

# Untitled

*Kevin K. McDade*

*August 31, 2016*

The contents of this package are:

```
search()
```

```
## [1] ".GlobalEnv"           "package:EUFLOW"
## [3] "package:IdMappingAnalysis" "package:rChoiceDialogs"
## [5] "package:rJava"         "package:R.oo"
## [7] "package:R.methodsS3"   "package:stats"
## [9] "package:graphics"     "package:grDevices"
## [11] "package:utils"         "package:datasets"
## [13] "package:methods"      "Autoloads"
## [15] "package:base"
```

```
ls(pos=2)
```

```
## [1] "EvaluationExperimentSet" "expectedUtility"
## [3] "fit2clusters.workflow"  "make.workflow.map"
## [5] "merge_tag_options"     "Model.quality.list"
## [7] "RANDOMSET"              "RNASEQDATA"
## [9] "RPPADATA.original"     "Workflow.Criterion"
## [11] "Workflow.Evaluation.table" "Workflow.posteriorestimate"
## [13] "WorkflowEvaluationData"
```

We now test the package using test.R contents.

```
RNASEQDATA<-read.csv(file="../data/RNASEQDATA.csv",header=TRUE)
RPPADATA<-read.csv(file="../data/RPPADATA.original.csv",header=TRUE)
#EvaluationExperimentSet<-read.csv(file="../data/EvaluationExperimentSet.csv",header=TRUE)
EvaluationExperimentSet<-RNASEQDATA
#EvaluationExperimentSet<-rbind(RNASEQDATA,RANDOMSET)
ReferenceSet<-RPPADATA
Workflow.Data<-EUFLOW::WorkflowEvaluationData(EvaluationExperimentSet,ReferenceSet)
Merged.options<-EUFLOW::merge_tag_options(Workflow.Data)
Model.quality.object<-Model.quality.list(Merged.options)
Model.Quality<-EUFLOW::Workflow.Criterion(Model.quality.object)
```

```
## Performing correlations...
```

```
Posterior.dataframe<-EUFLOW::Workflow.posteriorestimate(Model.quality.object,Model.Quality)
```

```
## Performing bootstrap R= 200 on correlations...
```

```
##
```

```
processed: 1 %
```

processed: 1 %  
processed: 2 %  
processed: 3 %  
processed: 4 %  
processed: 4 %  
processed: 5 %  
processed: 6 %  
processed: 7 %  
processed: 7 %  
processed: 8 %  
processed: 9 %  
processed: 10 %  
processed: 10 %  
processed: 11 %  
processed: 12 %  
processed: 13 %  
processed: 13 %  
processed: 14 %  
processed: 15 %  
processed: 16 %  
processed: 16 %  
processed: 17 %  
processed: 18 %  
processed: 19 %  
processed: 19 %  
processed: 20 %  
processed: 21 %

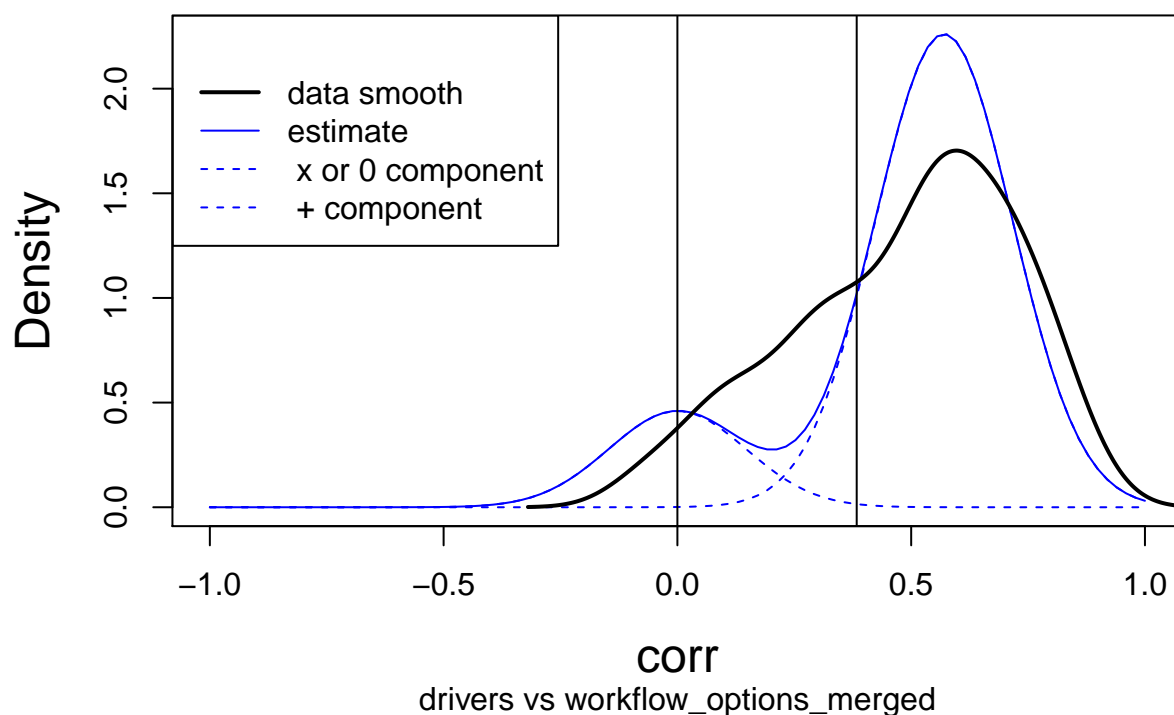
processed: 22 %  
processed: 22 %  
processed: 23 %  
processed: 24 %  
processed: 25 %  
processed: 25 %  
processed: 26 %  
processed: 27 %  
processed: 28 %  
processed: 28 %  
processed: 29 %  
processed: 30 %  
processed: 31 %  
processed: 31 %  
processed: 32 %  
processed: 33 %  
processed: 34 %  
processed: 34 %  
processed: 35 %  
processed: 36 %  
processed: 37 %  
processed: 37 %  
processed: 38 %  
processed: 39 %  
processed: 40 %  
processed: 40 %  
processed: 41 %

processed: 42 %  
processed: 43 %  
processed: 43 %  
processed: 44 %  
processed: 45 %  
processed: 46 %  
processed: 46 %  
processed: 47 %  
processed: 48 %  
processed: 49 %  
processed: 49 %  
processed: 50 %  
processed: 51 %  
processed: 51 %  
processed: 52 %  
processed: 53 %  
processed: 54 %  
processed: 54 %  
processed: 55 %  
processed: 56 %  
processed: 57 %  
processed: 57 %  
processed: 58 %  
processed: 59 %  
processed: 60 %  
processed: 60 %  
processed: 61 %

processed: 62 %  
processed: 63 %  
processed: 63 %  
processed: 64 %  
processed: 65 %  
processed: 66 %  
processed: 66 %  
processed: 67 %  
processed: 68 %  
processed: 69 %  
processed: 69 %  
processed: 70 %  
processed: 71 %  
processed: 72 %  
processed: 72 %  
processed: 73 %  
processed: 74 %  
processed: 75 %  
processed: 75 %  
processed: 76 %  
processed: 77 %  
processed: 78 %  
processed: 78 %  
processed: 79 %  
processed: 80 %  
processed: 81 %  
processed: 81 %

processed: 82 %  
processed: 83 %  
processed: 84 %  
processed: 84 %  
processed: 85 %  
processed: 86 %  
processed: 87 %  
processed: 87 %  
processed: 88 %  
processed: 89 %  
processed: 90 %  
processed: 90 %  
processed: 91 %  
processed: 92 %  
processed: 93 %  
processed: 93 %  
processed: 94 %  
processed: 95 %  
processed: 96 %  
processed: 96 %  
processed: 97 %  
processed: 98 %  
processed: 99 %  
processed: 99 %  
  
processed: 100 %  
## 34 . Converged.

## Mixture density



```
EUFLOW::Workflow.Evaluation.table(Posterior.dataframe)
```

```
##          label Utp Lfp deltaPlus nPairs   PrPlus   PrTrue   PrFalse
## Use All Use All  1  1          1    133 0.9483798 0.9483798 0.05162022
## 1         1  1  1          1     67 0.9290330 0.9290330 0.07096702
## 2         2  1  1          1     66 0.9682300 0.9682300 0.03177002
##          Utrue   Lfalse Eutility1 Eutility
## Use All 0.9483798 0.05162022 0.8967596 119.26902
## 1       0.9290330 0.07096702 0.8580660  57.49042
## 2       0.9682300 0.03177002 0.9364600  61.80636
```

```
Workflow.Evaluation.table(Posterior.dataframe,deltaPlus = 2)
```

```
##          label Utp Lfp deltaPlus nPairs   PrPlus   PrTrue   PrFalse
## Use All Use All  1  1          2    133 0.9483798 0.4741899 0.5258101
## 1         1  1  1          2     67 0.9290330 0.4645165 0.5354835
## 2         2  1  1          2     66 0.9682300 0.4841150 0.5158850
##          Utrue   Lfalse Eutility1 Eutility
## Use All 0.4741899 0.5258101 -0.05162022 -6.865490
## 1       0.4645165 0.5354835 -0.07096702 -4.754790
## 2       0.4841150 0.5158850 -0.03177002 -2.096821
```

```
Workflow.Evaluation.table(Posterior.dataframe,Utp=3)
```

```
##          label Utp Lfp deltaPlus nPairs      PrPlus      PrTrue      PrFalse
## Use All Use All   3   1          1    133 0.9483798 0.9483798 0.05162022
## 1          1   3   1          1     67 0.9290330 0.9290330 0.07096702
## 2          2   3   1          1     66 0.9682300 0.9682300 0.03177002
##          Utrue      Lfalse Eutility1 Eutility
## Use All 2.845139 0.05162022 2.793519 371.5380
## 1      2.787099 0.07096702 2.716132 181.9808
## 2      2.904690 0.03177002 2.872920 189.6127
```

```
Workflow.Evaluation.table(Posterior.dataframe,Utp=1)
```

```
##          label Utp Lfp deltaPlus nPairs      PrPlus      PrTrue      PrFalse
## Use All Use All   1   1          1    133 0.9483798 0.9483798 0.05162022
## 1          1   1   1          1     67 0.9290330 0.9290330 0.07096702
## 2          2   1   1          1     66 0.9682300 0.9682300 0.03177002
##          Utrue      Lfalse Eutility1 Eutility
## Use All 0.9483798 0.05162022 0.8967596 119.26902
## 1      0.9290330 0.07096702 0.8580660 57.49042
## 2      0.9682300 0.03177002 0.9364600 61.80636
```