG ab7c64738d52 getDSCwithExcerpt before java
## 2020 11 18 16:47:54.870 DEBUG ab7c64738d52 getDSCwithExcerpt after java
## 2020 11 18 16:47:54.870 DEBUG ab7c64738d52 pvalueDSCwithExcerpt after getDSCwithExcerpt
## 2020 11 18 16:47:54.871 DEBUG ab7c64738d52 pvalueDSCwithExcerpt length(unique(theBatchIds
## 2020 11 18 16:47:54.871 DEBUG ab7c64738d52 pvalueDSCwithExcerpt call doDscPerms
## 2020 11 18 16:47:54.872 DEBUG ab7c64738d52 doDscPerms before java
## 2020 11 18 16:47:55.592 DEBUG ab7c64738d52 doDscPerms after java
## 2020 11 18 16:47:55.947 DEBUG ab7c64738d52 doDscPerms length(resultsList)= 2000
## 2020 11 18 16:47:55.948 DEBUG ab7c64738d52 pvalueDSCwithExcerpt length(permResults)= 2000
## 2020 11 18 16:47:56.056 DEBUG ab7c64738d52 p-value run time =  1.18475556373596
## 2020 11 18 16:47:56.057 DEBUG ab7c64738d52 p-value is  0.979
## 2020 11 18 16:47:56.057 DEBUG ab7c64738d52 pvalueDSCwithExcerpt 2222 length(permResults)=
## 2020 11 18 16:47:56.057 DEBUG ab7c64738d52 pvalueDSCwithExcerpt PCA-PVALUE-DSC
## 2020 11 18 16:47:56.224 DEBUG ab7c64738d52 openAndWriteDscPermsFile -- start
## 2020 11 18 16:47:56.224 DEBUG ab7c64738d52 openAndWriteDscPermsFile -- redo name
## 2020 11 18 16:47:56.224 DEBUG ab7c64738d52 openAndWriteDscPermsFile -- check file
## 2020 11 18 16:47:56.225 DEBUG ab7c64738d52 openAndWriteDscPermsFile -- no file, write
## 2020 11 18 16:47:56.858 DEBUG ab7c64738d52 write writePcaDataFilesForDataset
## 2020 11 18 16:47:56.858 DEBUG ab7c64738d52 checkCreateDir: /builds/BatchEffects_clean/Ba
## 2020 11 18 16:47:56.859 DEBUG ab7c64738d52 writePCAValuesTSV
## 2020 11 18 16:47:56.859 DEBUG ab7c64738d52 writePCAValuesTSV outputFile
## 2020 11 18 16:47:56.859 DEBUG ab7c64738d52 writePCAValuesTSV components
## 2020 11 18 16:47:56.860 DEBUG ab7c64738d52 writePCAValuesTSV myDataFrame
## 2020 11 18 16:47:56.860 DEBUG ab7c64738d52 writePCAValuesTSV - values
## 2020 11 18 16:47:56.860 DEBUG ab7c64738d52 writePCAValuesTSV - matrix
## 2020 11 18 16:47:56.861 DEBUG ab7c64738d52 writePCAValuesTSV - write
## 2020 11 18 16:47:56.863 DEBUG ab7c64738d52 writePCAValuesTSV finished  /builds/BatchEffec
## 2020 11 18 16:47:56.863 DEBUG ab7c64738d52 writePCAAnnotations
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## 2020 11 18 16:47:56.863 DEBUG ab7c64738d52 writePCAAnnotations - header and all data
## 2020 11 18 16:47:56.870 DEBUG ab7c64738d52 write writeSharedFveWeightScoresFiles
## 2020 11 18 16:47:56.973 DEBUG ab7c64738d52 createBatchEffectsOutput_pca loop
## 2020 11 18 16:47:56.974 DEBUG ab7c64738d52 doInternalPca before filter - Number of rownam
## 2020 11 18 16:47:56.974 DEBUG ab7c64738d52 doInternalPca before filter - length of batch
## 2020 11 18 16:47:56.974 DEBUG ab7c64738d52 doInternalPca - filtering batch size of  5
## 2020 11 18 16:47:56.975 DEBUG ab7c64738d52 doInternalPca after filter - Number of rowname
## 2020 11 18 16:47:56.975 DEBUG ab7c64738d52 doInternalPca after filter - length of batch i
## 2020 11 18 16:47:56.976 DEBUG ab7c64738d52 doInternalPca - pvalueDSC
## 2020 11 18 16:47:56.976 DEBUG ab7c64738d52 pvalueDSC start
## 2020 11 18 16:47:56.976 DEBUG ab7c64738d52 pvalueDSC transpose
## 2020 11 18 16:47:56.977 DEBUG ab7c64738d52 pvalueDSC call pvalueDSCwithExcerpt
## 2020 11 18 16:47:56.977 DEBUG ab7c64738d52 pvalueDSCwithExcerpt start
## 2020 11 18 16:47:56.977 DEBUG ab7c64738d52 nrow(thePcaDataExcerpt)= 2
## 2020 11 18 16:47:56.977 DEBUG ab7c64738d52 ncol(thePcaDataExcerpt)= 69
## 2020 11 18 16:47:56.978 DEBUG ab7c64738d52 length(theBatchIdsForSamples)= 69
## 2020 11 18 16:47:56.978 DEBUG ab7c64738d52 getDSCwithExcerpt before java
## 2020 11 18 16:47:56.979 DEBUG ab7c64738d52 getDSCwithExcerpt after java
## 2020 11 18 16:47:56.979 DEBUG ab7c64738d52 pvalueDSCwithExcerpt after getDSCwithExcerpt
## 2020 11 18 16:47:56.980 DEBUG ab7c64738d52 pvalueDSCwithExcerpt length(unique(theBatchIds
## 2020 11 18 16:47:56.980 DEBUG ab7c64738d52 pvalueDSCwithExcerpt call doDscPerms
## 2020 11 18 16:47:56.981 DEBUG ab7c64738d52 doDscPerms before java
## 2020 11 18 16:47:57.185 DEBUG ab7c64738d52 doDscPerms after java
## 2020 11 18 16:47:57.514 DEBUG ab7c64738d52 doDscPerms length(resultsList)= 2000
## 2020 11 18 16:47:57.514 DEBUG ab7c64738d52 pvalueDSCwithExcerpt length(permResults)= 2000
## 2020 11 18 16:47:57.521 DEBUG ab7c64738d52 p-value run time =  0.540417671203613
## 2020 11 18 16:47:57.521 DEBUG ab7c64738d52 p-value is  0.3955
## 2020 11 18 16:47:57.521 DEBUG ab7c64738d52 pvalueDSCwithExcerpt 2222 length(permResults)=
## 2020 11 18 16:47:57.522 DEBUG ab7c64738d52 pvalueDSCwithExcerpt PCA-PVALUE-DSC
## 2020 11 18 16:47:57.523 DEBUG ab7c64738d52 openAndWriteDscPermsFile -- start
## 2020 11 18 16:47:57.524 DEBUG ab7c64738d52 openAndWriteDscPermsFile -- redo name
## 2020 11 18 16:47:57.524 DEBUG ab7c64738d52 openAndWriteDscPermsFile -- check file
## 2020 11 18 16:47:57.524 DEBUG ab7c64738d52 openAndWriteDscPermsFile -- no file, write
## 2020 11 18 16:47:58.155 DEBUG ab7c64738d52 writePCAAnnotations
## 2020 11 18 16:47:58.156 DEBUG ab7c64738d52 writePCAAnnotations - data  PC1,PC2
## 2020 11 18 16:47:58.158 DEBUG ab7c64738d52 writePcaAnalysis_Image - Number of rownames fo
## 2020 11 18 16:47:58.159 DEBUG ab7c64738d52 writePcaAnalysis_Image - length of batch ids f

## 2020 11 18 16:47:58.235 DEBUG ab7c64738d52 mbatchStandardLegend - Calling .jinit  /tmp/R/
## 2020 11 18 16:47:58.237 DEBUG ab7c64738d52 mbatchStandardLegend - .jinit complete
## 2020 11 18 16:47:58.237 DEBUG ab7c64738d52 mbatchStandardLegend - theTitle  Points: ShipI
## 2020 11 18 16:47:58.237 DEBUG ab7c64738d52 mbatchStandardLegend - theVersion  MBatch 1.7.
## 2020 11 18 16:47:58.238 DEBUG ab7c64738d52 mbatchStandardLegend - theFilenamePath  /build
## 2020 11 18 16:47:58.238 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendNames  2010-02
## 2020 11 18 16:47:58.238 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendNames  4
## 2020 11 18 16:47:58.239 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendColors  4
```

```
## 2020 11 18 16:47:58.239 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendSymbols  4
## 2020 11 18 16:47:58.239 DEBUG ab7c64738d52 mbatchStandardLegend - myColors  #b30000,#59b3
## 2020 11 18 16:47:58.239 DEBUG ab7c64738d52 mbatchStandardLegend before java
## 2020 11 18 16:47:58.266 DEBUG ab7c64738d52 mbatchStandardLegend after java
## 2020 11 18 16:47:58.267 DEBUG ab7c64738d52 mbatchStandardLegend - Calling .jinit  /tmp/R/
## 2020 11 18 16:47:58.269 DEBUG ab7c64738d52 mbatchStandardLegend - .jinit complete
## 2020 11 18 16:47:58.269 DEBUG ab7c64738d52 mbatchStandardLegend - theTitle  Dispersion Me
## 2020 11 18 16:47:58.270 DEBUG ab7c64738d52 mbatchStandardLegend - theVersion  MBatch 1.7.
## 2020 11 18 16:47:58.270 DEBUG ab7c64738d52 mbatchStandardLegend - theFilenamePath  /build
## 2020 11 18 16:47:58.270 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendNames  First F
## 2020 11 18 16:47:58.271 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendNames  14
## 2020 11 18 16:47:58.271 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendColors  0
## 2020 11 18 16:47:58.271 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendSymbols  0
## 2020 11 18 16:47:58.271 DEBUG ab7c64738d52 mbatchStandardLegend - myColors
## 2020 11 18 16:47:58.272 DEBUG ab7c64738d52 mbatchStandardLegend before java
## 2020 11 18 16:47:58.411 DEBUG ab7c64738d52 mbatchStandardLegend after java
## 2020 11 18 16:47:58.412 DEBUG ab7c64738d52 mbatchStandardCombineLegends - Calling .jinit
## 2020 11 18 16:47:58.414 DEBUG ab7c64738d52 mbatchStandardCombineLegends - .jinit complete
## 2020 11 18 16:47:58.414 DEBUG ab7c64738d52 mbatchStandardCombineLegends - theTitle  MBatc
## 2020 11 18 16:47:58.414 DEBUG ab7c64738d52 mbatchStandardCombineLegends - theFilenamePath
## 2020 11 18 16:47:58.414 DEBUG ab7c64738d52 mbatchStandardCombineLegends - theListOfFiles
## 2020 11 18 16:47:58.415 DEBUG ab7c64738d52 mbatchStandardLegend before java
## 2020 11 18 16:47:58.623 DEBUG ab7c64738d52 mbatchStandardLegend after java
## 2020 11 18 16:47:58.625 DEBUG ab7c64738d52 doInternalPca before filter - Number of rownam
## 2020 11 18 16:47:58.625 DEBUG ab7c64738d52 doInternalPca before filter - length of batch
## 2020 11 18 16:47:58.625 DEBUG ab7c64738d52 doInternalPca - filtering batch size of  5
## 2020 11 18 16:47:58.626 DEBUG ab7c64738d52 doInternalPca after filter - Number of rowname
## 2020 11 18 16:47:58.627 DEBUG ab7c64738d52 doInternalPca after filter - length of batch i
## 2020 11 18 16:47:58.627 DEBUG ab7c64738d52 doInternalPca - pvalueDSC
## 2020 11 18 16:47:58.627 DEBUG ab7c64738d52 pvalueDSC start
## 2020 11 18 16:47:58.627 DEBUG ab7c64738d52 pvalueDSC transpose
## 2020 11 18 16:47:58.628 DEBUG ab7c64738d52 pvalueDSC call pvalueDSCwithExcerpt
## 2020 11 18 16:47:58.628 DEBUG ab7c64738d52 pvalueDSCwithExcerpt start
## 2020 11 18 16:47:58.628 DEBUG ab7c64738d52 nrow(thePcaDataExcerpt)= 2
## 2020 11 18 16:47:58.628 DEBUG ab7c64738d52 ncol(thePcaDataExcerpt)= 69
## 2020 11 18 16:47:58.629 DEBUG ab7c64738d52 length(theBatchIdsForSamples)= 69
## 2020 11 18 16:47:58.629 DEBUG ab7c64738d52 getDSCwithExcerpt before java
## 2020 11 18 16:47:58.640 DEBUG ab7c64738d52 getDSCwithExcerpt after java
## 2020 11 18 16:47:58.641 DEBUG ab7c64738d52 pvalueDSCwithExcerpt after getDSCwithExcerpt
## 2020 11 18 16:47:58.641 DEBUG ab7c64738d52 pvalueDSCwithExcerpt length(unique(theBatchIds
## 2020 11 18 16:47:58.642 DEBUG ab7c64738d52 pvalueDSCwithExcerpt call doDscPerms
## 2020 11 18 16:47:58.642 DEBUG ab7c64738d52 doDscPerms before java
## 2020 11 18 16:47:58.831 DEBUG ab7c64738d52 doDscPerms after java
## 2020 11 18 16:47:59.187 DEBUG ab7c64738d52 doDscPerms length(resultsList)= 2000
## 2020 11 18 16:47:59.188 DEBUG ab7c64738d52 pvalueDSCwithExcerpt length(permResults)= 2000
## 2020 11 18 16:47:59.195 DEBUG ab7c64738d52 p-value run time =  0.5529625415802
```

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## 2020 11 18 16:47:59.195 DEBUG ab7c64738d52 p-value is  0.4805
## 2020 11 18 16:47:59.195 DEBUG ab7c64738d52 pvalueDSCwithExcerpt 2222 length(permResults)=
## 2020 11 18 16:47:59.196 DEBUG ab7c64738d52 pvalueDSCwithExcerpt PCA-PVALUE-DSC
## 2020 11 18 16:47:59.197 DEBUG ab7c64738d52 openAndWriteDscPermsFile -- start
## 2020 11 18 16:47:59.198 DEBUG ab7c64738d52 openAndWriteDscPermsFile -- redo name
## 2020 11 18 16:47:59.198 DEBUG ab7c64738d52 openAndWriteDscPermsFile -- check file
## 2020 11 18 16:47:59.198 DEBUG ab7c64738d52 openAndWriteDscPermsFile -- no file, write
## 2020 11 18 16:47:59.832 DEBUG ab7c64738d52 writePCAAnnotations
## 2020 11 18 16:47:59.833 DEBUG ab7c64738d52 writePCAAnnotations - data  PC1,PC3
## 2020 11 18 16:47:59.835 DEBUG ab7c64738d52 writePcaAnalysis_Image - Number of rownames fo
## 2020 11 18 16:47:59.836 DEBUG ab7c64738d52 writePcaAnalysis_Image - length of batch ids f

## 2020 11 18 16:47:59.912 DEBUG ab7c64738d52 mbatchStandardLegend - Calling .jinit  /tmp/R/
## 2020 11 18 16:47:59.914 DEBUG ab7c64738d52 mbatchStandardLegend - .jinit complete
## 2020 11 18 16:47:59.914 DEBUG ab7c64738d52 mbatchStandardLegend - theTitle  Points: ShipD
## 2020 11 18 16:47:59.915 DEBUG ab7c64738d52 mbatchStandardLegend - theVersion  MBatch 1.7.
## 2020 11 18 16:47:59.915 DEBUG ab7c64738d52 mbatchStandardLegend - theFilenamePath  /build
## 2020 11 18 16:47:59.916 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendNames  2010-02
## 2020 11 18 16:47:59.916 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendNames  4
## 2020 11 18 16:47:59.916 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendColors  4
## 2020 11 18 16:47:59.916 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendSymbols  4
## 2020 11 18 16:47:59.917 DEBUG ab7c64738d52 mbatchStandardLegend - myColors  #b30000,#59b3
## 2020 11 18 16:47:59.917 DEBUG ab7c64738d52 mbatchStandardLegend before java
## 2020 11 18 16:47:59.944 DEBUG ab7c64738d52 mbatchStandardLegend after java
## 2020 11 18 16:47:59.945 DEBUG ab7c64738d52 mbatchStandardLegend - Calling .jinit  /tmp/R/
## 2020 11 18 16:47:59.947 DEBUG ab7c64738d52 mbatchStandardLegend - .jinit complete
## 2020 11 18 16:47:59.947 DEBUG ab7c64738d52 mbatchStandardLegend - theTitle  Dispersion Me
## 2020 11 18 16:47:59.947 DEBUG ab7c64738d52 mbatchStandardLegend - theVersion  MBatch 1.7.
## 2020 11 18 16:47:59.948 DEBUG ab7c64738d52 mbatchStandardLegend - theFilenamePath  /build
## 2020 11 18 16:47:59.948 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendNames  First F
## 2020 11 18 16:47:59.949 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendNames  14
## 2020 11 18 16:47:59.949 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendColors  0
## 2020 11 18 16:47:59.949 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendSymbols  0
## 2020 11 18 16:47:59.949 DEBUG ab7c64738d52 mbatchStandardLegend - myColors
## 2020 11 18 16:47:59.950 DEBUG ab7c64738d52 mbatchStandardLegend before java
## 2020 11 18 16:48:00.092 DEBUG ab7c64738d52 mbatchStandardLegend after java
## 2020 11 18 16:48:00.093 DEBUG ab7c64738d52 mbatchStandardCombineLegends - Calling .jinit
## 2020 11 18 16:48:00.095 DEBUG ab7c64738d52 mbatchStandardCombineLegends - .jinit complete
## 2020 11 18 16:48:00.095 DEBUG ab7c64738d52 mbatchStandardCombineLegends - theTitle  MBatc
## 2020 11 18 16:48:00.096 DEBUG ab7c64738d52 mbatchStandardCombineLegends - theFilenamePath
## 2020 11 18 16:48:00.096 DEBUG ab7c64738d52 mbatchStandardCombineLegends - theListOfFiles
## 2020 11 18 16:48:00.096 DEBUG ab7c64738d52 mbatchStandardLegend before java
## 2020 11 18 16:48:00.303 DEBUG ab7c64738d52 mbatchStandardLegend after java
## 2020 11 18 16:48:00.305 DEBUG ab7c64738d52 doInternalPca before filter - Number of rownam
## 2020 11 18 16:48:00.305 DEBUG ab7c64738d52 doInternalPca before filter - length of batch
## 2020 11 18 16:48:00.305 DEBUG ab7c64738d52 doInternalPca - filtering batch size of  5
```

```
## 2020 11 18 16:48:00.306 DEBUG ab7c64738d52 doInternalPca after filter - Number of rowname
## 2020 11 18 16:48:00.307 DEBUG ab7c64738d52 doInternalPca after filter - length of batch i
## 2020 11 18 16:48:00.307 DEBUG ab7c64738d52 doInternalPca - pvalueDSC
## 2020 11 18 16:48:00.307 DEBUG ab7c64738d52 pvalueDSC start
## 2020 11 18 16:48:00.307 DEBUG ab7c64738d52 pvalueDSC transpose
## 2020 11 18 16:48:00.308 DEBUG ab7c64738d52 pvalueDSC call pvalueDSCwithExcerpt
## 2020 11 18 16:48:00.308 DEBUG ab7c64738d52 pvalueDSCwithExcerpt start
## 2020 11 18 16:48:00.308 DEBUG ab7c64738d52 nrow(thePcaDataExcerpt)= 2
## 2020 11 18 16:48:00.309 DEBUG ab7c64738d52 ncol(thePcaDataExcerpt)= 69
## 2020 11 18 16:48:00.309 DEBUG ab7c64738d52 length(theBatchIdsForSamples)= 69
## 2020 11 18 16:48:00.309 DEBUG ab7c64738d52 getDSCwithExcerpt before java
## 2020 11 18 16:48:00.310 DEBUG ab7c64738d52 getDSCwithExcerpt after java
## 2020 11 18 16:48:00.311 DEBUG ab7c64738d52 pvalueDSCwithExcerpt after getDSCwithExcerpt
## 2020 11 18 16:48:00.311 DEBUG ab7c64738d52 pvalueDSCwithExcerpt length(unique(theBatchIds
## 2020 11 18 16:48:00.311 DEBUG ab7c64738d52 pvalueDSCwithExcerpt call doDscPerms
## 2020 11 18 16:48:00.312 DEBUG ab7c64738d52 doDscPerms before java
## 2020 11 18 16:48:00.521 DEBUG ab7c64738d52 doDscPerms after java
## 2020 11 18 16:48:00.936 DEBUG ab7c64738d52 doDscPerms length(resultsList)= 2000
## 2020 11 18 16:48:00.937 DEBUG ab7c64738d52 pvalueDSCwithExcerpt length(permResults)= 2000
## 2020 11 18 16:48:00.944 DEBUG ab7c64738d52 p-value run time =  0.632740020751953
## 2020 11 18 16:48:00.945 DEBUG ab7c64738d52 p-value is  0.4835
## 2020 11 18 16:48:00.945 DEBUG ab7c64738d52 pvalueDSCwithExcerpt 2222 length(permResults)=
## 2020 11 18 16:48:00.945 DEBUG ab7c64738d52 pvalueDSCwithExcerpt PCA-PVALUE-DSC
## 2020 11 18 16:48:00.947 DEBUG ab7c64738d52 openAndWriteDscPermsFile -- start
## 2020 11 18 16:48:00.947 DEBUG ab7c64738d52 openAndWriteDscPermsFile -- redo name
## 2020 11 18 16:48:00.948 DEBUG ab7c64738d52 openAndWriteDscPermsFile -- check file
## 2020 11 18 16:48:00.948 DEBUG ab7c64738d52 openAndWriteDscPermsFile -- no file, write
## 2020 11 18 16:48:01.599 DEBUG ab7c64738d52 writePCAAnnotations
## 2020 11 18 16:48:01.600 DEBUG ab7c64738d52 writePCAAnnotations - data  PC1,PC4
## 2020 11 18 16:48:01.602 DEBUG ab7c64738d52 writePcaAnalysis_Image - Number of rownames fo
## 2020 11 18 16:48:01.602 DEBUG ab7c64738d52 writePcaAnalysis_Image - length of batch ids f

## 2020 11 18 16:48:01.677 DEBUG ab7c64738d52 mbatchStandardLegend - Calling .jinit  /tmp/R/
## 2020 11 18 16:48:01.679 DEBUG ab7c64738d52 mbatchStandardLegend - .jinit complete
## 2020 11 18 16:48:01.679 DEBUG ab7c64738d52 mbatchStandardLegend - theTitle  Points: ShipD
## 2020 11 18 16:48:01.679 DEBUG ab7c64738d52 mbatchStandardLegend - theVersion  MBatch 1.7.
## 2020 11 18 16:48:01.680 DEBUG ab7c64738d52 mbatchStandardLegend - theFilenamePath  /build
## 2020 11 18 16:48:01.680 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendNames  2010-02
## 2020 11 18 16:48:01.680 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendNames  4
## 2020 11 18 16:48:01.681 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendColors  4
## 2020 11 18 16:48:01.681 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendSymbols  4
## 2020 11 18 16:48:01.681 DEBUG ab7c64738d52 mbatchStandardLegend - myColors  #b30000,#59b3
## 2020 11 18 16:48:01.682 DEBUG ab7c64738d52 mbatchStandardLegend before java
## 2020 11 18 16:48:01.708 DEBUG ab7c64738d52 mbatchStandardLegend after java
## 2020 11 18 16:48:01.709 DEBUG ab7c64738d52 mbatchStandardLegend - Calling .jinit  /tmp/R/
## 2020 11 18 16:48:01.711 DEBUG ab7c64738d52 mbatchStandardLegend - .jinit complete
```

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## 2020 11 18 16:48:01.711 DEBUG ab7c64738d52 mbatchStandardLegend - theTitle  Dispersion Me
## 2020 11 18 16:48:01.711 DEBUG ab7c64738d52 mbatchStandardLegend - theVersion  MBatch 1.7.
## 2020 11 18 16:48:01.712 DEBUG ab7c64738d52 mbatchStandardLegend - theFilenamePath  /build
## 2020 11 18 16:48:01.712 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendNames  First F
## 2020 11 18 16:48:01.713 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendNames  14
## 2020 11 18 16:48:01.713 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendColors  0
## 2020 11 18 16:48:01.713 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendSymbols  0
## 2020 11 18 16:48:01.713 DEBUG ab7c64738d52 mbatchStandardLegend - myColors
## 2020 11 18 16:48:01.714 DEBUG ab7c64738d52 mbatchStandardLegend before java
## 2020 11 18 16:48:01.854 DEBUG ab7c64738d52 mbatchStandardLegend after java
## 2020 11 18 16:48:01.855 DEBUG ab7c64738d52 mbatchStandardCombineLegends - Calling .jinit
## 2020 11 18 16:48:01.857 DEBUG ab7c64738d52 mbatchStandardCombineLegends - .jinit complete
## 2020 11 18 16:48:01.858 DEBUG ab7c64738d52 mbatchStandardCombineLegends - theTitle  MBatc
## 2020 11 18 16:48:01.858 DEBUG ab7c64738d52 mbatchStandardCombineLegends - theFilenamePath
## 2020 11 18 16:48:01.858 DEBUG ab7c64738d52 mbatchStandardCombineLegends - theListOfFiles
## 2020 11 18 16:48:01.858 DEBUG ab7c64738d52 mbatchStandardLegend before java
## 2020 11 18 16:48:02.069 DEBUG ab7c64738d52 mbatchStandardLegend after java
## 2020 11 18 16:48:02.070 DEBUG ab7c64738d52 doInternalPca before filter - Number of rownam
## 2020 11 18 16:48:02.070 DEBUG ab7c64738d52 doInternalPca before filter - length of batch
## 2020 11 18 16:48:02.071 DEBUG ab7c64738d52 doInternalPca - filtering batch size of  5
## 2020 11 18 16:48:02.072 DEBUG ab7c64738d52 doInternalPca after filter - Number of rowname
## 2020 11 18 16:48:02.072 DEBUG ab7c64738d52 doInternalPca after filter - length of batch i
## 2020 11 18 16:48:02.072 DEBUG ab7c64738d52 doInternalPca - pvalueDSC
## 2020 11 18 16:48:02.073 DEBUG ab7c64738d52 pvalueDSC start
## 2020 11 18 16:48:02.073 DEBUG ab7c64738d52 pvalueDSC transpose
## 2020 11 18 16:48:02.073 DEBUG ab7c64738d52 pvalueDSC call pvalueDSCwithExcerpt
## 2020 11 18 16:48:02.073 DEBUG ab7c64738d52 pvalueDSCwithExcerpt start
## 2020 11 18 16:48:02.074 DEBUG ab7c64738d52 nrow(thePcaDataExcerpt)= 2
## 2020 11 18 16:48:02.074 DEBUG ab7c64738d52 ncol(thePcaDataExcerpt)= 69
## 2020 11 18 16:48:02.074 DEBUG ab7c64738d52 length(theBatchIdsForSamples)= 69
## 2020 11 18 16:48:02.075 DEBUG ab7c64738d52 getDSCwithExcerpt before java
## 2020 11 18 16:48:02.076 DEBUG ab7c64738d52 getDSCwithExcerpt after java
## 2020 11 18 16:48:02.076 DEBUG ab7c64738d52 pvalueDSCwithExcerpt after getDSCwithExcerpt
## 2020 11 18 16:48:02.077 DEBUG ab7c64738d52 pvalueDSCwithExcerpt length(unique(theBatchIds
## 2020 11 18 16:48:02.077 DEBUG ab7c64738d52 pvalueDSCwithExcerpt call doDscPerms
## 2020 11 18 16:48:02.077 DEBUG ab7c64738d52 doDscPerms before java
## 2020 11 18 16:48:02.288 DEBUG ab7c64738d52 doDscPerms after java
## 2020 11 18 16:48:02.656 DEBUG ab7c64738d52 doDscPerms length(resultsList)= 2000
## 2020 11 18 16:48:02.656 DEBUG ab7c64738d52 pvalueDSCwithExcerpt length(permResults)= 2000
## 2020 11 18 16:48:02.665 DEBUG ab7c64738d52 p-value run time =  0.587902545928955
## 2020 11 18 16:48:02.665 DEBUG ab7c64738d52 p-value is  0.495
## 2020 11 18 16:48:02.666 DEBUG ab7c64738d52 pvalueDSCwithExcerpt 2222 length(permResults)=
## 2020 11 18 16:48:02.666 DEBUG ab7c64738d52 pvalueDSCwithExcerpt PCA-PVALUE-DSC
## 2020 11 18 16:48:02.668 DEBUG ab7c64738d52 openAndWriteDscPermsFile -- start
## 2020 11 18 16:48:02.668 DEBUG ab7c64738d52 openAndWriteDscPermsFile -- redo name
## 2020 11 18 16:48:02.668 DEBUG ab7c64738d52 openAndWriteDscPermsFile -- check file
```

```
## 2020 11 18 16:48:02.669 DEBUG ab7c64738d52 openAndWriteDscPermsFile -- no file, write
## 2020 11 18 16:48:03.310 DEBUG ab7c64738d52 writePCAAnnotations
## 2020 11 18 16:48:03.310 DEBUG ab7c64738d52 writePCAAnnotations - data  PC2,PC3
## 2020 11 18 16:48:03.312 DEBUG ab7c64738d52 writePcaAnalysis_Image - Number of rownames fo
## 2020 11 18 16:48:03.313 DEBUG ab7c64738d52 writePcaAnalysis_Image - length of batch ids i

## 2020 11 18 16:48:03.388 DEBUG ab7c64738d52 mbatchStandardLegend - Calling .jinit  /tmp/R/
## 2020 11 18 16:48:03.390 DEBUG ab7c64738d52 mbatchStandardLegend - .jinit complete
## 2020 11 18 16:48:03.391 DEBUG ab7c64738d52 mbatchStandardLegend - theTitle  Points: ShipD
## 2020 11 18 16:48:03.391 DEBUG ab7c64738d52 mbatchStandardLegend - theVersion  MBatch 1.7.
## 2020 11 18 16:48:03.392 DEBUG ab7c64738d52 mbatchStandardLegend - theFilenamePath  /build
## 2020 11 18 16:48:03.392 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendNames  2010-02
## 2020 11 18 16:48:03.392 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendNames  4
## 2020 11 18 16:48:03.393 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendColors  4
## 2020 11 18 16:48:03.393 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendSymbols  4
## 2020 11 18 16:48:03.393 DEBUG ab7c64738d52 mbatchStandardLegend - myColors  #b30000,#59b3
## 2020 11 18 16:48:03.393 DEBUG ab7c64738d52 mbatchStandardLegend before java
## 2020 11 18 16:48:03.420 DEBUG ab7c64738d52 mbatchStandardLegend after java
## 2020 11 18 16:48:03.421 DEBUG ab7c64738d52 mbatchStandardLegend - Calling .jinit  /tmp/R/
## 2020 11 18 16:48:03.422 DEBUG ab7c64738d52 mbatchStandardLegend - .jinit complete
## 2020 11 18 16:48:03.423 DEBUG ab7c64738d52 mbatchStandardLegend - theTitle  Dispersion Me
## 2020 11 18 16:48:03.423 DEBUG ab7c64738d52 mbatchStandardLegend - theVersion  MBatch 1.7.
## 2020 11 18 16:48:03.424 DEBUG ab7c64738d52 mbatchStandardLegend - theFilenamePath  /build
## 2020 11 18 16:48:03.424 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendNames  First F
## 2020 11 18 16:48:03.424 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendNames  14
## 2020 11 18 16:48:03.425 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendColors  0
## 2020 11 18 16:48:03.425 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendSymbols  0
## 2020 11 18 16:48:03.425 DEBUG ab7c64738d52 mbatchStandardLegend - myColors
## 2020 11 18 16:48:03.425 DEBUG ab7c64738d52 mbatchStandardLegend before java
## 2020 11 18 16:48:03.566 DEBUG ab7c64738d52 mbatchStandardLegend after java
## 2020 11 18 16:48:03.567 DEBUG ab7c64738d52 mbatchStandardCombineLegends - Calling .jinit
## 2020 11 18 16:48:03.569 DEBUG ab7c64738d52 mbatchStandardCombineLegends - .jinit complete
## 2020 11 18 16:48:03.569 DEBUG ab7c64738d52 mbatchStandardCombineLegends - theTitle  MBatc
## 2020 11 18 16:48:03.569 DEBUG ab7c64738d52 mbatchStandardCombineLegends - theFilenamePath
## 2020 11 18 16:48:03.570 DEBUG ab7c64738d52 mbatchStandardCombineLegends - theListOfFiles
## 2020 11 18 16:48:03.570 DEBUG ab7c64738d52 mbatchStandardLegend before java
## 2020 11 18 16:48:03.778 DEBUG ab7c64738d52 mbatchStandardLegend after java
## 2020 11 18 16:48:03.779 DEBUG ab7c64738d52 doInternalPca before filter - Number of rownam
## 2020 11 18 16:48:03.779 DEBUG ab7c64738d52 doInternalPca before filter - length of batch
## 2020 11 18 16:48:03.780 DEBUG ab7c64738d52 doInternalPca - filtering batch size of  5
## 2020 11 18 16:48:03.781 DEBUG ab7c64738d52 doInternalPca after filter - Number of rowname
## 2020 11 18 16:48:03.781 DEBUG ab7c64738d52 doInternalPca after filter - length of batch i
## 2020 11 18 16:48:03.781 DEBUG ab7c64738d52 doInternalPca - pvalueDSC
## 2020 11 18 16:48:03.782 DEBUG ab7c64738d52 pvalueDSC start
## 2020 11 18 16:48:03.782 DEBUG ab7c64738d52 pvalueDSC transpose
## 2020 11 18 16:48:03.782 DEBUG ab7c64738d52 pvalueDSC call pvalueDSCwithExcerpt
```

```
## 2020 11 18 16:48:03.782 DEBUG ab7c64738d52 pvalueDSCwithExcerpt start
## 2020 11 18 16:48:03.783 DEBUG ab7c64738d52 nrow(thePcaDataExcerpt)= 2
## 2020 11 18 16:48:03.783 DEBUG ab7c64738d52 ncol(thePcaDataExcerpt)= 69
## 2020 11 18 16:48:03.783 DEBUG ab7c64738d52 length(theBatchIdsForSamples)= 69
## 2020 11 18 16:48:03.784 DEBUG ab7c64738d52 getDSCwithExcerpt before java
## 2020 11 18 16:48:03.785 DEBUG ab7c64738d52 getDSCwithExcerpt after java
## 2020 11 18 16:48:03.785 DEBUG ab7c64738d52 pvalueDSCwithExcerpt after getDSCwithExcerpt
## 2020 11 18 16:48:03.786 DEBUG ab7c64738d52 pvalueDSCwithExcerpt length(unique(theBatchIds
## 2020 11 18 16:48:03.786 DEBUG ab7c64738d52 pvalueDSCwithExcerpt call doDscPerms
## 2020 11 18 16:48:03.786 DEBUG ab7c64738d52 doDscPerms before java
## 2020 11 18 16:48:04.011 DEBUG ab7c64738d52 doDscPerms after java
## 2020 11 18 16:48:04.353 DEBUG ab7c64738d52 doDscPerms length(resultsList)= 2000
## 2020 11 18 16:48:04.354 DEBUG ab7c64738d52 pvalueDSCwithExcerpt length(permResults)= 2000
## 2020 11 18 16:48:04.360 DEBUG ab7c64738d52 p-value run time =  0.573825359344482
## 2020 11 18 16:48:04.360 DEBUG ab7c64738d52 p-value is  0.46
## 2020 11 18 16:48:04.361 DEBUG ab7c64738d52 pvalueDSCwithExcerpt 2222 length(permResults)=
## 2020 11 18 16:48:04.361 DEBUG ab7c64738d52 pvalueDSCwithExcerpt PCA-PVALUE-DSC
## 2020 11 18 16:48:04.362 DEBUG ab7c64738d52 openAndWriteDscPermsFile -- start
## 2020 11 18 16:48:04.363 DEBUG ab7c64738d52 openAndWriteDscPermsFile -- redo name
## 2020 11 18 16:48:04.363 DEBUG ab7c64738d52 openAndWriteDscPermsFile -- check file
## 2020 11 18 16:48:04.363 DEBUG ab7c64738d52 openAndWriteDscPermsFile -- no file, write
## 2020 11 18 16:48:05.029 DEBUG ab7c64738d52 writePCAAnnotations
## 2020 11 18 16:48:05.030 DEBUG ab7c64738d52 writePCAAnnotations - data  PC2,PC4
## 2020 11 18 16:48:05.033 DEBUG ab7c64738d52 writePcaAnalysis_Image - Number of rownames fo
## 2020 11 18 16:48:05.033 DEBUG ab7c64738d52 writePcaAnalysis_Image - length of batch ids f

## 2020 11 18 16:48:05.110 DEBUG ab7c64738d52 mbatchStandardLegend - Calling .jinit  /tmp/R/
## 2020 11 18 16:48:05.113 DEBUG ab7c64738d52 mbatchStandardLegend - .jinit complete
## 2020 11 18 16:48:05.113 DEBUG ab7c64738d52 mbatchStandardLegend - theTitle  Points: ShipD
## 2020 11 18 16:48:05.113 DEBUG ab7c64738d52 mbatchStandardLegend - theVersion  MBatch 1.7.
## 2020 11 18 16:48:05.114 DEBUG ab7c64738d52 mbatchStandardLegend - theFilenamePath  /build
## 2020 11 18 16:48:05.114 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendNames  2010-02
## 2020 11 18 16:48:05.115 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendNames  4
## 2020 11 18 16:48:05.115 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendColors  4
## 2020 11 18 16:48:05.115 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendSymbols  4
## 2020 11 18 16:48:05.116 DEBUG ab7c64738d52 mbatchStandardLegend - myColors  #b30000,#59b3
## 2020 11 18 16:48:05.116 DEBUG ab7c64738d52 mbatchStandardLegend before java
## 2020 11 18 16:48:05.143 DEBUG ab7c64738d52 mbatchStandardLegend after java
## 2020 11 18 16:48:05.144 DEBUG ab7c64738d52 mbatchStandardLegend - Calling .jinit  /tmp/R/
## 2020 11 18 16:48:05.146 DEBUG ab7c64738d52 mbatchStandardLegend - .jinit complete
## 2020 11 18 16:48:05.146 DEBUG ab7c64738d52 mbatchStandardLegend - theTitle  Dispersion Me
## 2020 11 18 16:48:05.147 DEBUG ab7c64738d52 mbatchStandardLegend - theVersion  MBatch 1.7.
## 2020 11 18 16:48:05.148 DEBUG ab7c64738d52 mbatchStandardLegend - theFilenamePath  /build
## 2020 11 18 16:48:05.148 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendNames  First F
## 2020 11 18 16:48:05.148 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendNames  14
## 2020 11 18 16:48:05.149 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendColors  0
```

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## 2020 11 18 16:48:05.149 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendSymbols  0
## 2020 11 18 16:48:05.149 DEBUG ab7c64738d52 mbatchStandardLegend - myColors
## 2020 11 18 16:48:05.150 DEBUG ab7c64738d52 mbatchStandardLegend before java
## 2020 11 18 16:48:05.289 DEBUG ab7c64738d52 mbatchStandardLegend after java
## 2020 11 18 16:48:05.290 DEBUG ab7c64738d52 mbatchStandardCombineLegends - Calling .jinit
## 2020 11 18 16:48:05.292 DEBUG ab7c64738d52 mbatchStandardCombineLegends - .jinit complete
## 2020 11 18 16:48:05.292 DEBUG ab7c64738d52 mbatchStandardCombineLegends - theTitle  MBatc
## 2020 11 18 16:48:05.292 DEBUG ab7c64738d52 mbatchStandardCombineLegends - theFilenamePath
## 2020 11 18 16:48:05.293 DEBUG ab7c64738d52 mbatchStandardCombineLegends - theListOfFiles
## 2020 11 18 16:48:05.293 DEBUG ab7c64738d52 mbatchStandardLegend before java
## 2020 11 18 16:48:05.500 DEBUG ab7c64738d52 mbatchStandardLegend after java
## 2020 11 18 16:48:05.501 DEBUG ab7c64738d52 doInternalPca before filter - Number of rownam
## 2020 11 18 16:48:05.502 DEBUG ab7c64738d52 doInternalPca before filter - length of batch
## 2020 11 18 16:48:05.502 DEBUG ab7c64738d52 doInternalPca - filtering batch size of  5
## 2020 11 18 16:48:05.503 DEBUG ab7c64738d52 doInternalPca after filter - Number of rowname
## 2020 11 18 16:48:05.503 DEBUG ab7c64738d52 doInternalPca after filter - length of batch i
## 2020 11 18 16:48:05.504 DEBUG ab7c64738d52 doInternalPca - pvalueDSC
## 2020 11 18 16:48:05.504 DEBUG ab7c64738d52 pvalueDSC start
## 2020 11 18 16:48:05.504 DEBUG ab7c64738d52 pvalueDSC transpose
## 2020 11 18 16:48:05.505 DEBUG ab7c64738d52 pvalueDSC call pvalueDSCwithExcerpt
## 2020 11 18 16:48:05.505 DEBUG ab7c64738d52 pvalueDSCwithExcerpt start
## 2020 11 18 16:48:05.505 DEBUG ab7c64738d52 nrow(thePcaDataExcerpt)= 2
## 2020 11 18 16:48:05.505 DEBUG ab7c64738d52 ncol(thePcaDataExcerpt)= 69
## 2020 11 18 16:48:05.506 DEBUG ab7c64738d52 length(theBatchIdsForSamples)= 69
## 2020 11 18 16:48:05.506 DEBUG ab7c64738d52 getDSCwithExcerpt before java
## 2020 11 18 16:48:05.507 DEBUG ab7c64738d52 getDSCwithExcerpt after java
## 2020 11 18 16:48:05.507 DEBUG ab7c64738d52 pvalueDSCwithExcerpt after getDSCwithExcerpt
## 2020 11 18 16:48:05.508 DEBUG ab7c64738d52 pvalueDSCwithExcerpt length(unique(theBatchIds
## 2020 11 18 16:48:05.508 DEBUG ab7c64738d52 pvalueDSCwithExcerpt call doDscPerms
## 2020 11 18 16:48:05.509 DEBUG ab7c64738d52 doDscPerms before java
## 2020 11 18 16:48:05.713 DEBUG ab7c64738d52 doDscPerms after java
## 2020 11 18 16:48:06.064 DEBUG ab7c64738d52 doDscPerms length(resultsList)= 2000
## 2020 11 18 16:48:06.064 DEBUG ab7c64738d52 pvalueDSCwithExcerpt length(permResults)= 2000
## 2020 11 18 16:48:06.071 DEBUG ab7c64738d52 p-value run time =  0.562427759170532
## 2020 11 18 16:48:06.071 DEBUG ab7c64738d52 p-value is  0.996
## 2020 11 18 16:48:06.071 DEBUG ab7c64738d52 pvalueDSCwithExcerpt 2222 length(permResults)=
## 2020 11 18 16:48:06.072 DEBUG ab7c64738d52 pvalueDSCwithExcerpt PCA-PVALUE-DSC
## 2020 11 18 16:48:06.073 DEBUG ab7c64738d52 openAndWriteDscPermsFile -- start
## 2020 11 18 16:48:06.074 DEBUG ab7c64738d52 openAndWriteDscPermsFile -- redo name
## 2020 11 18 16:48:06.074 DEBUG ab7c64738d52 openAndWriteDscPermsFile -- check file
## 2020 11 18 16:48:06.074 DEBUG ab7c64738d52 openAndWriteDscPermsFile -- no file, write
## 2020 11 18 16:48:06.736 DEBUG ab7c64738d52 writePCAAnnotations
## 2020 11 18 16:48:06.737 DEBUG ab7c64738d52 writePCAAnnotations - data  PC3,PC4
## 2020 11 18 16:48:06.740 DEBUG ab7c64738d52 writePcaAnalysis_Image - Number of rownames fo
## 2020 11 18 16:48:06.740 DEBUG ab7c64738d52 writePcaAnalysis_Image - length of batch ids f
```

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## 2020 11 18 16:48:06.815 DEBUG ab7c64738d52 mbatchStandardLegend - Calling .jinit  /tmp/R/
## 2020 11 18 16:48:06.818 DEBUG ab7c64738d52 mbatchStandardLegend - .jinit complete
## 2020 11 18 16:48:06.818 DEBUG ab7c64738d52 mbatchStandardLegend - theTitle  Points: ShipD
## 2020 11 18 16:48:06.818 DEBUG ab7c64738d52 mbatchStandardLegend - theVersion  MBatch 1.7.
## 2020 11 18 16:48:06.819 DEBUG ab7c64738d52 mbatchStandardLegend - theFilenamePath  /build
## 2020 11 18 16:48:06.819 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendNames  2010-02
## 2020 11 18 16:48:06.820 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendNames  4
## 2020 11 18 16:48:06.820 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendColors  4
## 2020 11 18 16:48:06.820 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendSymbols  4
## 2020 11 18 16:48:06.821 DEBUG ab7c64738d52 mbatchStandardLegend - myColors  #b30000,#59b3
## 2020 11 18 16:48:06.821 DEBUG ab7c64738d52 mbatchStandardLegend before java
## 2020 11 18 16:48:06.848 DEBUG ab7c64738d52 mbatchStandardLegend after java
## 2020 11 18 16:48:06.849 DEBUG ab7c64738d52 mbatchStandardLegend - Calling .jinit  /tmp/R/
## 2020 11 18 16:48:06.851 DEBUG ab7c64738d52 mbatchStandardLegend - .jinit complete
## 2020 11 18 16:48:06.852 DEBUG ab7c64738d52 mbatchStandardLegend - theTitle  Dispersion Me
## 2020 11 18 16:48:06.852 DEBUG ab7c64738d52 mbatchStandardLegend - theVersion  MBatch 1.7.
## 2020 11 18 16:48:06.853 DEBUG ab7c64738d52 mbatchStandardLegend - theFilenamePath  /build
## 2020 11 18 16:48:06.853 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendNames  First F
## 2020 11 18 16:48:06.853 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendNames  14
## 2020 11 18 16:48:06.854 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendColors  0
## 2020 11 18 16:48:06.854 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendSymbols  0
## 2020 11 18 16:48:06.854 DEBUG ab7c64738d52 mbatchStandardLegend - myColors
## 2020 11 18 16:48:06.854 DEBUG ab7c64738d52 mbatchStandardLegend before java
## 2020 11 18 16:48:06.993 DEBUG ab7c64738d52 mbatchStandardLegend after java
## 2020 11 18 16:48:06.994 DEBUG ab7c64738d52 mbatchStandardCombineLegends - Calling .jinit
## 2020 11 18 16:48:06.996 DEBUG ab7c64738d52 mbatchStandardCombineLegends - .jinit complete
## 2020 11 18 16:48:06.996 DEBUG ab7c64738d52 mbatchStandardCombineLegends - theTitle  MBatc
## 2020 11 18 16:48:06.997 DEBUG ab7c64738d52 mbatchStandardCombineLegends - theFilenamePath
## 2020 11 18 16:48:06.997 DEBUG ab7c64738d52 mbatchStandardCombineLegends - theListOfFiles
## 2020 11 18 16:48:06.997 DEBUG ab7c64738d52 mbatchStandardLegend before java
## 2020 11 18 16:48:07.205 DEBUG ab7c64738d52 mbatchStandardLegend after java
## 2020 11 18 16:48:07.206 DEBUG ab7c64738d52 Changing LC_COLLATE to C for duration of run
## 2020 11 18 16:48:07.207 INFO ab7c64738d52 \/ \/ \/ \/ \/ \/ \/ \/ \/ \/ \/ \/ \/
## 2020 11 18 16:48:07.207 INFO ab7c64738d52 mbatchTrimData Starting
## 2020 11 18 16:48:07.207 INFO ab7c64738d52 MBatch Version: BEA_VERSION_TIMESTAMP
## 2020 11 18 16:48:07.207 INFO ab7c64738d52 mbatchTrimData theMaxSize= 365000
## 2020 11 18 16:48:07.208 INFO ab7c64738d52 mbatchTrimData ncol(theMatrix)= 73
## 2020 11 18 16:48:07.208 INFO ab7c64738d52 mbatchTrimData nrow(theMatrix)= 684
## 2020 11 18 16:48:07.208 INFO ab7c64738d52 mbatchTrimData Finishing
## 2020 11 18 16:48:07.209 INFO ab7c64738d52 ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
## 2020 11 18 16:48:07.209 DEBUG ab7c64738d52 Changing LC_COLLATE to C for duration of run
## 2020 11 18 16:48:07.209 INFO ab7c64738d52 \/ \/ \/ \/ \/ \/ \/ \/ \/ \/ \/ \/ \/
## 2020 11 18 16:48:07.210 INFO ab7c64738d52 mbatchFilterData Starting
## 2020 11 18 16:48:07.210 INFO ab7c64738d52 MBatch Version: BEA_VERSION_TIMESTAMP
## 2020 11 18 16:48:07.210 DEBUG ab7c64738d52 rows pre filter  684
## 2020 11 18 16:48:07.315 DEBUG ab7c64738d52 rows post filter  684
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## 2020 11 18 16:48:07.316 DEBUG ab7c64738d52 mbatchFilterData Prefilter, gene data had  684
## 2020 11 18 16:48:07.316 DEBUG ab7c64738d52 mbatchFilterData Prefilter, batch data had  73
## 2020 11 18 16:48:07.317 INFO ab7c64738d52 mbatchFilterData Finishing
## 2020 11 18 16:48:07.317 INFO ab7c64738d52 ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
## 2020 11 18 16:48:07.317 DEBUG ab7c64738d52 hierclust_outputGraphics
## 2020 11 18 16:48:07.318 DEBUG ab7c64738d52 Changing LC_COLLATE to C for duration of run
## 2020 11 18 16:48:07.318 DEBUG ab7c64738d52 hierclust_calc
## 2020 11 18 16:48:07.318 DEBUG ab7c64738d52 Changing LC_COLLATE to C for duration of run
## 2020 11 18 16:48:07.319 DEBUG ab7c64738d52 calculating HC

## The "ward" method has been renamed to "ward.D"; note new "ward.D2"

## 2020 11 18 16:48:07.324 DEBUG ab7c64738d52 checkCreateDir:  /builds/BatchEffects_clean/Ba
## 2020 11 18 16:48:07.325 DEBUG ab7c64738d52 hierclust_draw
## 2020 11 18 16:48:07.326 DEBUG ab7c64738d52 Changing LC_COLLATE to C for duration of run
## 2020 11 18 16:48:07.333 DEBUG ab7c64738d52 writeClusteringImage /builds/BatchEffects_clea

## 2020 11 18 16:48:07.409 DEBUG ab7c64738d52 writeIndividualLegend /builds/BatchEffects_cle
## 2020 11 18 16:48:07.410 DEBUG ab7c64738d52 mbatchStandardLegend - Calling .jinit  /tmp/R/
## 2020 11 18 16:48:07.412 DEBUG ab7c64738d52 mbatchStandardLegend - .jinit complete
## 2020 11 18 16:48:07.412 DEBUG ab7c64738d52 mbatchStandardLegend - theTitle  TSS
## 2020 11 18 16:48:07.413 DEBUG ab7c64738d52 mbatchStandardLegend - theVersion  MBatch 1.7.
## 2020 11 18 16:48:07.413 DEBUG ab7c64738d52 mbatchStandardLegend - theFilenamePath  /build
## 2020 11 18 16:48:07.413 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendNames  AF (10)
## 2020 11 18 16:48:07.413 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendNames  2
## 2020 11 18 16:48:07.414 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendColors  2
## 2020 11 18 16:48:07.414 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendSymbols  0
## 2020 11 18 16:48:07.414 DEBUG ab7c64738d52 mbatchStandardLegend - myColors  #0066ff,#00ff
## 2020 11 18 16:48:07.414 DEBUG ab7c64738d52 mbatchStandardLegend before java
## 2020 11 18 16:48:07.427 DEBUG ab7c64738d52 mbatchStandardLegend after java
## 2020 11 18 16:48:07.428 DEBUG ab7c64738d52 writeIndividualLegend /builds/BatchEffects_cle
## 2020 11 18 16:48:07.429 DEBUG ab7c64738d52 mbatchStandardLegend - Calling .jinit  /tmp/R/
## 2020 11 18 16:48:07.431 DEBUG ab7c64738d52 mbatchStandardLegend - .jinit complete
## 2020 11 18 16:48:07.431 DEBUG ab7c64738d52 mbatchStandardLegend - theTitle  ShipDate
## 2020 11 18 16:48:07.432 DEBUG ab7c64738d52 mbatchStandardLegend - theVersion  MBatch 1.7.
## 2020 11 18 16:48:07.432 DEBUG ab7c64738d52 mbatchStandardLegend - theFilenamePath  /build
## 2020 11 18 16:48:07.432 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendNames  2010-02
## 2020 11 18 16:48:07.432 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendNames  5
## 2020 11 18 16:48:07.433 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendColors  5
## 2020 11 18 16:48:07.433 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendSymbols  0
## 2020 11 18 16:48:07.433 DEBUG ab7c64738d52 mbatchStandardLegend - myColors  #0066ff,#cc00
## 2020 11 18 16:48:07.433 DEBUG ab7c64738d52 mbatchStandardLegend before java
## 2020 11 18 16:48:07.455 DEBUG ab7c64738d52 mbatchStandardLegend after java
## 2020 11 18 16:48:07.456 DEBUG ab7c64738d52 writeCombinedLegendHC /builds/BatchEffects_cle
## 2020 11 18 16:48:07.456 DEBUG ab7c64738d52 mbatchStandardCombineLegends - Calling .jinit
## 2020 11 18 16:48:07.458 DEBUG ab7c64738d52 mbatchStandardCombineLegends - .jinit complete
## 2020 11 18 16:48:07.458 DEBUG ab7c64738d52 mbatchStandardCombineLegends - theTitle  MBatc
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## 2020 11 18 16:48:07.459 DEBUG ab7c64738d52 mbatchStandardCombineLegends - theFilenamePath
## 2020 11 18 16:48:07.459 DEBUG ab7c64738d52 mbatchStandardCombineLegends - theListOfFiles
## 2020 11 18 16:48:07.459 DEBUG ab7c64738d52 mbatchStandardLegend before java
## 2020 11 18 16:48:07.510 DEBUG ab7c64738d52 mbatchStandardLegend after java
## 2020 11 18 16:48:07.511 DEBUG ab7c64738d52 Changing LC_COLLATE to C for duration of run
## 2020 11 18 16:48:07.511 INFO ab7c64738d52 \/ \/ \/ \/ \/ \/ \/ \/ \/ \/ \/ \/ \/
## 2020 11 18 16:48:07.512 INFO ab7c64738d52 mbatchFilterData Starting
## 2020 11 18 16:48:07.512 INFO ab7c64738d52 MBatch Version: BEA_VERSION_TIMESTAMP
## 2020 11 18 16:48:07.512 DEBUG ab7c64738d52 rows pre filter  684
## 2020 11 18 16:48:07.647 DEBUG ab7c64738d52 rows post filter  684
## 2020 11 18 16:48:07.647 DEBUG ab7c64738d52 mbatchFilterData Prefilter, gene data had  684
## 2020 11 18 16:48:07.648 DEBUG ab7c64738d52 mbatchFilterData Prefilter, batch data had  73
## 2020 11 18 16:48:07.649 INFO ab7c64738d52 mbatchFilterData Finishing
## 2020 11 18 16:48:07.649 INFO ab7c64738d52 ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
## 2020 11 18 16:48:07.649 DEBUG ab7c64738d52 checkCreateDir:  /builds/BatchEffects_clean/Ba
## 2020 11 18 16:48:07.650 INFO ab7c64738d52 createBatchEffectsOutput_SupervisedClustering_b
## 2020 11 18 16:48:07.651 INFO ab7c64738d52 makeBiasClust - starting
## 2020 11 18 16:48:07.687 INFO ab7c64738d52 makeBiasClust - dat dim =  684, makeBiasClust -
## 2020 11 18 16:48:07.688 INFO ab7c64738d52 makeBiasClust - U.data dim =  680, makeBiasClus
## 2020 11 18 16:48:07.688 INFO ab7c64738d52 makeBiasClust - data frame
## 2020 11 18 16:48:07.689 INFO ab7c64738d52 makeBiasClust - U.dend1 <- bias.clust
## 2020 11 18 16:48:07.693 INFO ab7c64738d52 makeBiasClust new.dis size -  73-73
## 2020 11 18 16:48:07.694 INFO ab7c64738d52 makeBiasClust orig -  73-73
## 2020 11 18 16:48:07.694 INFO ab7c64738d52 makeBiasClust is.na -  73-73
## 2020 11 18 16:48:07.694 INFO ab7c64738d52 makeBiasClust is.infinite -  73-73

## 2020 11 18 16:48:09.920 DEBUG ab7c64738d52 mbatchStandardLegend - Calling .jinit  /tmp/R/
## 2020 11 18 16:48:09.922 DEBUG ab7c64738d52 mbatchStandardLegend - .jinit complete
## 2020 11 18 16:48:09.922 DEBUG ab7c64738d52 mbatchStandardLegend - theTitle  TSS
## 2020 11 18 16:48:09.922 DEBUG ab7c64738d52 mbatchStandardLegend - theVersion  MBatch 1.7.
## 2020 11 18 16:48:09.923 DEBUG ab7c64738d52 mbatchStandardLegend - theFilenamePath  /build
## 2020 11 18 16:48:09.923 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendNames  AF (10)
## 2020 11 18 16:48:09.923 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendNames  2
## 2020 11 18 16:48:09.923 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendColors  2
## 2020 11 18 16:48:09.924 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendSymbols  0
## 2020 11 18 16:48:09.924 DEBUG ab7c64738d52 mbatchStandardLegend - myColors  #b30000,#00b3
## 2020 11 18 16:48:09.924 DEBUG ab7c64738d52 mbatchStandardLegend before java
## 2020 11 18 16:48:09.937 DEBUG ab7c64738d52 mbatchStandardLegend after java
## 2020 11 18 16:48:09.938 INFO ab7c64738d52 createBatchEffectsOutput_SupervisedClustering_b
## 2020 11 18 16:48:09.938 INFO ab7c64738d52 makeBiasClust - starting
## 2020 11 18 16:48:10.004 INFO ab7c64738d52 makeBiasClust - dat dim =  684, makeBiasClust -
## 2020 11 18 16:48:10.005 INFO ab7c64738d52 makeBiasClust - U.data dim =  680, makeBiasClus
## 2020 11 18 16:48:10.005 INFO ab7c64738d52 makeBiasClust - data frame
## 2020 11 18 16:48:10.006 INFO ab7c64738d52 makeBiasClust - U.dend1 <- bias.clust
## 2020 11 18 16:48:10.010 INFO ab7c64738d52 makeBiasClust new.dis size -  73-73
## 2020 11 18 16:48:10.011 INFO ab7c64738d52 makeBiasClust orig -  73-73
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## 2020 11 18 16:48:10.011 INFO ab7c64738d52 makeBiasClust is.na -  73-73
## 2020 11 18 16:48:10.012 INFO ab7c64738d52 makeBiasClust is.infinite -  73-73

## 2020 11 18 16:48:12.232 DEBUG ab7c64738d52 mbatchStandardLegend - Calling .jinit  /tmp/R/
## 2020 11 18 16:48:12.234 DEBUG ab7c64738d52 mbatchStandardLegend - .jinit complete
## 2020 11 18 16:48:12.235 DEBUG ab7c64738d52 mbatchStandardLegend - theTitle  ShipDate
## 2020 11 18 16:48:12.235 DEBUG ab7c64738d52 mbatchStandardLegend - theVersion  MBatch 1.7.
## 2020 11 18 16:48:12.235 DEBUG ab7c64738d52 mbatchStandardLegend - theFilenamePath  /build
## 2020 11 18 16:48:12.236 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendNames  2010-02
## 2020 11 18 16:48:12.236 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendNames  5
## 2020 11 18 16:48:12.236 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendColors  5
## 2020 11 18 16:48:12.236 DEBUG ab7c64738d52 mbatchStandardLegend - theLegendSymbols  0
## 2020 11 18 16:48:12.237 DEBUG ab7c64738d52 mbatchStandardLegend - myColors  #b30000,#8fb3
## 2020 11 18 16:48:12.237 DEBUG ab7c64738d52 mbatchStandardLegend before java
## 2020 11 18 16:48:12.259 DEBUG ab7c64738d52 mbatchStandardLegend after java
## 2020 11 18 16:48:12.260 DEBUG ab7c64738d52 Changing LC_COLLATE to C for duration of run
## 2020 11 18 16:48:12.260 INFO ab7c64738d52 \/ \/ \/ \/ \/ \/ \/ \/ \/ \/ \/ \/ \/
## 2020 11 18 16:48:12.261 INFO ab7c64738d52 mbatchFilterData Starting
## 2020 11 18 16:48:12.261 INFO ab7c64738d52 MBatch Version: BEA_VERSION_TIMESTAMP
## 2020 11 18 16:48:12.261 DEBUG ab7c64738d52 rows pre filter  684
## 2020 11 18 16:48:12.360 DEBUG ab7c64738d52 rows post filter  684
## 2020 11 18 16:48:12.360 DEBUG ab7c64738d52 mbatchFilterData Prefilter, gene data had  684
## 2020 11 18 16:48:12.361 DEBUG ab7c64738d52 mbatchFilterData Prefilter, batch data had  73
## 2020 11 18 16:48:12.362 INFO ab7c64738d52 mbatchFilterData Finishing
## 2020 11 18 16:48:12.362 INFO ab7c64738d52 ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
## 2020 11 18 16:48:12.362 DEBUG ab7c64738d52 Changing LC_COLLATE to C for duration of run
## 2020 11 18 16:48:12.362 INFO ab7c64738d52 \/ \/ \/ \/ \/ \/ \/ \/ \/ \/ \/ \/ \/
## 2020 11 18 16:48:12.363 INFO ab7c64738d52 mbatchTrimData Starting
## 2020 11 18 16:48:12.363 INFO ab7c64738d52 MBatch Version: BEA_VERSION_TIMESTAMP
## 2020 11 18 16:48:12.363 INFO ab7c64738d52 mbatchTrimData theMaxSize= 365000
## 2020 11 18 16:48:12.363 INFO ab7c64738d52 mbatchTrimData ncol(theMatrix)= 73
## 2020 11 18 16:48:12.364 INFO ab7c64738d52 mbatchTrimData nrow(theMatrix)= 684
## 2020 11 18 16:48:12.364 INFO ab7c64738d52 mbatchTrimData Finishing
## 2020 11 18 16:48:12.364 INFO ab7c64738d52 ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
## 2020 11 18 16:48:12.365 DEBUG ab7c64738d52 checkCreateDir:  /builds/BatchEffects_clean/Ba
## 2020 11 18 16:48:12.365 DEBUG ab7c64738d52 dim(theMatrixGeneData) 684, dim(theMatrixGeneD
## 2020 11 18 16:48:12.365 DEBUG ab7c64738d52 length(colnames(theMatrixGeneData)) 73
## 2020 11 18 16:48:12.365 DEBUG ab7c64738d52 length(rownames(theMatrixGeneData)) 684
## 2020 11 18 16:48:12.366 DEBUG ab7c64738d52 dim(theDataframeBatchData) 73, dim(theDatafram
## 2020 11 18 16:48:12.366 DEBUG ab7c64738d52 length(names(theDataframeBatchData)) 3
## 2020 11 18 16:48:12.366 DEBUG ab7c64738d52 batchTypeName =  TSS
## 2020 11 18 16:48:12.367 DEBUG ab7c64738d52 theBatchType= TSS
## 2020 11 18 16:48:12.367 DEBUG ab7c64738d52 calcAndWriteBoxplot - theBoxDataFile= /builds/
## 2020 11 18 16:48:12.367 DEBUG ab7c64738d52 calcAndWriteBoxplot - theMedian= 0
## 2020 11 18 16:48:12.368 DEBUG ab7c64738d52 calcAndWriteBoxplot - dim(theData)[1]= 684
## 2020 11 18 16:48:12.368 DEBUG ab7c64738d52 calcAndWriteBoxplot - dim(theData)[2]= 73
```

```
## 2020 11 18 16:48:12.368 DEBUG ab7c64738d52 checkCreateDir:  /builds/BatchEffects_clean/Ba
## 2020 11 18 16:48:12.369 DEBUG ab7c64738d52 calcAndWriteBoxplot - before calcAndWriteBoxDa
## 2020 11 18 16:48:12.369 DEBUG ab7c64738d52 calcAndWriteBoxDataFile theFile= /builds/Batch
## 2020 11 18 16:48:12.369 DEBUG ab7c64738d52 calcAndWriteBoxDataFile thePngFile= /builds/Ba
## 2020 11 18 16:48:12.388 DEBUG ab7c64738d52 calcAndWriteBoxDataFile CairoPNG= /builds/Batc
## 2020 11 18 16:48:12.389 DEBUG ab7c64738d52 calcAndWriteBoxDataFile call boxplot

## 2020 11 18 16:48:12.415 DEBUG ab7c64738d52 calcAndWriteBoxDataFile call text
## 2020 11 18 16:48:12.423 DEBUG ab7c64738d52 calcAndWriteBoxDataFile done
## 2020 11 18 16:48:12.465 DEBUG ab7c64738d52 calcAndWriteBoxplot - after calcAndWriteBoxDat
## 2020 11 18 16:48:12.465 DEBUG ab7c64738d52 calcAndWriteBoxplot - before calcAndWriteHisto
## 2020 11 18 16:48:12.465 DEBUG ab7c64738d52 calcAndWriteHistogramFile  /builds/BatchEffect
## 2020 11 18 16:48:12.559 DEBUG ab7c64738d52 calcAndWriteBoxplot - after calcAndWriteHistog
## 2020 11 18 16:48:12.560 DEBUG ab7c64738d52 calcAndWriteBoxplot - before calcAndWriteAnnot
## 2020 11 18 16:48:12.560 DEBUG ab7c64738d52 calcAndWriteAnnotationsFile theFile= /builds/E
## 2020 11 18 16:48:12.565 DEBUG ab7c64738d52 calcAndWriteBoxplot - after calcAndWriteAnnota
## 2020 11 18 16:48:12.565 DEBUG ab7c64738d52 batchTypeName =  ShipDate
## 2020 11 18 16:48:12.565 DEBUG ab7c64738d52 theBatchType= ShipDate
## 2020 11 18 16:48:12.566 DEBUG ab7c64738d52 calcAndWriteBoxplot - theBoxDataFile= /builds/
## 2020 11 18 16:48:12.566 DEBUG ab7c64738d52 calcAndWriteBoxplot - theMedian= 0
## 2020 11 18 16:48:12.566 DEBUG ab7c64738d52 calcAndWriteBoxplot - dim(theData)[1]= 684
## 2020 11 18 16:48:12.567 DEBUG ab7c64738d52 calcAndWriteBoxplot - dim(theData)[2]= 73
## 2020 11 18 16:48:12.567 DEBUG ab7c64738d52 checkCreateDir:  /builds/BatchEffects_clean/Ba
## 2020 11 18 16:48:12.567 DEBUG ab7c64738d52 calcAndWriteBoxplot - before calcAndWriteBoxDa
## 2020 11 18 16:48:12.567 DEBUG ab7c64738d52 calcAndWriteBoxDataFile theFile= /builds/Batch
## 2020 11 18 16:48:12.568 DEBUG ab7c64738d52 calcAndWriteBoxDataFile thePngFile= /builds/Ba
## 2020 11 18 16:48:12.587 DEBUG ab7c64738d52 calcAndWriteBoxDataFile CairoPNG= /builds/Batc
## 2020 11 18 16:48:12.588 DEBUG ab7c64738d52 calcAndWriteBoxDataFile call boxplot

## 2020 11 18 16:48:12.614 DEBUG ab7c64738d52 calcAndWriteBoxDataFile call text
## 2020 11 18 16:48:12.624 DEBUG ab7c64738d52 calcAndWriteBoxDataFile done
## 2020 11 18 16:48:12.666 DEBUG ab7c64738d52 calcAndWriteBoxplot - after calcAndWriteBoxDat
## 2020 11 18 16:48:12.667 DEBUG ab7c64738d52 calcAndWriteBoxplot - before calcAndWriteHisto
## 2020 11 18 16:48:12.667 DEBUG ab7c64738d52 calcAndWriteHistogramFile  /builds/BatchEffect
## 2020 11 18 16:48:12.731 DEBUG ab7c64738d52 calcAndWriteBoxplot - after calcAndWriteHistog
## 2020 11 18 16:48:12.732 DEBUG ab7c64738d52 calcAndWriteBoxplot - before calcAndWriteAnnot
## 2020 11 18 16:48:12.732 DEBUG ab7c64738d52 calcAndWriteAnnotationsFile theFile= /builds/E
## 2020 11 18 16:48:12.736 DEBUG ab7c64738d52 calcAndWriteBoxplot - after calcAndWriteAnnota
## 2020 11 18 16:48:12.737 DEBUG ab7c64738d52 Changing LC_COLLATE to C for duration of run
## 2020 11 18 16:48:12.738 INFO ab7c64738d52 \/ \/ \/ \/ \/ \/ \/ \/ \/ \/ \/ \/ \/
## 2020 11 18 16:48:12.738 INFO ab7c64738d52 mbatchFilterData Starting
## 2020 11 18 16:48:12.738 INFO ab7c64738d52 MBatch Version: BEA_VERSION_TIMESTAMP
## 2020 11 18 16:48:12.739 DEBUG ab7c64738d52 rows pre filter  684
## 2020 11 18 16:48:12.887 DEBUG ab7c64738d52 rows post filter  684
## 2020 11 18 16:48:12.887 DEBUG ab7c64738d52 mbatchFilterData Prefilter, gene data had  684
## 2020 11 18 16:48:12.888 DEBUG ab7c64738d52 mbatchFilterData Prefilter, batch data had  73
## 2020 11 18 16:48:12.889 INFO ab7c64738d52 mbatchFilterData Finishing
```

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```
## 2020 11 18 16:48:12.889 INFO ab7c64738d52 ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
## 2020 11 18 16:48:12.889 DEBUG ab7c64738d52 Changing LC_COLLATE to C for duration of run
## 2020 11 18 16:48:12.890 INFO ab7c64738d52 \/ \/ \/ \/ \/ \/ \/ \/ \/ \/ \/ \/ \/
## 2020 11 18 16:48:12.890 INFO ab7c64738d52 mbatchTrimData Starting
## 2020 11 18 16:48:12.890 INFO ab7c64738d52 MBatch Version: BEA_VERSION_TIMESTAMP
## 2020 11 18 16:48:12.891 INFO ab7c64738d52 mbatchTrimData theMaxSize= 365000
## 2020 11 18 16:48:12.891 INFO ab7c64738d52 mbatchTrimData ncol(theMatrix)= 73
## 2020 11 18 16:48:12.891 INFO ab7c64738d52 mbatchTrimData nrow(theMatrix)= 684
## 2020 11 18 16:48:12.892 INFO ab7c64738d52 mbatchTrimData Finishing
## 2020 11 18 16:48:12.892 INFO ab7c64738d52 ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
## 2020 11 18 16:48:12.893 DEBUG ab7c64738d52 createBatchEffectsOutput_BoxPlot_AllSampleRLE
## 2020 11 18 16:48:12.893 DEBUG ab7c64738d52 checkCreateDir:  /builds/BatchEffects_clean/Ba
## 2020 11 18 16:48:12.893 DEBUG ab7c64738d52 dim(theMatrixGeneData) 684, dim(theMatrixGeneD
## 2020 11 18 16:48:12.894 DEBUG ab7c64738d52 length(colnames(theMatrixGeneData)) 73
## 2020 11 18 16:48:12.894 DEBUG ab7c64738d52 length(rownames(theMatrixGeneData)) 684
## 2020 11 18 16:48:12.895 DEBUG ab7c64738d52 dim(theDataframeBatchData) 73, dim(theDatafram
## 2020 11 18 16:48:12.895 DEBUG ab7c64738d52 length(names(theDataframeBatchData)) 3
## 2020 11 18 16:48:12.895 DEBUG ab7c64738d52 batchTypeName =  TSS
## 2020 11 18 16:48:12.896 DEBUG ab7c64738d52 theBatchType= TSS
## 2020 11 18 16:48:12.896 DEBUG ab7c64738d52 calcAndWriteBoxplot - theBoxDataFile= /builds/
## 2020 11 18 16:48:12.897 DEBUG ab7c64738d52 calcAndWriteBoxplot - theMedian= -2.7962471325
## 2020 11 18 16:48:12.899 DEBUG ab7c64738d52 calcAndWriteBoxplot - dim(theData)[1]= 684
## 2020 11 18 16:48:12.899 DEBUG ab7c64738d52 calcAndWriteBoxplot - dim(theData)[2]= 73
## 2020 11 18 16:48:12.899 DEBUG ab7c64738d52 checkCreateDir:  /builds/BatchEffects_clean/Ba
## 2020 11 18 16:48:12.900 DEBUG ab7c64738d52 calcAndWriteBoxplot - before calcAndWriteBoxDa
## 2020 11 18 16:48:12.900 DEBUG ab7c64738d52 calcAndWriteBoxDataFile theFile= /builds/Batch
## 2020 11 18 16:48:12.900 DEBUG ab7c64738d52 calcAndWriteBoxDataFile thePngFile= /builds/Ba
## 2020 11 18 16:48:12.923 DEBUG ab7c64738d52 calcAndWriteBoxDataFile CairoPNG= /builds/Batc
## 2020 11 18 16:48:12.924 DEBUG ab7c64738d52 calcAndWriteBoxDataFile call boxplot

## 2020 11 18 16:48:12.953 DEBUG ab7c64738d52 calcAndWriteBoxDataFile call text
## 2020 11 18 16:48:12.960 DEBUG ab7c64738d52 calcAndWriteBoxDataFile done
## 2020 11 18 16:48:13.002 DEBUG ab7c64738d52 calcAndWriteBoxplot - after calcAndWriteBoxDat
## 2020 11 18 16:48:13.002 DEBUG ab7c64738d52 calcAndWriteBoxplot - before calcAndWriteHisto
## 2020 11 18 16:48:13.003 DEBUG ab7c64738d52 calcAndWriteHistogramFile  /builds/BatchEffect
## 2020 11 18 16:48:13.071 DEBUG ab7c64738d52 calcAndWriteBoxplot - after calcAndWriteHistog
## 2020 11 18 16:48:13.071 DEBUG ab7c64738d52 calcAndWriteBoxplot - before calcAndWriteAnnot
## 2020 11 18 16:48:13.071 DEBUG ab7c64738d52 calcAndWriteAnnotationsFile theFile= /builds/B
## 2020 11 18 16:48:13.076 DEBUG ab7c64738d52 calcAndWriteBoxplot - after calcAndWriteAnnota
## 2020 11 18 16:48:13.076 DEBUG ab7c64738d52 batchTypeName =  ShipDate
## 2020 11 18 16:48:13.077 DEBUG ab7c64738d52 theBatchType= ShipDate
## 2020 11 18 16:48:13.077 DEBUG ab7c64738d52 calcAndWriteBoxplot - theBoxDataFile= /builds/
## 2020 11 18 16:48:13.077 DEBUG ab7c64738d52 calcAndWriteBoxplot - theMedian= -2.7962471325
## 2020 11 18 16:48:13.079 DEBUG ab7c64738d52 calcAndWriteBoxplot - dim(theData)[1]= 684
## 2020 11 18 16:48:13.080 DEBUG ab7c64738d52 calcAndWriteBoxplot - dim(theData)[2]= 73
## 2020 11 18 16:48:13.080 DEBUG ab7c64738d52 checkCreateDir:  /builds/BatchEffects_clean/Ba
```

```
## 2020 11 18 16:48:13.080 DEBUG ab7c64738d52 calcAndWriteBoxplot - before calcAndWriteBoxDa
## 2020 11 18 16:48:13.081 DEBUG ab7c64738d52 calcAndWriteBoxDataFile theFile= /builds/Batch
## 2020 11 18 16:48:13.081 DEBUG ab7c64738d52 calcAndWriteBoxDataFile thePngFile= /builds/Ba
## 2020 11 18 16:48:13.101 DEBUG ab7c64738d52 calcAndWriteBoxDataFile CairoPNG= /builds/Batc
## 2020 11 18 16:48:13.102 DEBUG ab7c64738d52 calcAndWriteBoxDataFile call boxplot

## 2020 11 18 16:48:13.127 DEBUG ab7c64738d52 calcAndWriteBoxDataFile call text
## 2020 11 18 16:48:13.137 DEBUG ab7c64738d52 calcAndWriteBoxDataFile done
## 2020 11 18 16:48:13.180 DEBUG ab7c64738d52 calcAndWriteBoxplot - after calcAndWriteBoxDat
## 2020 11 18 16:48:13.180 DEBUG ab7c64738d52 calcAndWriteBoxplot - before calcAndWriteHisto
## 2020 11 18 16:48:13.181 DEBUG ab7c64738d52 calcAndWriteHistogramFile  /builds/BatchEffect
## 2020 11 18 16:48:13.245 DEBUG ab7c64738d52 calcAndWriteBoxplot - after calcAndWriteHistog
## 2020 11 18 16:48:13.245 DEBUG ab7c64738d52 calcAndWriteBoxplot - before calcAndWriteAnnot
## 2020 11 18 16:48:13.246 DEBUG ab7c64738d52 calcAndWriteAnnotationsFile theFile= /builds/B
## 2020 11 18 16:48:13.250 DEBUG ab7c64738d52 calcAndWriteBoxplot - after calcAndWriteAnnota
## 2020 11 18 16:48:13.251 DEBUG ab7c64738d52 Changing LC_COLLATE to C for duration of run
## 2020 11 18 16:48:13.251 INFO ab7c64738d52 \/ \/ \/ \/ \/ \/ \/ \/ \/ \/ \/ \/ \/
## 2020 11 18 16:48:13.251 INFO ab7c64738d52 mbatchFilterData Starting
## 2020 11 18 16:48:13.252 INFO ab7c64738d52 MBatch Version: BEA_VERSION_TIMESTAMP
## 2020 11 18 16:48:13.252 DEBUG ab7c64738d52 rows pre filter  684
## 2020 11 18 16:48:13.390 DEBUG ab7c64738d52 rows post filter  684
## 2020 11 18 16:48:13.390 DEBUG ab7c64738d52 mbatchFilterData Prefilter, gene data had  684
## 2020 11 18 16:48:13.391 DEBUG ab7c64738d52 mbatchFilterData Prefilter, batch data had  73
## 2020 11 18 16:48:13.391 INFO ab7c64738d52 mbatchFilterData Finishing
## 2020 11 18 16:48:13.392 INFO ab7c64738d52 ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
## 2020 11 18 16:48:13.392 DEBUG ab7c64738d52 Changing LC_COLLATE to C for duration of run
## 2020 11 18 16:48:13.392 INFO ab7c64738d52 \/ \/ \/ \/ \/ \/ \/ \/ \/ \/ \/ \/ \/
## 2020 11 18 16:48:13.392 INFO ab7c64738d52 mbatchTrimData Starting
## 2020 11 18 16:48:13.393 INFO ab7c64738d52 MBatch Version: BEA_VERSION_TIMESTAMP
## 2020 11 18 16:48:13.393 INFO ab7c64738d52 mbatchTrimData theMaxSize= 365000
## 2020 11 18 16:48:13.393 INFO ab7c64738d52 mbatchTrimData ncol(theMatrix)= 73
## 2020 11 18 16:48:13.394 INFO ab7c64738d52 mbatchTrimData nrow(theMatrix)= 684
## 2020 11 18 16:48:13.394 INFO ab7c64738d52 mbatchTrimData Finishing
## 2020 11 18 16:48:13.394 INFO ab7c64738d52 ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
## 2020 11 18 16:48:13.395 DEBUG ab7c64738d52 checkCreateDir:  /builds/BatchEffects_clean/Ba
## 2020 11 18 16:48:13.395 DEBUG ab7c64738d52 groupFunction
## 2020 11 18 16:48:13.395 DEBUG ab7c64738d52 dim(theMatrixGeneData) 684, dim(theMatrixGeneD
## 2020 11 18 16:48:13.396 DEBUG ab7c64738d52 length(colnames(theMatrixGeneData)) 73
## 2020 11 18 16:48:13.396 DEBUG ab7c64738d52 length(rownames(theMatrixGeneData)) 684
## 2020 11 18 16:48:13.396 DEBUG ab7c64738d52 dim(theDataframeBatchData) 73, dim(theDatafram
## 2020 11 18 16:48:13.396 DEBUG ab7c64738d52 length(names(theDataframeBatchData)) 3
## 2020 11 18 16:48:13.397 DEBUG ab7c64738d52 groupLabel =  Mean
## 2020 11 18 16:48:13.397 DEBUG ab7c64738d52 batchTypeName =  TSS
## 2020 11 18 16:48:13.397 DEBUG ab7c64738d52 buildGroupMatrix - dim(theDataMatrix)[1]= 684
## 2020 11 18 16:48:13.398 DEBUG ab7c64738d52 buildGroupMatrix - dim(theDataMatrix)[2]= 73
## 2020 11 18 16:48:13.398 DEBUG ab7c64738d52 buildGroupMatrix - dim(theBatchDF)[1]= 73
```

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## 2020 11 18 16:48:13.398 DEBUG ab7c64738d52 buildGroupMatrix - dim(theBatchDF)[2]= 3
## 2020 11 18 16:48:13.398 DEBUG ab7c64738d52 buildGroupMatrix theBatchType= TSS
## 2020 11 18 16:48:13.399 DEBUG ab7c64738d52 buildGroupMatrix fullBatchList= 73
## 2020 11 18 16:48:13.399 DEBUG ab7c64738d52 buildGroupMatrix batchNameList= 2
## 2020 11 18 16:48:13.399 DEBUG ab7c64738d52 buildGroupMatrix sampleIdList= 73
## 2020 11 18 16:48:13.402 DEBUG ab7c64738d52 calcAndWriteBoxplot - theBoxDataFile= /builds/
## 2020 11 18 16:48:13.402 DEBUG ab7c64738d52 calcAndWriteBoxplot - theMedian= 0
## 2020 11 18 16:48:13.402 DEBUG ab7c64738d52 calcAndWriteBoxplot - dim(theData)[1]= 73
## 2020 11 18 16:48:13.403 DEBUG ab7c64738d52 calcAndWriteBoxplot - dim(theData)[2]= 2
## 2020 11 18 16:48:13.403 DEBUG ab7c64738d52 checkCreateDir:  /builds/BatchEffects_clean/Ba
## 2020 11 18 16:48:13.404 DEBUG ab7c64738d52 calcAndWriteBoxplot - before calcAndWriteBoxDa
## 2020 11 18 16:48:13.404 DEBUG ab7c64738d52 calcAndWriteBoxDataFile theFile= /builds/Batch
## 2020 11 18 16:48:13.404 DEBUG ab7c64738d52 calcAndWriteBoxDataFile thePngFile= /builds/Ba
## 2020 11 18 16:48:13.405 DEBUG ab7c64738d52 calcAndWriteBoxDataFile CairoPNG= /builds/Batc
## 2020 11 18 16:48:13.406 DEBUG ab7c64738d52 calcAndWriteBoxDataFile call boxplot

## 2020 11 18 16:48:13.409 DEBUG ab7c64738d52 calcAndWriteBoxDataFile call text
## 2020 11 18 16:48:13.410 DEBUG ab7c64738d52 calcAndWriteBoxDataFile done
## 2020 11 18 16:48:13.424 DEBUG ab7c64738d52 calcAndWriteBoxplot - after calcAndWriteBoxDat
## 2020 11 18 16:48:13.424 DEBUG ab7c64738d52 calcAndWriteBoxplot - before calcAndWriteHisto
## 2020 11 18 16:48:13.424 DEBUG ab7c64738d52 calcAndWriteHistogramFile  /builds/BatchEffect
## 2020 11 18 16:48:13.427 DEBUG ab7c64738d52 calcAndWriteBoxplot - after calcAndWriteHistog
## 2020 11 18 16:48:13.427 DEBUG ab7c64738d52 calcAndWriteBoxplot - before calcAndWriteAnnot
## 2020 11 18 16:48:13.428 DEBUG ab7c64738d52 calcAndWriteAnnotationsFile theFile= /builds/B
## 2020 11 18 16:48:13.428 DEBUG ab7c64738d52 calcAndWriteBoxplot - after calcAndWriteAnnota
## 2020 11 18 16:48:13.428 DEBUG ab7c64738d52 batchTypeName =  ShipDate
## 2020 11 18 16:48:13.429 DEBUG ab7c64738d52 buildGroupMatrix - dim(theDataMatrix)[1]= 684
## 2020 11 18 16:48:13.429 DEBUG ab7c64738d52 buildGroupMatrix - dim(theDataMatrix)[2]= 73
## 2020 11 18 16:48:13.429 DEBUG ab7c64738d52 buildGroupMatrix - dim(theBatchDF)[1]= 73
## 2020 11 18 16:48:13.430 DEBUG ab7c64738d52 buildGroupMatrix - dim(theBatchDF)[2]= 3
## 2020 11 18 16:48:13.430 DEBUG ab7c64738d52 buildGroupMatrix theBatchType= ShipDate
## 2020 11 18 16:48:13.430 DEBUG ab7c64738d52 buildGroupMatrix fullBatchList= 73
## 2020 11 18 16:48:13.430 DEBUG ab7c64738d52 buildGroupMatrix batchNameList= 5
## 2020 11 18 16:48:13.431 DEBUG ab7c64738d52 buildGroupMatrix sampleIdList= 73
## 2020 11 18 16:48:13.433 DEBUG ab7c64738d52 calcAndWriteBoxplot - theBoxDataFile= /builds/
## 2020 11 18 16:48:13.433 DEBUG ab7c64738d52 calcAndWriteBoxplot - theMedian= 0
## 2020 11 18 16:48:13.434 DEBUG ab7c64738d52 calcAndWriteBoxplot - dim(theData)[1]= 73
## 2020 11 18 16:48:13.434 DEBUG ab7c64738d52 calcAndWriteBoxplot - dim(theData)[2]= 5
## 2020 11 18 16:48:13.434 DEBUG ab7c64738d52 checkCreateDir:  /builds/BatchEffects_clean/Ba
## 2020 11 18 16:48:13.435 DEBUG ab7c64738d52 calcAndWriteBoxplot - before calcAndWriteBoxDa
## 2020 11 18 16:48:13.435 DEBUG ab7c64738d52 calcAndWriteBoxDataFile theFile= /builds/Batch
## 2020 11 18 16:48:13.435 DEBUG ab7c64738d52 calcAndWriteBoxDataFile thePngFile= /builds/Ba
## 2020 11 18 16:48:13.436 DEBUG ab7c64738d52 calcAndWriteBoxDataFile CairoPNG= /builds/Batc
## 2020 11 18 16:48:13.437 DEBUG ab7c64738d52 calcAndWriteBoxDataFile call boxplot

## 2020 11 18 16:48:13.441 DEBUG ab7c64738d52 calcAndWriteBoxDataFile call text
## 2020 11 18 16:48:13.442 DEBUG ab7c64738d52 calcAndWriteBoxDataFile done
```

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## 2020 11 18 16:48:13.456 DEBUG ab7c64738d52 calcAndWriteBoxplot - after calcAndWriteBoxDat
## 2020 11 18 16:48:13.456 DEBUG ab7c64738d52 calcAndWriteBoxplot - before calcAndWriteHisto
## 2020 11 18 16:48:13.456 DEBUG ab7c64738d52 calcAndWriteHistogramFile  /builds/BatchEffect
## 2020 11 18 16:48:13.461 DEBUG ab7c64738d52 calcAndWriteBoxplot - after calcAndWriteHistog
## 2020 11 18 16:48:13.461 DEBUG ab7c64738d52 calcAndWriteBoxplot - before calcAndWriteAnnot
## 2020 11 18 16:48:13.462 DEBUG ab7c64738d52 calcAndWriteAnnotationsFile theFile= /builds/E
## 2020 11 18 16:48:13.462 DEBUG ab7c64738d52 calcAndWriteBoxplot - after calcAndWriteAnnota
## 2020 11 18 16:48:13.463 DEBUG ab7c64738d52 writeAsDataframe - thePar  -Xmx2000m
## 2020 11 18 16:48:13.463 DEBUG ab7c64738d52 writeAsDataframe - theFile  /builds/BatchEffec
## 2020 11 18 16:48:13.464 DEBUG ab7c64738d52 writeAsDataframe - length(myData)   219
## 2020 11 18 16:48:13.464 DEBUG ab7c64738d52 writeAsDataframe - length(myCols)   3
## 2020 11 18 16:48:13.464 DEBUG ab7c64738d52 writeAsDataframe - length(myRows)   0
## 2020 11 18 16:48:13.465 DEBUG ab7c64738d52 writeAsDataframe - Calling .jinit   /tmp/R/4/li
## 2020 11 18 16:48:13.466 DEBUG ab7c64738d52 writeAsDataframe - .jinit complete
## 2020 11 18 16:48:13.467 DEBUG ab7c64738d52 writeAsDataframe before java
## 2020 11 18 16:48:13.468 DEBUG ab7c64738d52 writeAsDataframe after java
## 2020 11 18 16:48:13.469 DEBUG ab7c64738d52 writeAsDataframe success= TRUE

## Processing success

## 2020 11 18 16:48:13.469 INFO ab7c64738d52 mbatchAssess Finishing
## 2020 11 18 16:48:13.471 DEBUG ab7c64738d52 myCompListDscFile
## 2020 11 18 16:48:13.471 DEBUG ab7c64738d52 loop myCompListDscFile= /builds/BatchEffects_c
## 2020 11 18 16:48:13.474 DEBUG ab7c64738d52 myOverallDscFile  /builds/BatchEffects_clean/E
## 2020 11 18 16:48:13.510 DEBUG ab7c64738d52 datasetDesc  /PCA/ShipDate/ManyToMany
## 2020 11 18 16:48:13.511 DEBUG ab7c64738d52 myCompDscFile  /builds/BatchEffects_clean/Batc
## 2020 11 18 16:48:13.523 DEBUG ab7c64738d52 myCompDscFile  /builds/BatchEffects_clean/Batc
## 2020 11 18 16:48:13.534 DEBUG ab7c64738d52 myCompDscFile  /builds/BatchEffects_clean/Batc
## 2020 11 18 16:48:13.546 DEBUG ab7c64738d52 myCompDscFile  /builds/BatchEffects_clean/Batc
## 2020 11 18 16:48:13.555 DEBUG ab7c64738d52 myCompDscFile  /builds/BatchEffects_clean/Batc
## 2020 11 18 16:48:13.565 DEBUG ab7c64738d52 myCompDscFile  /builds/BatchEffects_clean/Batc
## 2020 11 18 16:48:13.574 DEBUG ab7c64738d52 myOverallDscFile  /builds/BatchEffects_clean/E
## 2020 11 18 16:48:13.610 DEBUG ab7c64738d52 datasetDesc  /PCA/TSS/ManyToMany
## 2020 11 18 16:48:13.610 DEBUG ab7c64738d52 myCompDscFile  /builds/BatchEffects_clean/Batc
## 2020 11 18 16:48:13.620 DEBUG ab7c64738d52 myCompDscFile  /builds/BatchEffects_clean/Batc
## 2020 11 18 16:48:13.629 DEBUG ab7c64738d52 myCompDscFile  /builds/BatchEffects_clean/Batc
## 2020 11 18 16:48:13.639 DEBUG ab7c64738d52 myCompDscFile  /builds/BatchEffects_clean/Batc
## 2020 11 18 16:48:13.648 DEBUG ab7c64738d52 myCompDscFile  /builds/BatchEffects_clean/Batc
## 2020 11 18 16:48:13.658 DEBUG ab7c64738d52 myCompDscFile  /builds/BatchEffects_clean/Batc
## 2020 11 18 16:48:13.667 DEBUG ab7c64738d52 overall DSC  /builds/BatchEffects_clean/BatchE

## title MBatchUtils Test Run

## myBatchType TSS

## theShaidyMapGen /builds/BatchEffects_clean/BatchEffectsPackage/data/testing_static/MBatch

## theShaidyMapGenJava /usr/bin/java
```

```
## dim(myMBatchData@mData) 2248873

## dim(myMBatchData@mBatches) 733

## trim to same size as hierarchical

## 2020 11 18 16:48:13.675 DEBUG ab7c64738d52 Changing LC_COLLATE to C for duration of run
## 2020 11 18 16:48:13.676 INFO ab7c64738d52 \/ \/ \/ \/ \/ \/ \/ \/ \/ \/ \/ \/ \/
## 2020 11 18 16:48:13.676 INFO ab7c64738d52 mbatchTrimData Starting
## 2020 11 18 16:48:13.676 INFO ab7c64738d52 MBatch Version: BEA_VERSION_TIMESTAMP
## 2020 11 18 16:48:15.572 INFO ab7c64738d52 mbatchTrimData theMaxSize= 365000
## 2020 11 18 16:48:15.573 INFO ab7c64738d52 mbatchTrimData ncol(theMatrix)= 73
## 2020 11 18 16:48:15.573 INFO ab7c64738d52 mbatchTrimData nrow(theMatrix)= 5000
## 2020 11 18 16:48:15.573 INFO ab7c64738d52 mbatchTrimData Finishing
## 2020 11 18 16:48:15.574 INFO ab7c64738d52 ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^

## MBatchUtils BEA_VERSION_TIMESTAMP

## buildBatchHeatMapFromHC_Structures

## [1] "MBatchUtilsTestRunTSS"
## [1] "/builds/BatchEffects_clean/BatchEffectsPackage/data/testing_dynamic/MBatchUtils/ZIP_

## theMatrixData size 5000 73

## theBatchData size 73 3

## compute row clusters

## theRowCluster[1]=pearson

## theRowCluster[2]=ward.D2

## hierClustForNgchmCalc

## Changing LC_COLLATE to C for duration of run

## calculating HC

## cast as.dendrogram

## compute col clusters

## use HC clustering

## make quartiles

##         25%        50%        75%        90%
## -3.6588756 -2.2757797 -1.0971351 -0.5179561

## make color map

## make data layer

## make CHM

## add caption
```

```
## add covariates

## Sample

## TSS

## 73

## covariate length 73

## ShipDate

## 73

## covariate length 73

## chmExportToHTML

## /builds/BatchEffects_clean/BatchEffectsPackage/data/testing_dynamic/MBatchUtils/ZIP_Archi

## chmExportToFile

## title MBatchUtils Test Run

## myBatchType ShipDate

## theShaidyMapGen /builds/BatchEffects_clean/BatchEffectsPackage/data/testing_static/MBatch

## theShaidyMapGenJava /usr/bin/java

## dim(myMBatchData@mData) 2248873

## dim(myMBatchData@mBatches) 733

## trim to same size as hierarchical

## 2020 11 18 16:48:29.866 DEBUG ab7c64738d52 Changing LC_COLLATE to C for duration of run
## 2020 11 18 16:48:29.867 INFO ab7c64738d52 \/ \/ \/ \/ \/ \/ \/ \/ \/ \/ \/ \/ \/
## 2020 11 18 16:48:29.867 INFO ab7c64738d52 mbatchTrimData Starting
## 2020 11 18 16:48:29.868 INFO ab7c64738d52 MBatch Version: BEA_VERSION_TIMESTAMP
## 2020 11 18 16:48:31.551 INFO ab7c64738d52 mbatchTrimData theMaxSize= 365000
## 2020 11 18 16:48:31.552 INFO ab7c64738d52 mbatchTrimData ncol(theMatrix)= 73
## 2020 11 18 16:48:31.552 INFO ab7c64738d52 mbatchTrimData nrow(theMatrix)= 5000
## 2020 11 18 16:48:31.552 INFO ab7c64738d52 mbatchTrimData Finishing
## 2020 11 18 16:48:31.553 INFO ab7c64738d52 ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^

## MBatchUtils BEA_VERSION_TIMESTAMP

## buildBatchHeatMapFromHC_Structures

## [1] "MBatchUtilsTestRunShipDate"
## [1] "/builds/BatchEffects_clean/BatchEffectsPackage/data/testing_dynamic/MBatchUtils/ZIP_

## theMatrixData size 5000 73

## theBatchData size 73 3

## compute row clusters
```

```
## theRowCluster[1]=pearson

## theRowCluster[2]=ward.D2

## hierClustForNgchmCalc

## Changing LC_COLLATE to C for duration of run

## calculating HC

## cast as.dendrogram

## compute col clusters

## use HC clustering

## make quartiles

##         25%         50%         75%         90%
## -3.6588756 -2.2757797 -1.0971351 -0.5179561

## make color map

## make data layer

## make CHM

## add caption

## add covariates

## Sample

## TSS

## 73

## covariate length 73

## ShipDate

## 73

## covariate length 73

## chmExportToHTML

## /builds/BatchEffects_clean/BatchEffectsPackage/data/testing_dynamic/MBatchUtils/ZIP_Archi

## chmExportToFile

## 2020 11 18 16:48:44.482 INFO ab7c64738d52 CDP_Plot theFilePath= /builds/BatchEffects_clea
## 2020 11 18 16:48:44.483 INFO ab7c64738d52 CDP_Plot theData1PairedReplicates= 73
## 2020 11 18 16:48:44.484 INFO ab7c64738d52 CDP_Plot theData2PairedReplicates= 73
## 2020 11 18 16:48:44.484 INFO ab7c64738d52 CDP_Plot theData1UnmatchedReplicates= 0
## 2020 11 18 16:48:44.484 INFO ab7c64738d52 CDP_Plot theData2UnmatchedReplicates= 0
## 2020 11 18 16:48:44.574 INFO ab7c64738d52 CDP_Plot pairedCorr= 73
## 2020 11 18 16:48:44.575 INFO ab7c64738d52 CDP_Plot unmatchedCorr= 0
```

```
## 2020 11 18 16:48:44.576 INFO ab7c64738d52 CDP_Plot pairedDensity$x= 512
## 2020 11 18 16:48:44.577 INFO ab7c64738d52 CDP_Plot pairedDensity$y= 512
## 2020 11 18 16:48:44.577 INFO ab7c64738d52 CDP_Plot pairedDensity$bw= 0.0005380619996764140
## 2020 11 18 16:48:44.577 INFO ab7c64738d52 CDP_Plot unmatchedDensity$x= 0
## 2020 11 18 16:48:44.578 INFO ab7c64738d52 CDP_Plot unmatchedDensity$y= 0
## 2020 11 18 16:48:44.578 INFO ab7c64738d52 CDP_Plot unmatchedDensity$bw=
```

Write success note to '/builds/BatchEffects_clean/BatchEffectsPackage/data/testing_dynami

buildSingleArchive::mbatchID=none

buildSingleArchive::originalDataJsonFile=

buildSingleArchive::mbatchResultsDir=/builds/BatchEffects_clean/BatchEffectsPackage/data/

buildSingleArchive::zipDir=/builds/BatchEffects_clean/BatchEffectsPackage/data/testing_dy