Sequential Quantile Estimation

Reference Manual of a Software Tool implemented in the Context of the PhD Thesis

Sequential Analysis of Quantiles and Probability Distributions by Replicated Simulations

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Here is a list of all files with brief descriptions:

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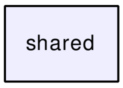
6.1 /home/cosc/student/mei16/archiv/projects/distribution-Estimation/shared/ Directory Reference



Files

- file **akaroa_import.cc**
- file **akaroa_import.h**
- file **environment.h**
- file **error.cc**
- file **error.h**
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- file **resultfile.h**
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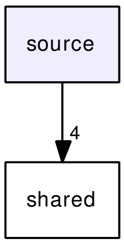
- file **setting.h**
- file **signal_interface.cc**
- file **signal_interface.h**
- file **statistic.cc**
- file **statistic.h**

- file **system_command.cc**
- file **system_command.h**

6.2 source/ Directory Reference



Files

- file **basic.cc**
- file **basic.h**
- file **batching.cc**
- file **batching.h**
- file **controller.cc**
- file **controller.h**
- file **homogeneityTests.cc**
- file **homogeneityTests.h**
- file **main.cc**
- file **main.h**
- file **method_factory.cc**
- file **method_factory.h**
- file **quantile_estimation.cc**
- file **quantile_estimation.h**
- file **time_evolution.cc**
- file **time_evolution.h**
- file **truncation_point_detection.cc**
- file **truncation_point_detection.h**

Chapter 7

Sequential Quantile Estimation Namespace Documentation

7.1 lib_signals Namespace Reference

Functions

- void **initializeUserDefinedSignals** (void)
- void **signal_stop** (int signr)
- void **signal_ignore** (int signr)
- void **registerChildProcess** (pid_t newProcess)
- void **sendSignalToAllChildProcesses** (int signr)

Variables

- bool **continueExecution** = true
- unsigned int **actNoChildProcesses** = 0
- const unsigned int **maxNoChildProcesses** = 1024
- pid_t **ChildProcessPIDs** [**maxNoChildProcesses**]
- bool **continueExecution**
- const unsigned int **maxNoChildProcesses**

7.1.1 Function Documentation

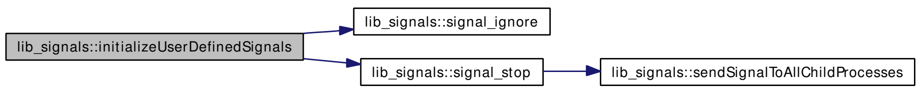
7.1.1.1 void lib_signals::initializeUserDefinedSignals (void)

Definition at line 15 of file signal_interface.cc.

References signal_ignore(), and signal_stop().

Referenced by main().

Here is the call graph for this function:


lib_signals::signal_ignore
lib_signals::initializeUserDefinedSignals
lib_signals::signal_stop
lib_signals::sendSignalToAllChildProcesses

7.1.1.2 void lib_signals::registerChildProcess (pid_t *newProcess*)

Definition at line 38 of file signal_interface.cc.

References actNoChildProcesses, and ChildProcessPIDs.

7.1.1.3 void lib_signals::sendSignalToAllChildProcesses (int *signr* = `SIGKILL`)

Definition at line 42 of file signal_interface.cc.

References actNoChildProcesses, and ChildProcessPIDs.

Referenced by main(), and signal_stop().

7.1.1.4 void lib_signals::signal_ignore (int *signr*)

Definition at line 33 of file signal_interface.cc.

Referenced by initializeUserDefinedSignals().

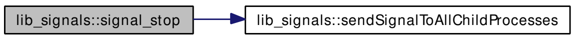
7.1.1.5 void lib_signals::signal_stop (int *signr*)

Definition at line 26 of file signal_interface.cc.

References continueExecution, and sendSignalToAllChildProcesses().

Referenced by initializeUserDefinedSignals().

Here is the call graph for this function:



7.1.2 Variable Documentation

7.1.2.1 unsigned int lib_signals::actNoChildProcesses = 0

Definition at line 11 of file signal_interface.cc.

Referenced by registerChildProcess(), and sendSignalToAllChildProcesses().

7.1.2.2 pid_t lib_signals::ChildProcessPIDs[maxNoChildProcesses]

Definition at line 13 of file signal_interface.cc.

Referenced by registerChildProcess(), and sendSignalToAllChildProcesses().

7.1.2.3 bool lib_signals::continueExecution

Definition at line 10 of file signal_interface.cc.

Referenced by main(), and signal_stop().

7.1.2.4 bool lib_signals::continueExecution = true

Definition at line 10 of file signal_interface.cc.

Referenced by main(), and signal_stop().

7.1.2.5 const unsigned int lib_signals::maxNoChildProcesses

Definition at line 12 of file signal_interface.cc.

7.1.2.6 const unsigned int lib_signals::maxNoChildProcesses = 1024

Definition at line 12 of file signal_interface.cc.

7.2 logInfo Namespace Reference

Functions

- void **open** (void)
- void **close** (void)

7.2.1 Function Documentation

7.2.1.1 void logInfo::close (void)

Definition at line 14 of file logfile.cc.

References logfile.

Referenced by main().

7.2.1.2 void logInfo::open (void)

Definition at line 8 of file logfile.cc.

References logfile.

Referenced by main().

Chapter 8

Sequential Quantile Estimation Data Structure Documentation

8.1 akaroa_import Class Reference

`#include <akaroa_import.h>`

Public Types

- enum { **SLOPE_PROTECTION_OFF** = 0, **SLOPE_PROTECTION_-UNCONDITIONAL** = 1, **SLOPE_PROTECTION_CONDITIONAL** = 2 }

Public Member Functions

- long double **SchrubenStatistic** (long double X[ ], int n_t, int n_v, long double sigma_sq)
- void **SpectralVarianceAnalysisOfMean** (long double X[ ], int N, long double &sigma_sq, int &kappa)
- void **SpectralVarianceAnalysisOfProcess** (long double X[ ], int N, long double &sigma_-sq, int &kappa)
- void **CalculatePeriodogram** (long double X[ ], int n, long double P[ ], int nP)
- void **LogAveragePairsAndOffset** (long double P[ ], long double Lfj[ ], int K, long double offset)
- void **LookUp_K_d** (int K, int d, long double &C1, int &C2)
- long double **LeastSquaresPolyAt0** (long double x[ ], long double f[ ], int N, int k, long double &dp0)
- void **OrthogonalPolynomialTables** (long double x[ ], int k, int N, long double ∗P[ ], long double A[ ], long double B[ ])
- void **OrthogonalPolynomialValues** (long double A[ ], long double B[ ], int k, int N, long double x, long double P[ ], long double dP[ ])
- long double **sqr** (long double x)
- long double **Z** (long double p)
- long double **t_distribution** (int ndf, long double p)

8.1.1 Detailed Description

Definition at line 4 of file akaroa_import.h.

8.1.2 Member Enumeration Documentation

8.1.2.1 anonymous enum

Enumerator:

SLOPE_PROTECTION_OFF

SLOPE_PROTECTION_UNCONDITIONAL

SLOPE_PROTECTION_CONDITIONAL

Definition at line 16 of file akaroa_import.h.

8.1.3 Member Function Documentation

8.1.3.1 long double akaroa_import::SchrubenStatistic (long double *X*[ ], int *n_t*, int *n_v*, long double *sigma_sq*)

Definition at line 13 of file akaroa_import.cc.

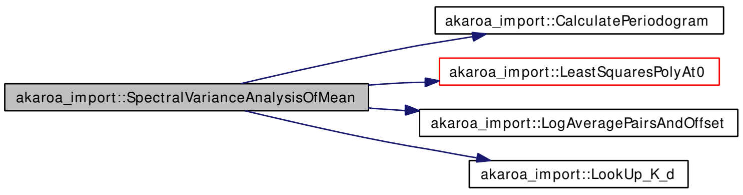
8.1.3.2 void akaroa_import::SpectralVarianceAnalysisOfMean (long double *X*[ ], int *N*, long double & *sigma_sq*, int & *kappa*)

Definition at line 31 of file akaroa_import.cc.

References CalculatePeriodogram(), LeastSquaresPolyAt0(), LogAveragePairsAndOffset(), LookUp_K_d(), SLOPE_PROTECTION_CONDITIONAL, and SLOPE_PROTECTION_-UNCONDITIONAL.

Referenced by spectral_analysis_QE::checkQuantiles().

Here is the call graph for this function:

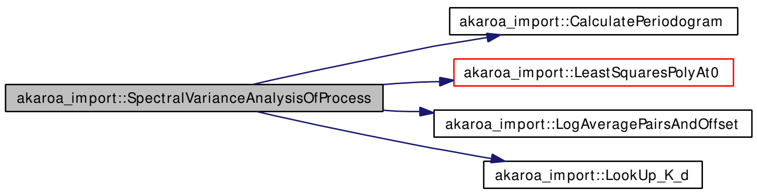

akaroa_import::SpectralVarianceAnalysisOfMean
akaroa_import::CalculatePeriodogram
akaroa_import::LeastSquaresPolyAt0
akaroa_import::LogAveragePairsAndOffset
akaroa_import::LookUp_K_d

8.1.3.3 void akaroa_import::SpectralVarianceAnalysisOfProcess (long double *X*[ ], int *N*, long double & *sigma_sq*, int & *kappa*)

Definition at line 81 of file akaroa_import.cc.

References CalculatePeriodogram(), LeastSquaresPolyAt0(), LogAveragePairsAndOffset(), LookUp_K_d(), SLOPE_PROTECTION_CONDITIONAL, and SLOPE_PROTECTION_-UNCONDITIONAL.

Here is the call graph for this function:


akaroa_import::SpectralVarianceAnalysisOfProcess
akaroa_import::CalculatePeriodogram
akaroa_import::LeastSquaresPolyAt0
akaroa_import::LogAveragePairsAndOffset
akaroa_import::LookUp_K_d

8.1.3.4 void akaroa_import::CalculatePeriodogram (long double *X*[ ], int *n*, long double *P*[ ], int *nP*)

Definition at line 131 of file akaroa_import.cc.

Referenced by SpectralVarianceAnalysisOfMean(), and SpectralVarianceAnalysisOfProcess().

8.1.3.5 void akaroa_import::LogAveragePairsAndOffset (long double *P*[ ], long double *Lfj*[ ], int *K*, long double *offset*)

Definition at line 143 of file akaroa_import.cc.

Referenced by SpectralVarianceAnalysisOfMean(), and SpectralVarianceAnalysisOfProcess().

8.1.3.6 void akaroa_import::LookUp_K_d (int *K*, int *d*, long double & *C1*, int & *C2*)

Definition at line 167 of file akaroa_import.cc.

References K_d_entry::C1, K_d_entry::C2, K_d_entry::d, K_d_entry::K, and K_d_table.

Referenced by SpectralVarianceAnalysisOfMean(), and SpectralVarianceAnalysisOfProcess().

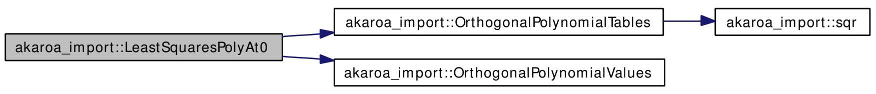
8.1.3.7 long double akaroa_import::LeastSquaresPolyAt0 (long double *x*[ ], long double *f*[ ], int *N*, int *k*, long double & *dp0*)

Definition at line 190 of file akaroa_import.cc.

References OrthogonalPolynomialTables(), and OrthogonalPolynomialValues().

Referenced by SpectralVarianceAnalysisOfMean(), and SpectralVarianceAnalysisOfProcess().

Here is the call graph for this function:


akaroa_import::LeastSquaresPolyAt0
akaroa_import::OrthogonalPolynomialTables
akaroa_import::sqr
akaroa_import::OrthogonalPolynomialValues

8.1.3.8 void akaroa_import::OrthogonalPolynomialTables (long double *x*[ ], int *k*, int *N*, long double ∗ *P*[ ], long double *A*[ ], long double *B*[ ])

Definition at line 231 of file akaroa_import.cc.

References sqr().

Referenced by LeastSquaresPolyAt0().

Here is the call graph for this function:

akaroa_import::OrthogonalPolynomialTables
akaroa_import::sqr

8.1.3.9 void akaroa_import::OrthogonalPolynomialValues (long double *A*[ ], long double *B*[ ], int *k*, int *N*, long double *x*, long double *P*[ ], long double *dP*[ ])

Definition at line 264 of file akaroa_import.cc.

Referenced by LeastSquaresPolyAt0().

8.1.3.10 long double akaroa_import::sqr (long double *x*) `[inline]`

Definition at line 15 of file akaroa_import.h.

Referenced by OrthogonalPolynomialTables().

8.1.3.11 long double akaroa_import::Z (long double *p*)

Definition at line 276 of file akaroa_import.cc.

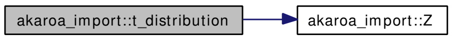
Referenced by t_distribution().

8.1.3.12 long double akaroa_import::t_distribution (int *ndf*, long double *p*)

Definition at line 289 of file akaroa_import.cc.

References Z().

Here is the call graph for this function:



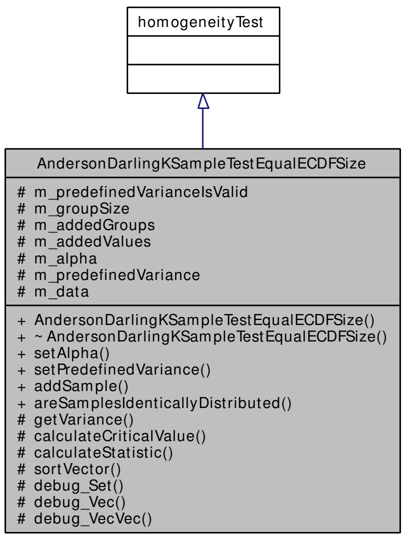
The documentation for this class was generated from the following files:

- **akaroa_import.h**
- **akaroa_import.cc**

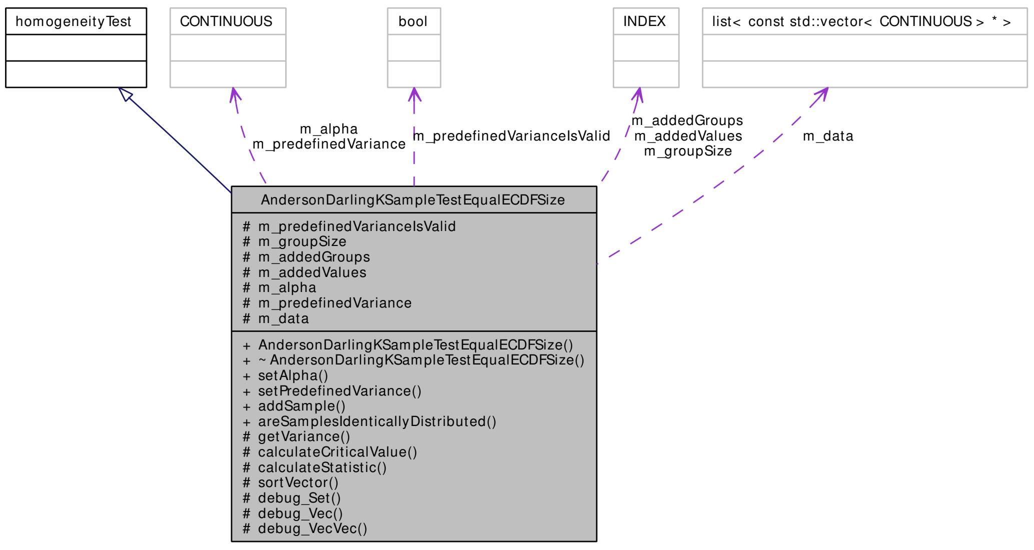
8.2 AndersonDarlingKSampleTestEqualECDFSize Class Reference

`#include <homogeneityTests.h>`

Inheritance diagram for AndersonDarlingKSampleTestEqualECDFSize:


homogeneityTest
AndersonDarlingKSampleTestEqualECDFSize
# m_predefinedVarianceIsValid
# m_groupSize
# m_addedGroups
# m_addedValues
# m_alpha
# m_predefinedVariance
# m_data
+ AndersonDarlingKSampleTestEqualECDFSize()
+ ~AndersonDarlingKSampleTestEqualECDFSize()
+ setAlpha()
+ setPredefinedVariance()
+ addSample()
+ areSamplesIdenticallyDistributed()
# getVariance()
# calculateCriticalValue()
# calculateStatistic()
# sortVector()
# debug_Set()
# debug_Vec()
# debug_VecVec()

Collaboration diagram for AndersonDarlingKSampleTestEqualECDFSize:


homogeneityTest
CONTINUOUS
bool
INDEX
list< const std::vector< CONTINUOUS > * >
m_alpha
m_predefinedVariance
m_predefinedVarianceIsValid
m_addedGroups
m_addedValues
m_groupSize
m_data
AndersonDarlingKSampleTestEqualECDFSize
# m_predefinedVarianceIsValid
# m_groupSize
# m_addedGroups
# m_addedValues
# m_alpha
# m_predefinedVariance
# m_data
+ AndersonDarlingKSampleTestEqualECDFSize()
+ ~AndersonDarlingKSampleTestEqualECDFSize()
+ setAlpha()
+ setPredefinedVariance()
+ addSample()
+ areSamplesIdenticallyDistributed()
# getVariance()
# calculateCriticalValue()
# calculateStatistic()
# sortVector()
# debug_Set()
# debug_Vec()
# debug_VecVec()

Public Member Functions

- **AndersonDarlingKSampleTestEqualECDFSize** (INDEX newGroupSize)
- ~**AndersonDarlingKSampleTestEqualECDFSize** (void)
- void **setAlpha** (CONTINUOUS newAlpha)

- void **setPredefinedVariance** (CONTINUOUS newVariance)
- void **addSample** (const std::vector< CONTINUOUS > &)
- bool **areSamplesIdenticallyDistributed** (CONTINUOUS &std_statistic, CONTINUOUS &criticalValue, CONTINUOUS &variance, CONTINUOUS &statistic, CONTINUOUS &resultValue)

Protected Member Functions

- CONTINUOUS **getVariance** (void)
- CONTINUOUS **calculateCriticalValue** (void)
- CONTINUOUS **calculateStatistic** (void)
- void **sortVector** (std::vector< CONTINUOUS > &)
- void **debug_Set** (std::set< CONTINUOUS > &)
- void **debug_Vec** (std::vector< CONTINUOUS > &)
- void **debug_VecVec** (std::vector< std::vector< CONTINUOUS > > &)

Protected Attributes

- bool **m_predefinedVarianceIsValid**
- INDEX **m_groupSize**
- INDEX **m_addedGroups**
- INDEX **m_addedValues**
- CONTINUOUS **m_alpha**
- CONTINUOUS **m_predefinedVariance**
- std::list< const std::vector< CONTINUOUS > ∗ > **m_data**

8.2.1 Detailed Description

Definition at line 16 of file homogeneityTests.h.

8.2.2 Constructor & Destructor Documentation

8.2.2.1 AndersonDarlingKSampleTestEqualECDFSize::AndersonDarlingKSampleTestEqualECDFSize (INDEX *newGroupSize*)

Definition at line 7 of file homogeneityTests.cc.

References m_groupSize.

8.2.2.2 AndersonDarlingKSampleTestEqualECDFSize::∼AndersonDarlingKSampleTestEqualECDFSize (void)

Definition at line 16 of file homogeneityTests.cc.

8.2.3 Member Function Documentation

8.2.3.1 void AndersonDarlingKSampleTestEqualECDFSize::setAlpha (CONTINUOUS *newAlpha*)

Definition at line 19 of file homogeneityTests.cc.

References m_alpha.

Referenced by sequential_TPD::homogeneityTest().

8.2.3.2 void AndersonDarlingKSampleTestEqualECDFSize::setPredefinedVariance (CONTINUOUS *newVariance*)

Definition at line 31 of file homogeneityTests.cc.

References m_predefinedVariance, and m_predefinedVarianceIsValid.

Referenced by sequential_TPD::homogeneityTest().

8.2.3.3 void AndersonDarlingKSampleTestEqualECDFSize::addSample (const std::vector< CONTINUOUS > &)

Definition at line 36 of file homogeneityTests.cc.

References m_addedGroups, m_addedValues, m_data, and m_groupSize.

Referenced by sequential_TPD::homogeneityTest().

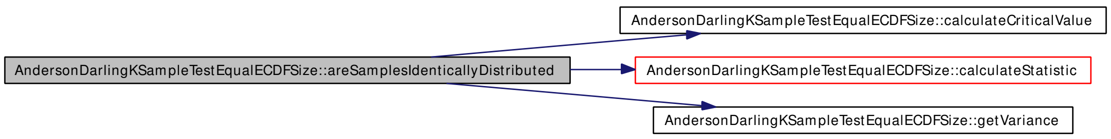
8.2.3.4 bool AndersonDarlingKSampleTestEqualECDFSize::areSamplesIdentically-Distributed (CONTINUOUS & *std_statistic*, CONTINUOUS & *criticalValue*, CONTINUOUS & *variance*, CONTINUOUS & *statistic*, CONTINUOUS & *resultValue*)

Definition at line 44 of file homogeneityTests.cc.

References calculateCriticalValue(), calculateStatistic(), getVariance(), and m_addedGroups.

Referenced by sequential_TPD::homogeneityTest().

Here is the call graph for this function:


AndersonDarlingKSampleTestEqualECDFSize::areSamplesIdenticallyDistributed
AndersonDarlingKSampleTestEqualECDFSize::calculateCriticalValue
AndersonDarlingKSampleTestEqualECDFSize::calculateStatistic
AndersonDarlingKSampleTestEqualECDFSize::getVariance

8.2.3.5 CONTINUOUS AndersonDarlingKSampleTestEqualECDFSize::get-Variance (void) `[protected]`

Definition at line 68 of file homogeneityTests.cc.

References CONTINUOUS, m_addedGroups, m_addedValues, m_groupSize, m_predefined-Variance, and m_predefinedVarianceIsValid.

Referenced by areSamplesIdenticallyDistributed().

8.2.3.6 CONTINUOUS AndersonDarlingKSampleTestEqualECDFSize::calculateCriticalValue (void) `[protected]`

Definition at line 96 of file homogeneityTests.cc.

References CONTINUOUS, m_addedGroups, and m_alpha.

Referenced by areSamplesIdenticallyDistributed().

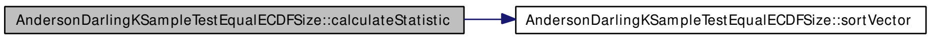
8.2.3.7 CONTINUOUS AndersonDarlingKSampleTestEqualECDFSize::calculateStatistic (void) `[protected]`

Definition at line 121 of file homogeneityTests.cc.

References CONTINUOUS, INDEX, m_addedGroups, m_addedValues, m_data, m_groupSize, and sortVector().

Referenced by areSamplesIdenticallyDistributed().

Here is the call graph for this function:


AndersonDarlingKSampleTestEqualECDFSize::calculateStatistic
AndersonDarlingKSampleTestEqualECDFSize::sortVector

8.2.3.8 void AndersonDarlingKSampleTestEqualECDFSize::sortVector (std::vector< CONTINUOUS > &) `[protected]`

Definition at line 109 of file homogeneityTests.cc.

References INDEX.

Referenced by calculateStatistic().

8.2.3.9 void AndersonDarlingKSampleTestEqualECDFSize::debug_Set (std::set< CONTINUOUS > &) `[protected]`

Definition at line 231 of file homogeneityTests.cc.

8.2.3.10 void AndersonDarlingKSampleTestEqualECDFSize::debug_Vec (std::vector< CONTINUOUS > &) `[protected]`

Definition at line 241 of file homogeneityTests.cc.

8.2.3.11 void AndersonDarlingKSampleTestEqualECDFSize::debug_VecVec (std::vector< std::vector< CONTINUOUS > > &) `[protected]`

Definition at line 249 of file homogeneityTests.cc.

References INDEX.

8.2.4 Field Documentation

8.2.4.1 bool AndersonDarlingKSampleTestEqualECDFSize::m_predefined-VarianceIsValid [protected]

Definition at line 31 of file homogeneityTests.h.

Referenced by getVariance(), and setPredefinedVariance().

8.2.4.2 INDEX AndersonDarlingKSampleTestEqualECDFSize::m_groupSize [protected]

Definition at line 32 of file homogeneityTests.h.

Referenced by addSample(), AndersonDarlingKSampleTestEqualECDFSize(), calculateStatistic(), and getVariance().

8.2.4.3 INDEX AndersonDarlingKSampleTestEqualECDFSize::m_addedGroups [protected]

Definition at line 33 of file homogeneityTests.h.

Referenced by addSample(), areSamplesIdenticallyDistributed(), calculateCriticalValue(), calculateStatistic(), and getVariance().

8.2.4.4 INDEX AndersonDarlingKSampleTestEqualECDFSize::m_addedValues [protected]

Definition at line 34 of file homogeneityTests.h.

Referenced by addSample(), calculateStatistic(), and getVariance().

8.2.4.5 CONTINUOUS AndersonDarlingKSampleTestEqualECDFSize::m_alpha [protected]

Definition at line 35 of file homogeneityTests.h.

Referenced by calculateCriticalValue(), and setAlpha().

8.2.4.6 CONTINUOUS AndersonDarlingKSampleTestEqualECDFSize::m_-predefinedVariance [protected]

Definition at line 36 of file homogeneityTests.h.

Referenced by getVariance(), and setPredefinedVariance().

8.2.4.7 std::list< const std::vector<CONTINUOUS>* > AndersonDarling-KSampleTestEqualECDFSize::m_data [protected]

Definition at line 37 of file homogeneityTests.h.

Referenced by addSample(), and calculateStatistic().

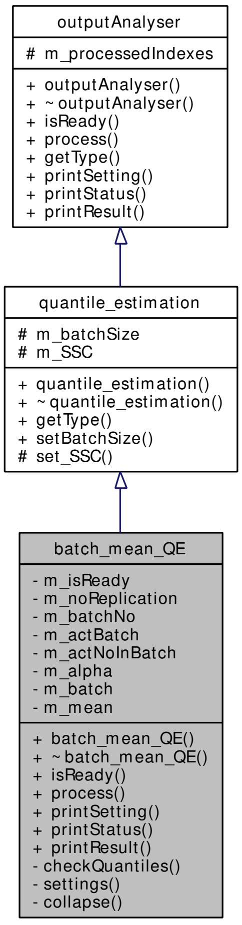
The documentation for this class was generated from the following files:

- **homogeneityTests.h**
- **homogeneityTests.cc**

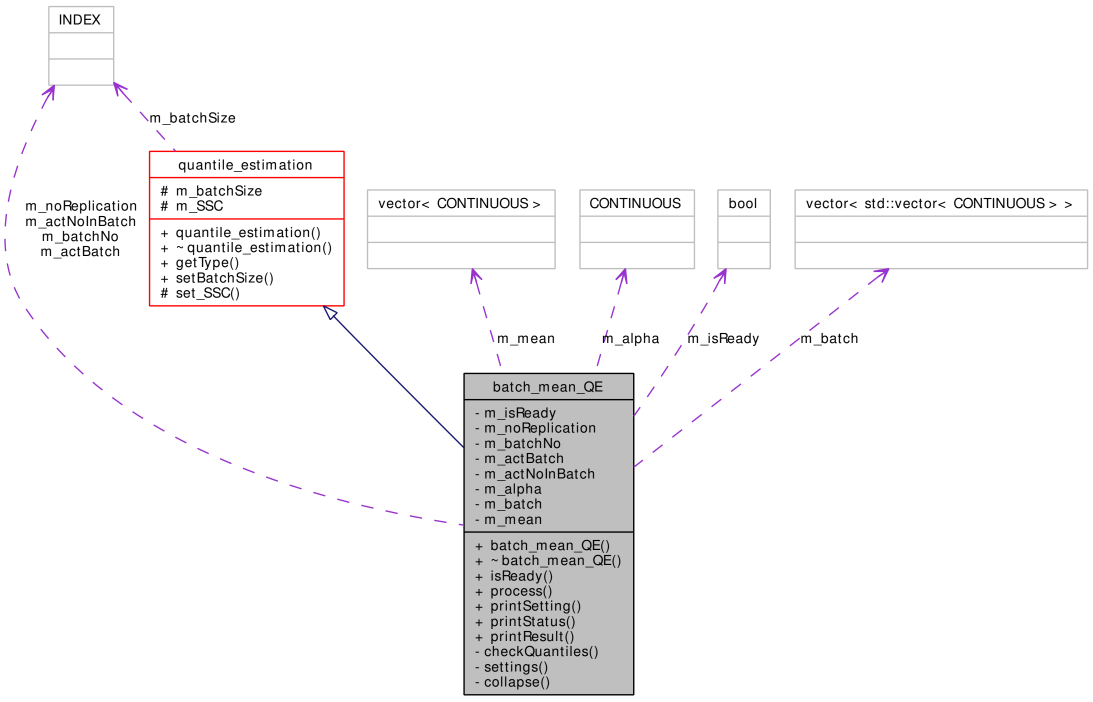
8.3 batch_mean_QE Class Reference

`#include <quantile_estimation.h>`

Inheritance diagram for batch_mean_QE:



Collaboration diagram for batch_mean_QE:



Public Member Functions

- **batch_mean_QE** (void)
- ∼**batch_mean_QE** (void)
- bool **isReady** (void) const
- void **process** (const std::list< CONTINUOUS > &)
- void **printSetting** (void)
- void **printStatus** (void)
- void **printResult** (void)
- virtual **TypeOfMethod getType** (void) const
- void **setBatchSize** (INDEX p)

Protected Member Functions

- void **set_SSC** (void)

Protected Attributes

- INDEX **m_batchSize**
- **SequentialStoppingCriteria_QE** ∗ **m_SSC**
- INDEX **m_processedIndexes**

Private Member Functions

- bool **checkQuantiles** (void)
- void **settings** (void)
- void **collapse** (void)

Private Attributes

- bool **m_isReady**
- INDEX **m_noReplication**
- INDEX **m_batchNo**
- INDEX **m_actBatch**
- INDEX **m_actNoInBatch**
- CONTINUOUS **m_alpha**
- std::vector< std::vector< CONTINUOUS > > **m_batch**
- std::vector< CONTINUOUS > **m_mean**

8.3.1 Detailed Description

Definition at line 54 of file quantile_estimation.h.

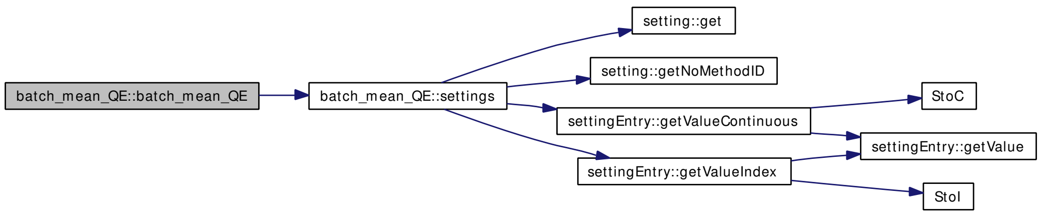
8.3.2 Constructor & Destructor Documentation

8.3.2.1 batch_mean_QE::batch_mean_QE (void)

Definition at line 228 of file quantile_estimation.cc.

References settings().

Here is the call graph for this function:


batch_mean_QE::batch_mean_QE
batch_mean_QE::settings
setting::get
setting::getNoMethodID
settingEntry::getValueContinuous
settingEntry::getValueIndex
StoC
settingEntry::getValue
StoI

8.3.2.2 batch_mean_QE::∼batch_mean_QE (void)

Definition at line 239 of file quantile_estimation.cc.

8.3.3 Member Function Documentation

8.3.3.1 bool batch_mean_QE::isReady (void) const `[virtual]`

Reimplemented from **outputAnalyser** (p. 183).

Definition at line 242 of file quantile_estimation.cc.

References m_isReady.

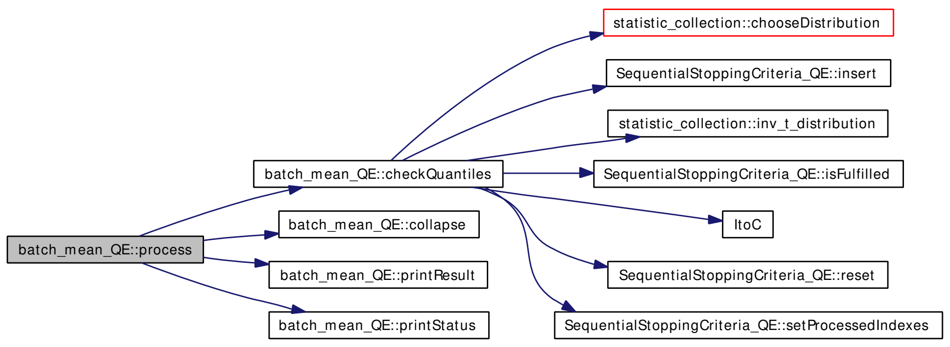
8.3.3.2 void batch_mean_QE::process (const std::list< CONTINUOUS > &) [virtual]

Reimplemented from **outputAnalyser** (p. 183).

Definition at line 246 of file quantile_estimation.cc.

References checkQuantiles(), collapse(), INDEX, m_actBatch, m_actNoInBatch, m_batch, m_-batchNo, quantile_estimation::m_batchSize, m_isReady, m_mean, m_noReplication, output-Analyser::m_processedIndexes, printResult(), and printStatus().

Here is the call graph for this function:


statistic_collection::chooseDistribution
SequentialStoppingCriteria_QE::insert
statistic_collection::inv_t_distribution
batch_mean_QE::checkQuantiles
SequentialStoppingCriteria_QE::isFulfilled
batch_mean_QE::collapse
ItoC
batch_mean_QE::process
batch_mean_QE::printResult
SequentialStoppingCriteria_QE::reset
batch_mean_QE::printStatus
SequentialStoppingCriteria_QE::setProcessedIndexes

8.3.3.3 void batch_mean_QE::printSetting (void) [virtual]

Reimplemented from **outputAnalyser** (p. 183).

Definition at line 294 of file quantile_estimation.cc.

References logfile, m_batchNo, s_batch_mean_QE, s_batches, s_execute, and s_yes.

8.3.3.4 void batch_mean_QE::printStatus (void) [virtual]

Reimplemented from **outputAnalyser** (p. 183).

Definition at line 305 of file quantile_estimation.cc.

References logfile, m_actBatch, m_actNoInBatch, m_alpha, m_batchNo, quantile_-estimation::m_batchSize, m_noReplication, outputAnalyser::m_processedIndexes, and s_-batch_mean_QE.

Referenced by process().

8.3.3.5 void batch_mean_QE::printResult (void) [virtual]

Reimplemented from **outputAnalyser** (p. 183).

Definition at line 317 of file quantile_estimation.cc.

References logfile, m_actBatch, m_actNoInBatch, m_alpha, m_batchNo, quantile_-estimation::m_batchSize, m_noReplication, outputAnalyser::m_processedIndexes, and s_-batch_mean_QE.

Referenced by process().

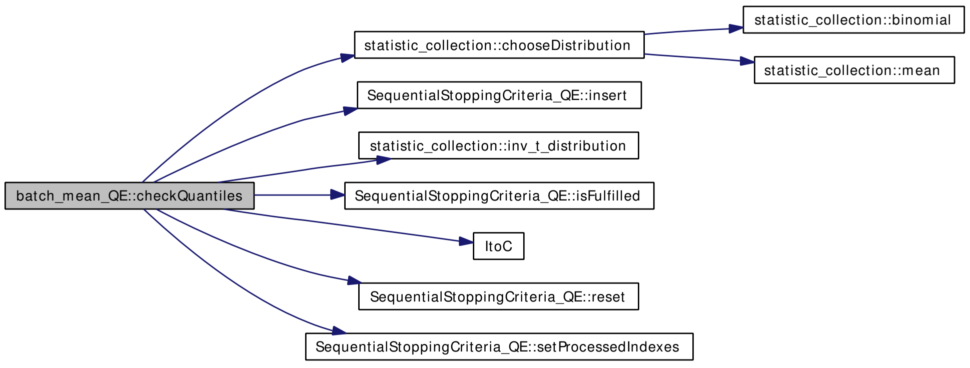
8.3.3.6 bool batch_mean_QE::checkQuantiles (void) [private]

Definition at line 329 of file quantile_estimation.cc.

References statistic_collection::chooseDistribution(), CONTINUOUS, INDEX, SequentialStoppingCriteria_QE::insert(), statistic_collection::inv_t_distribution(), SequentialStoppingCriteria_QE::isFulfilled(), ItoC(), lib_statistic, m_alpha, m_batch, m_batchNo, quantile_-estimation::m_batchSize, m_mean, m_noReplication, outputAnalyser::m_processedIndexes, quantile_estimation::m_SSC, SequentialStoppingCriteria_QE::reset(), and SequentialStoppingCriteria_QE::setProcessedIndexes().

Referenced by process().

Here is the call graph for this function:


batch_mean_QE::checkQuantiles
statistic_collection::chooseDistribution
statistic_collection::binomial
statistic_collection::mean
SequentialStoppingCriteria_QE::insert
statistic_collection::inv_t_distribution
SequentialStoppingCriteria_QE::isFulfilled
ItoC
SequentialStoppingCriteria_QE::reset
SequentialStoppingCriteria_QE::setProcessedIndexes

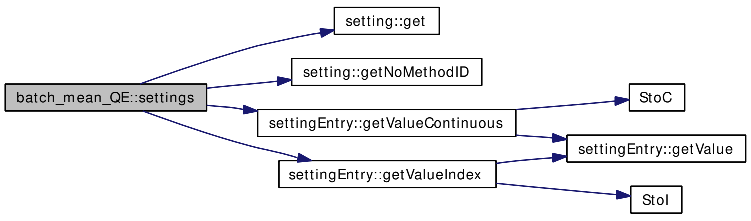
8.3.3.7 void batch_mean_QE::settings (void) [private]

Definition at line 375 of file quantile_estimation.cc.

References setting::get(), setting::getNoMethodID(), settingEntry::getValueContinuous(), settingEntry::getValueIndex(), lib_setting, m_alpha, m_batchNo, m_noReplication, s_alpha, s_-batch_mean_QE, s_batches, and s_replications.

Referenced by batch_mean_QE().

Here is the call graph for this function:



8.3.3.8 void batch_mean_QE::collapse (void) [private]

Definition at line 398 of file quantile_estimation.cc.

References INDEX, m_actBatch, m_actNoInBatch, m_batch, m_batchNo, quantile_-estimation::m_batchSize, and m_noReplication.

Referenced by process().

8.3.3.9 TypeOfMethod quantile_estimation::getType (void) const `[virtual, inherited]`

Reimplemented from **outputAnalyser** (p. 87).

Definition at line 22 of file quantile_estimation.cc.

References ESTIMATOR.

8.3.3.10 void quantile_estimation::setBatchSize (INDEX *p*) `[inherited]`

Definition at line 26 of file quantile_estimation.cc.

References quantile_estimation::m_batchSize.

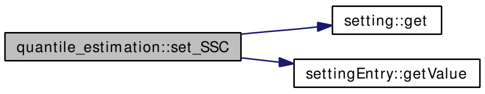
8.3.3.11 void quantile_estimation::set_SSC (void) `[protected, inherited]`

Definition at line 31 of file quantile_estimation.cc.

References setting::get(), settingEntry::getValue(), lib_setting, quantile_estimation::m_SSC, s_-confidenceInterval_SSC_QE, s_deterministic_SSC_QE, s_execute, s_relativeErrorQuantile_-SSC_QE, s_relativeErrorRange_SSC_QE, and s_yes.

Referenced by quantile_estimation::quantile_estimation().

Here is the call graph for this function:



8.3.4 Field Documentation

8.3.4.1 bool batch_mean_QE::m_isReady `[private]`

Definition at line 70 of file quantile_estimation.h.

Referenced by isReady(), and process().

8.3.4.2 INDEX batch_mean_QE::m_noReplication `[private]`

Definition at line 71 of file quantile_estimation.h.

Referenced by checkQuantiles(), collapse(), printResult(), printStatus(), process(), and settings().

8.3.4.3 INDEX batch_mean_QE::m_batchNo `[private]`

Definition at line 72 of file quantile_estimation.h.

Referenced by checkQuantiles(), collapse(), printResult(), printSetting(), printStatus(), process(), and settings().

8.3.4.4 INDEX batch_mean_QE::m_actBatch `[private]`

Definition at line 73 of file quantile_estimation.h.

Referenced by collapse(), printResult(), printStatus(), and process().

8.3.4.5 INDEX batch_mean_QE::m_actNoInBatch `[private]`

Definition at line 74 of file quantile_estimation.h.

Referenced by collapse(), printResult(), printStatus(), and process().

8.3.4.6 CONTINUOUS batch_mean_QE::m_alpha `[private]`

Definition at line 75 of file quantile_estimation.h.

Referenced by checkQuantiles(), printResult(), printStatus(), and settings().

8.3.4.7 std::vector< std::vector<CONTINUOUS> > batch_mean_QE::m_batch `[private]`

Definition at line 76 of file quantile_estimation.h.

Referenced by checkQuantiles(), collapse(), and process().

8.3.4.8 std::vector< CONTINUOUS > batch_mean_QE::m_mean `[private]`

Definition at line 77 of file quantile_estimation.h.

Referenced by checkQuantiles(), and process().

8.3.4.9 INDEX quantile_estimation::m_batchSize `[protected, inherited]`

Definition at line 26 of file quantile_estimation.h.

Referenced by spectral_analysis_QE::checkQuantiles(), checkQuantiles(), spectral_analysis_-QE::collapse(), collapse(), spectral_analysis_QE::printResult(), printResult(), pooling_-QE::printResult(), spectral_analysis_QE::printStatus(), printStatus(), pooling_QE::print-Status(), spectral_analysis_QE::process(), process(), pooling_QE::process(), and quantile_-estimation::setBatchSize().

8.3.4.10 SequentialStoppingCriteria_QE∗ quantile_estimation::m_SSC `[protected, inherited]`

Definition at line 27 of file quantile_estimation.h.

Referenced by spectral_analysis_QE::checkQuantiles(), checkQuantiles(), pooling_QE::check-Quantiles(), quantile_estimation::set_SSC(), and quantile_estimation::∼quantile_estimation().

8.3.4.11 INDEX outputAnalyser::m_processedIndexes `[protected, inherited]`

Definition at line 20 of file basic.h.

Referenced by evolution::calculateQuantiles(), spectral_analysis_QE::checkQuantiles(), checkQuantiles(), pooling_QE::checkQuantiles(), deterministic_TPD::isReady(), evolution::isReady(), sequential_TPD::printResult(), deterministic_TPD::printResult(), spectral_analysis_QE::printResult(), printResult(), pooling_QE::printResult(), batching::printResult(), sequential_TPD::printStatus(), deterministic_TPD::printStatus(), evolution::printStatus(), spectral_analysis_QE::printStatus(), printStatus(), pooling_QE::printStatus(), batching::printStatus(), sequential_TPD::process(), deterministic_TPD::process(), evolution::process(), spectral_analysis_QE::process(), process(), pooling_QE::process(), batching::process(), outputAnalyser::process(), sequential_TPD::sub_collect(), sequential_TPD::sub_compare(), and sequential_TPD::sub_initialize().

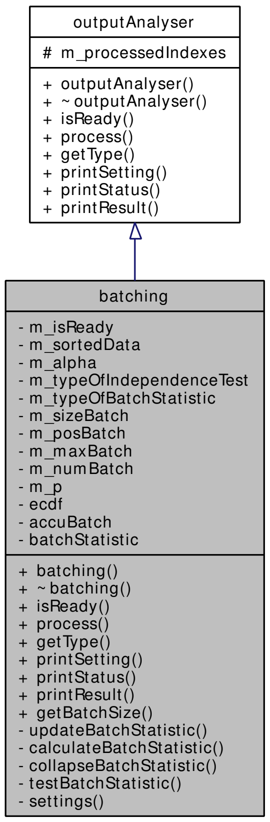
The documentation for this class was generated from the following files:

- **quantile_estimation.h**
- **quantile_estimation.cc**

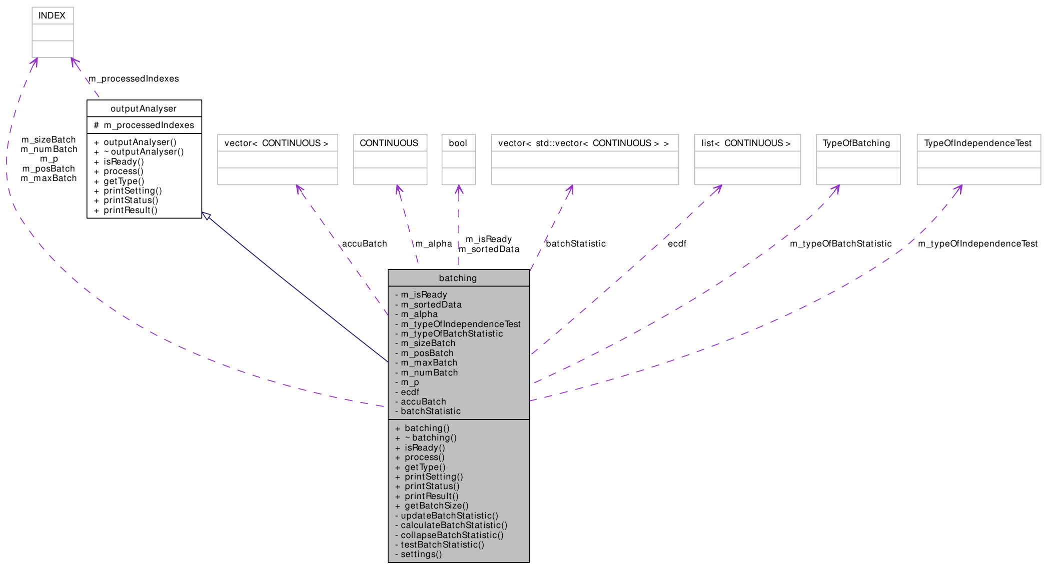
8.4 batching Class Reference

`#include <batching.h>`

Inheritance diagram for batching:



Collaboration diagram for batching:



Public Member Functions

- **batching** (void)
- virtual ~**batching** (void)
- bool **isReady** (void) const
- void **process** (const std::list< CONTINUOUS > &)
- **TypeOfMethod** **getType** (void) const
- void **printSetting** (void)
- void **printStatus** (void)
- void **printResult** (void)
- INDEX **getBatchSize** (void) const

Protected Attributes

- INDEX **m_processedIndexes**

Private Types

- enum **TypeOfBatching** { **Mean**, **Spacing** }

Private Member Functions

- void **updateBatchStatistic** (void)
- void **calculateBatchStatistic** (void)
- void **collapseBatchStatistic** (void)
- bool **testBatchStatistic** (void)
- void **settings** (void)

Private Attributes

- bool **m_isReady**
- bool **m_sortedData**
- CONTINUOUS **m_alpha**
- **statistic_collection::TypeOfIndependenceTest m_typeOfIndependenceTest**
- **TypeOfBatching m_typeOfBatchStatistic**
- INDEX **m_sizeBatch**
- INDEX **m_posBatch**
- INDEX **m_maxBatch**
- INDEX **m_numBatch**
- INDEX **m_p**
- std::list< CONTINUOUS > **ecdf**
- std::vector< CONTINUOUS > **accuBatch**
- std::vector< std::vector< CONTINUOUS > > **batchStatistic**

8.4.1 Detailed Description

Definition at line 6 of file batching.h.

8.4.2 Member Enumeration Documentation

8.4.2.1 enum batching::TypeOfBatching `[private]`

Enumerator:

Mean

Spacing

Definition at line 20 of file batching.h.

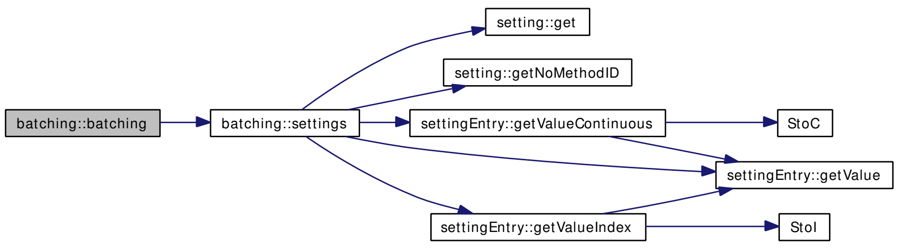
8.4.3 Constructor & Destructor Documentation

8.4.3.1 batching::batching (void)

Definition at line 8 of file batching.cc.

References accuBatch, batchStatistic, INDEX, m_maxBatch, m_p, and settings().

Here is the call graph for this function:



8.4.3.2 batching::∼batching (void) `[virtual]`

Definition at line 36 of file batching.cc.

8.4.4 Member Function Documentation

8.4.4.1 bool batching::isReady (void) const `[virtual]`

Reimplemented from **outputAnalyser** (p. 183).

Definition at line 39 of file batching.cc.

References m_isReady.

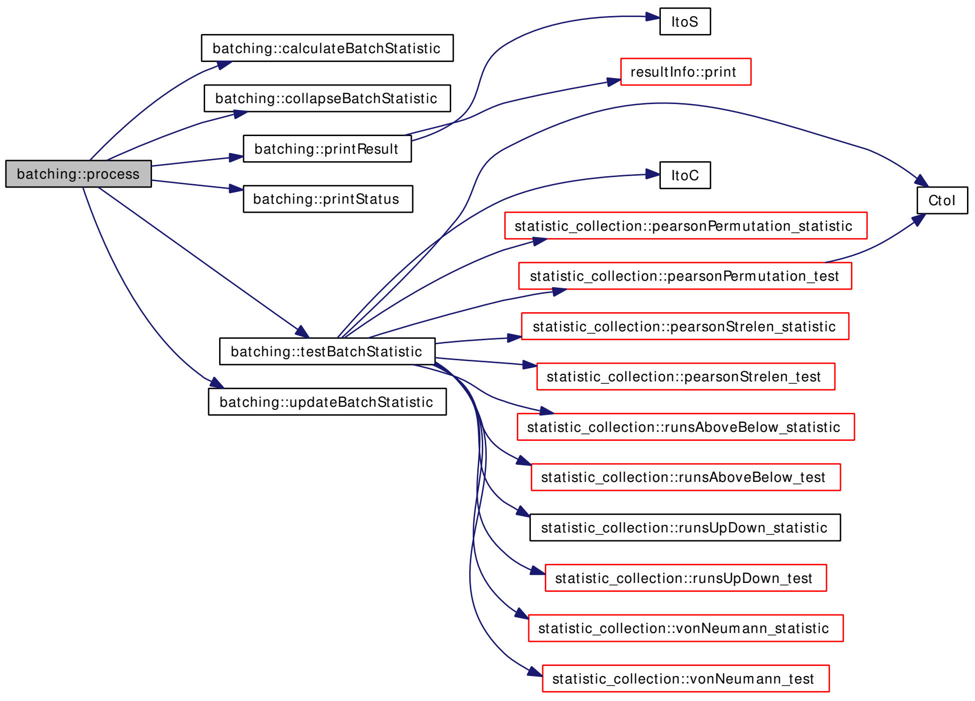
8.4.4.2 void batching::process (const std::list< CONTINUOUS > &) `[virtual]`

Reimplemented from **outputAnalyser** (p. 183).

Definition at line 43 of file batching.cc.

References calculateBatchStatistic(), collapseBatchStatistic(), ecdf, m_isReady, m_maxBatch, m_numBatch, m_p, m_posBatch, outputAnalyser::m_processedIndexes, m_sizeBatch, m_-sortedData, printResult(), printStatus(), testBatchStatistic(), and updateBatchStatistic().

Here is the call graph for this function:


batching::process
batching::calculateBatchStatistic
batching::collapseBatchStatistic
batching::printResult
batching::printStatus
batching::testBatchStatistic
batching::updateBatchStatistic
ItoS
resultInfo::print
ItoC
CtoI
statistic_collection::pearsonPermutation_statistic
statistic_collection::pearsonPermutation_test
statistic_collection::pearsonStrelen_statistic
statistic_collection::pearsonStrelen_test
statistic_collection::runsAboveBelow_statistic
statistic_collection::runsAboveBelow_test
statistic_collection::runsUpDown_statistic
statistic_collection::runsUpDown_test
statistic_collection::vonNeumann_statistic
statistic_collection::vonNeumann_test

8.4.4.3 TypeOfMethod batching::getType (void) const `[virtual]`

Reimplemented from **outputAnalyser** (p. 87).

Definition at line 73 of file batching.cc.

References INDEPENDENT.

8.4.4.4 void batching::printSetting (void) `[virtual]`

Reimplemented from **outputAnalyser** (p. 183).

Definition at line 77 of file batching.cc.

References logfile, m_alpha, m_maxBatch, m_sortedData, m_typeOfBatchStatistic, m_typeOfIndependenceTest, Mean, statistic_collection::PearsonPermutation, statistic_collection::PearsonStrelen, statistic_collection::RunsAboveBelow, statistic_collection::RunsUpDown, s_alpha, s_batch_max, s_execute, s_independence, s_mean, s_no, s_pearsonPermutation, s_pearsonStrelen, s_runsAboveBelow, s_runsUpDown, s_sequential_batching, s_sort, s_spacing, s_statistic, s_vonNeumann, s_yes, Spacing, and statistic_collection::VonNeuman.

8.4.4.5 void batching::printStatus (void) `[virtual]`

Reimplemented from **outputAnalyser** (p. 183).

Definition at line 106 of file batching.cc.

References logfile, m_maxBatch, m_numBatch, m_p, m_posBatch, outputAnalyser::m_processedIndexes, m_sizeBatch, and s_sequential_batching.

Referenced by process().

8.4.4.6 void batching::printResult (void) `[virtual]`

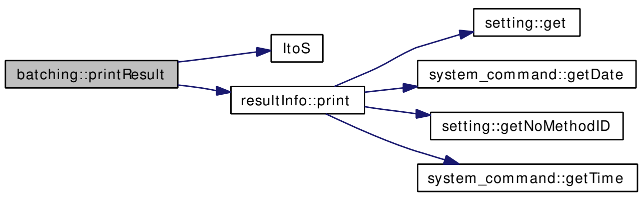
Reimplemented from **outputAnalyser** (p. 183).

Definition at line 117 of file batching.cc.

References ItoS(), logfile, m_maxBatch, m_numBatch, m_p, m_posBatch, outputAnalyser::m_processedIndexes, m_sizeBatch, resultInfo::print(), resultfile, and s_sequential_batching.

Referenced by process().

Here is the call graph for this function:



8.4.4.7 INDEX batching::getBatchSize (void) const

Definition at line 131 of file batching.cc.

References m_isReady, and m_sizeBatch.

Referenced by controller::process().

8.4.4.8 void batching::updateBatchStatistic (void) [private]

Definition at line 136 of file batching.cc.

References accuBatch, ecdf, INDEX, m_p, m_typeOfBatchStatistic, Mean, and Spacing.

Referenced by process().

8.4.4.9 void batching::calculateBatchStatistic (void) [private]

Definition at line 150 of file batching.cc.

References accuBatch, batchStatistic, ecdf, INDEX, m_numBatch, m_p, m_sizeBatch, m_type-OfBatchStatistic, Mean, and Spacing.

Referenced by process().

8.4.4.10 void batching::collapseBatchStatistic (void) [private]

Definition at line 167 of file batching.cc.

References batchStatistic, INDEX, m_maxBatch, m_p, m_typeOfBatchStatistic, Mean, and Spacing.

Referenced by process().

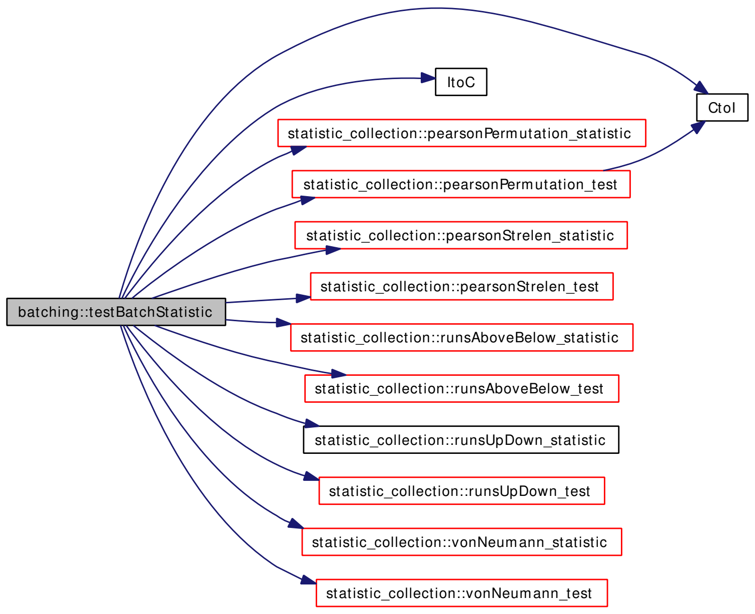
8.4.4.11 bool batching::testBatchStatistic (void) [private]

Definition at line 180 of file batching.cc.

References batchStatistic, CONTINUOUS, CtoI(), INDEX, ItoC(), lib_statistic, logfile, m_alpha, m_maxBatch, m_p, m_sizeBatch, m_typeOfIndependenceTest, statistic_collection::Pearson-Permutation, statistic_collection::pearsonPermutation_statistic(), statistic_collection::pearson-Permutation_test(), statistic_collection::PearsonStrelen, statistic_collection::pearsonStrelen_-statistic(), statistic_collection::pearsonStrelen_test(), statistic_collection::RunsAboveBelow, statistic_collection::runsAboveBelow_statistic(), statistic_collection::runsAboveBelow_test(), statistic_collection::RunsUpDown, statistic_collection::runsUpDown_statistic(), statistic_-collection::runsUpDown_test(), statistic_collection::VonNeuman, statistic_collection::von-Neumann_statistic(), and statistic_collection::vonNeumann_test().

Referenced by process().

Here is the call graph for this function:


batching::testBatchStatistic
ItoC
CtoI
statistic_collection::pearsonPermutation_statistic
statistic_collection::pearsonPermutation_test
statistic_collection::pearsonStrelen_statistic
statistic_collection::pearsonStrelen_test
statistic_collection::runsAboveBelow_statistic
statistic_collection::runsAboveBelow_test
statistic_collection::runsUpDown_statistic
statistic_collection::runsUpDown_test
statistic_collection::vonNeumann_statistic
statistic_collection::vonNeumann_test

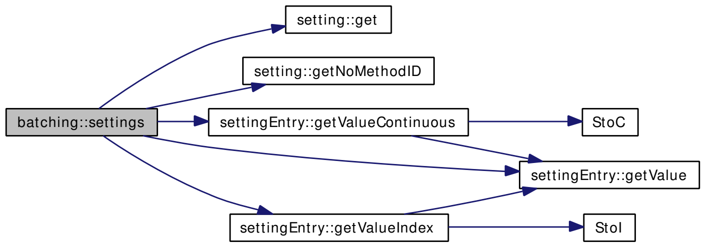
8.4.4.12 void batching::settings (void) `[private]`

Definition at line 275 of file batching.cc.

References setting::get(), setting::getNoMethodID(), settingEntry::getValue(), settingEntry::getValueContinuous(), settingEntry::getValueIndex(), lib_setting, m_alpha, m_maxBatch, m_p, m_sortedData, m_typeOfBatchStatistic, m_typeOfIndependenceTest, Mean, statistic_collection::PearsonPermutation, statistic_collection::PearsonStrelen, statistic_collection::RunsAboveBelow, statistic_collection::RunsUpDown, s_alpha, s_auto, s_batch_max, s_independence, s_mean, s_no, s_pearsonPermutation, s_pearsonStrelen, s_replications, s_runsAboveBelow, s_runsUpDown, s_sequential_batching, s_sort, s_spacing, s_statistic, s_vonNeumann, s_yes, Spacing, and statistic_collection::VonNeuman.

Referenced by batching().

Here is the call graph for this function:



8.4.5 Field Documentation

8.4.5.1 bool batching::m_isReady [private]

Definition at line 28 of file batching.h.

Referenced by getBatchSize(), isReady(), and process().

8.4.5.2 bool batching::m_sortedData [private]

Definition at line 29 of file batching.h.

Referenced by printSetting(), process(), and settings().

8.4.5.3 CONTINUOUS batching::m_alpha [private]

Definition at line 30 of file batching.h.

Referenced by printSetting(), settings(), and testBatchStatistic().

8.4.5.4 statistic_collection::TypeOfIndependenceTest batching::m_typeOfIndependenceTest [private]

Definition at line 31 of file batching.h.

Referenced by printSetting(), settings(), and testBatchStatistic().

8.4.5.5 TypeOfBatching batching::m_typeOfBatchStatistic [private]

Definition at line 32 of file batching.h.

Referenced by calculateBatchStatistic(), collapseBatchStatistic(), printSetting(), settings(), and updateBatchStatistic().

8.4.5.6 INDEX batching::m_sizeBatch [private]

Definition at line 33 of file batching.h.

Referenced by calculateBatchStatistic(), getBatchSize(), printResult(), printStatus(), process(), and testBatchStatistic().

8.4.5.7 INDEX batching::m_posBatch [private]

Definition at line 34 of file batching.h.

Referenced by printResult(), printStatus(), and process().

8.4.5.8 INDEX batching::m_maxBatch [private]

Definition at line 35 of file batching.h.

Referenced by batching(), collapseBatchStatistic(), printResult(), printSetting(), printStatus(), process(), settings(), and testBatchStatistic().

8.4.5.9 INDEX batching::m_numBatch `[private]`

Definition at line 36 of file batching.h.

Referenced by calculateBatchStatistic(), printResult(), printStatus(), and process().

8.4.5.10 INDEX batching::m_p `[private]`

Definition at line 37 of file batching.h.

Referenced by batching(), calculateBatchStatistic(), collapseBatchStatistic(), printResult(), printStatus(), process(), settings(), testBatchStatistic(), and updateBatchStatistic().

8.4.5.11 std::list<CONTINUOUS> batching::ecdf `[private]`

Definition at line 38 of file batching.h.

Referenced by calculateBatchStatistic(), process(), and updateBatchStatistic().

8.4.5.12 std::vector<CONTINUOUS> batching::accuBatch `[private]`

Definition at line 39 of file batching.h.

Referenced by batching(), calculateBatchStatistic(), and updateBatchStatistic().

8.4.5.13 std::vector< std::vector<CONTINUOUS> > batching::batchStatistic `[private]`

Definition at line 40 of file batching.h.

Referenced by batching(), calculateBatchStatistic(), collapseBatchStatistic(), and testBatchStatistic().

8.4.5.14 INDEX outputAnalyser::m_processedIndexes `[protected, inherited]`

Definition at line 20 of file basic.h.

Referenced by evolution::calculateQuantiles(), spectral_analysis_QE::checkQuantiles(), batch_mean_QE::checkQuantiles(), pooling_QE::checkQuantiles(), deterministic_TPD::isReady(), evolution::isReady(), sequential_TPD::printResult(), deterministic_TPD::printResult(), spectral_analysis_QE::printResult(), batch_mean_QE::printResult(), pooling_QE::printResult(), printResult(), sequential_TPD::printStatus(), deterministic_TPD::printStatus(), evolution::printStatus(), spectral_analysis_QE::printStatus(), batch_mean_QE::printStatus(), pooling_QE::printStatus(), printStatus(), sequential_TPD::process(), deterministic_TPD::process(), evolution::process(), spectral_analysis_QE::process(), batch_mean_QE::process(), pooling_QE::process(), process(), outputAnalyser::process(), sequential_TPD::sub_collect(), sequential_TPD::sub_compare(), and sequential_TPD::sub_initialize().

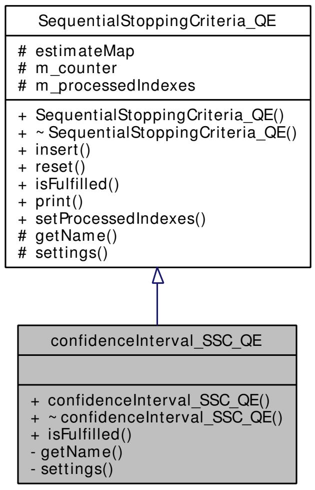
The documentation for this class was generated from the following files:

- **batching.h**
- **batching.cc**

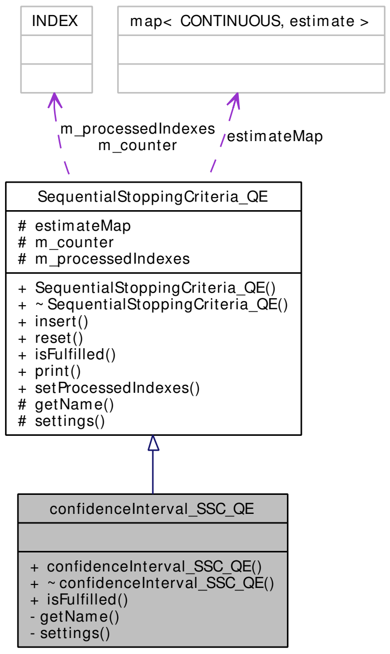
8.5 confidenceInterval_SSC_QE Class Reference

`#include <quantile_estimation.h>`

Inheritance diagram for confidenceInterval_SSC_QE:


SequentialStoppingCriteria_QE
# estimateMap
# m_counter
# m_processedIndexes
+ SequentialStoppingCriteria_QE()
+ ~SequentialStoppingCriteria_QE()
+ insert()
+ reset()
+ isFulfilled()
+ print()
+ setProcessedIndexes()
# getName()
# settings()
confidenceInterval_SSC_QE
+ confidenceInterval_SSC_QE()
+ ~confidenceInterval_SSC_QE()
+ isFulfilled()
- getName()
- settings()

Collaboration diagram for confidenceInterval_SSC_QE:



Public Member Functions

- **confidenceInterval_SSC_QE** (void)
- ~**confidenceInterval_SSC_QE** (void)
- bool **isFulfilled** (void)

- void **insert** (const CONTINUOUS &location, const CONTINUOUS &probability, const CONTINUOUS &absoluteErrorNeg, const CONTINUOUS &absoluteErrorPos)
- void **reset** (void)
- void **print** (bool isFinal=false)
- void **setProcessedIndexes** (INDEX i)

Protected Attributes

- std::map< CONTINUOUS, estimate > **estimateMap**
- INDEX **m_counter**
- INDEX **m_processedIndexes**

Private Member Functions

- std::string **getName** (void)
- void **settings** (void)

8.5.1 Detailed Description

Definition at line 151 of file quantile_estimation.h.

8.5.2 Constructor & Destructor Documentation

8.5.2.1 confidenceInterval_SSC_QE::confidenceInterval_SSC_QE (void)

Definition at line 798 of file quantile_estimation.cc.

8.5.2.2 confidenceInterval_SSC_QE::~confidenceInterval_SSC_QE (void)

Definition at line 803 of file quantile_estimation.cc.

8.5.3 Member Function Documentation

8.5.3.1 bool confidenceInterval_SSC_QE::isFulfilled (void) `[virtual]`

Reimplemented from **SequentialStoppingCriteria_QE** (p. 138).

Definition at line 806 of file quantile_estimation.cc.

8.5.3.2 std::string confidenceInterval_SSC_QE::getName (void) `[inline, private, virtual]`

Reimplemented from **SequentialStoppingCriteria_QE** (p. 138).

Definition at line 159 of file quantile_estimation.h.

References s_confidenceInterval_SSC_QE.

8.5.3.3 void confidenceInterval_SSC_QE::settings (void) `[private, virtual]`

Reimplemented from **SequentialStoppingCriteria_QE** (p. 139).

Definition at line 828 of file quantile_estimation.cc.

8.5.3.4 void SequentialStoppingCriteria_QE::insert (const CONTINUOUS & *location*, const CONTINUOUS & *probability*, const CONTINUOUS & *absoluteErrorNeg*, const CONTINUOUS & *absoluteErrorPos*) `[inherited]`

Definition at line 627 of file quantile_estimation.cc.

References SequentialStoppingCriteria_QE::estimate::absoluteErrorNeg, SequentialStoppingCriteria_QE::estimate::absoluteErrorPos, SequentialStoppingCriteria_QE::estimateMap, SequentialStoppingCriteria_QE::estimate::location, and SequentialStoppingCriteria_-QE::estimate::probability.

Referenced by spectral_analysis_QE::checkQuantiles(), batch_mean_QE::checkQuantiles(), and pooling_QE::checkQuantiles().

8.5.3.5 void SequentialStoppingCriteria_QE::reset (void) `[inherited]`

Definition at line 639 of file quantile_estimation.cc.

References SequentialStoppingCriteria_QE::estimateMap.

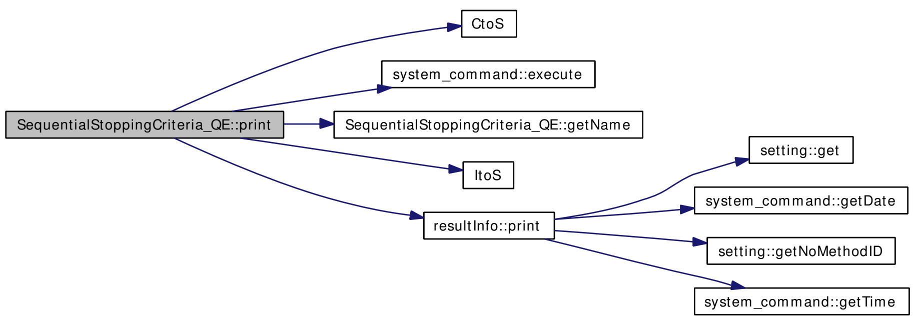
Referenced by spectral_analysis_QE::checkQuantiles(), batch_mean_QE::checkQuantiles(), and pooling_QE::checkQuantiles().

8.5.3.6 void SequentialStoppingCriteria_QE::print (bool *isFinal* = `false`) `[inherited]`

Definition at line 652 of file quantile_estimation.cc.

References CONTINUOUS, CtoS(), SequentialStoppingCriteria_QE::estimateMap, system_-command::execute(), SequentialStoppingCriteria_QE::getName(), ItoS(), lib_system, Sequential-StoppingCriteria_QE::m_counter, SequentialStoppingCriteria_QE::m_processedIndexes, result-Info::print(), and resultfile.

Here is the call graph for this function:



8.5.3.7 void SequentialStoppingCriteria_QE::setProcessedIndexes (INDEX *i*) `[inline, inherited]`

Definition at line 118 of file quantile_estimation.h.

References SequentialStoppingCriteria_QE::m_processedIndexes.

Referenced by spectral_analysis_QE::checkQuantiles(), batch_mean_QE::checkQuantiles(), and pooling_QE::checkQuantiles().

8.5.4 Field Documentation

8.5.4.1 std::map<CONTINUOUS,estimate> SequentialStoppingCriteria_-QE::estimateMap `[protected, inherited]`

Definition at line 131 of file quantile_estimation.h.

Referenced by SequentialStoppingCriteria_QE::insert(), SequentialStoppingCriteria_QE::print(), and SequentialStoppingCriteria_QE::reset().

8.5.4.2 INDEX SequentialStoppingCriteria_QE::m_counter `[protected, inherited]`

Definition at line 132 of file quantile_estimation.h.

Referenced by SequentialStoppingCriteria_QE::print().

8.5.4.3 INDEX SequentialStoppingCriteria_QE::m_processedIndexes `[protected, inherited]`

Definition at line 133 of file quantile_estimation.h.

Referenced by SequentialStoppingCriteria_QE::print(), and SequentialStoppingCriteria_QE::set-ProcessedIndexes().

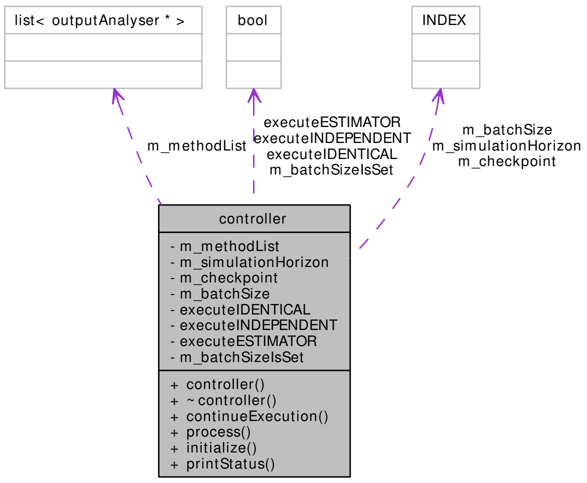
The documentation for this class was generated from the following files:

- **quantile_estimation.h**
- **quantile_estimation.cc**

8.6 controller Class Reference

`#include <controller.h>`

Collaboration diagram for controller:



Public Member Functions

- **controller** (void)
- ~**controller** (void)
- bool **continueExecution** (void) const
- void **process** (const std::list< CONTINUOUS > &)
- void **initialize** (void)
- void **printStatus** (void) const

Private Attributes

- std::list< **outputAnalyser** ∗ > **m_methodList**
- INDEX **m_simulationHorizon**
- INDEX **m_checkpoint**
- INDEX **m_batchSize**
- bool **executeIDENTICAL**
- bool **executeINDEPENDENT**
- bool **executeESTIMATOR**
- bool **m_batchSizeIsSet**

8.6.1 Detailed Description

Definition at line 9 of file controller.h.

8.6.2 Constructor & Destructor Documentation

8.6.2.1 controller::controller (void)

Definition at line 9 of file controller.cc.

References m_methodList.

8.6.2.2 controller::∼controller (void)

Definition at line 20 of file controller.cc.

References m_methodList.

8.6.3 Member Function Documentation

8.6.3.1 bool controller::continueExecution (void) const

Definition at line 28 of file controller.cc.

References m_methodList.

Referenced by main().

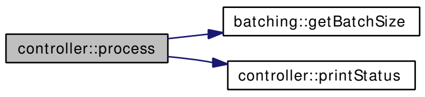
8.6.3.2 void controller::process (const std::list< CONTINUOUS > &)

Definition at line 32 of file controller.cc.

References ESTIMATOR, EVOLUTION, executeESTIMATOR, executeIDENTICAL, executeINDEPENDENT, batching::getBatchSize(), IDENTICAL, INDEPENDENT, logfile, m_batchSize, m_batchSizeIsSet, m_checkpoint, m_methodList, m_simulationHorizon, and printStatus().

Referenced by main().

Here is the call graph for this function:



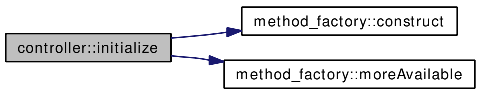
8.6.3.3 void controller::initialize (void)

Definition at line 141 of file controller.cc.

References method_factory::construct(), m_methodList, and method_factory::moreAvailable().

Referenced by main().

Here is the call graph for this function:



8.6.3.4 void controller::printStatus (void) const

Definition at line 147 of file controller.cc.

References logfile, m_methodList, and m_simulationHorizon.

Referenced by main(), and process().

8.6.4 Field Documentation

8.6.4.1 std::list<outputAnalyser*> controller::m_methodList `[private]`

Definition at line 20 of file controller.h.

Referenced by continueExecution(), controller(), initialize(), printStatus(), process(), and ∼controller().

8.6.4.2 INDEX controller::m_simulationHorizon `[private]`

Definition at line 21 of file controller.h.

Referenced by printStatus(), and process().

8.6.4.3 INDEX controller::m_checkpoint `[private]`

Definition at line 22 of file controller.h.

Referenced by process().

8.6.4.4 INDEX controller::m_batchSize `[private]`

Definition at line 23 of file controller.h.

Referenced by process().

8.6.4.5 bool controller::executeIDENTICAL `[private]`

Definition at line 25 of file controller.h.

Referenced by process().

8.6.4.6 bool controller::executeINDEPENDENT `[private]`

Definition at line 26 of file controller.h.

Referenced by process().

8.6.4.7 bool controller::executeESTIMATOR `[private]`

Definition at line 27 of file controller.h.

Referenced by process().

8.6.4.8 bool controller::m_batchSizeIsSet [private]

Definition at line 28 of file controller.h.

Referenced by process().

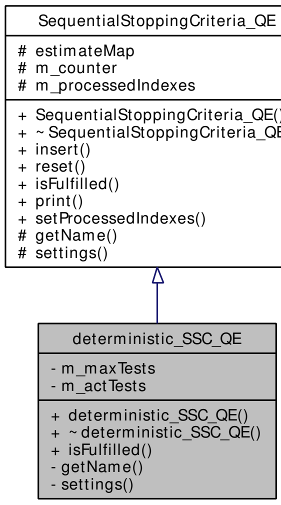
The documentation for this class was generated from the following files:

- **controller.h**
- **controller.cc**

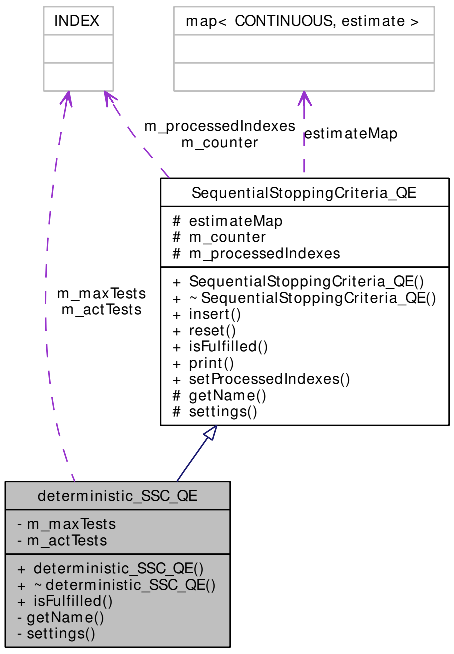
8.7 deterministic_SSC_QE Class Reference

`#include <quantile_estimation.h>`

Inheritance diagram for deterministic_SSC_QE:



Collaboration diagram for deterministic_SSC_QE:



Public Member Functions

- **deterministic_SSC_QE** (void)
- **~deterministic_SSC_QE** (void)

- bool **isFulfilled** (void)
- void **insert** (const CONTINUOUS &location, const CONTINUOUS &probability, const CONTINUOUS &absoluteErrorNeg, const CONTINUOUS &absoluteErrorPos)
- void **reset** (void)
- void **print** (bool isFinal=false)
- void **setProcessedIndexes** (INDEX i)

Protected Attributes

- std::map< CONTINUOUS, estimate > **estimateMap**
- INDEX **m_counter**
- INDEX **m_processedIndexes**

Private Member Functions

- std::string **getName** (void)
- void **settings** (void)

Private Attributes

- INDEX **m_maxTests**
- INDEX **m_actTests**

8.7.1 Detailed Description

Definition at line 136 of file quantile_estimation.h.

8.7.2 Constructor & Destructor Documentation

8.7.2.1 deterministic_SSC_QE::deterministic_SSC_QE (void)

Definition at line 769 of file quantile_estimation.cc.

8.7.2.2 deterministic_SSC_QE::~deterministic_SSC_QE (void)

Definition at line 776 of file quantile_estimation.cc.

8.7.3 Member Function Documentation

8.7.3.1 bool deterministic_SSC_QE::isFulfilled (void) `[virtual]`

Reimplemented from **SequentialStoppingCriteria_QE** (p. 138).

Definition at line 779 of file quantile_estimation.cc.

8.7.3.2 std::string deterministic_SSC_QE::getName (void) `[inline, private, virtual]`

Reimplemented from **SequentialStoppingCriteria_QE** (p. 138).

Definition at line 144 of file quantile_estimation.h.

References s_deterministic_SSC_QE.

8.7.3.3 void deterministic_SSC_QE::settings (void) `[private, virtual]`

Reimplemented from **SequentialStoppingCriteria_QE** (p. 139).

Definition at line 785 of file quantile_estimation.cc.

8.7.3.4 void SequentialStoppingCriteria_QE::insert (const CONTINUOUS & *location*, const CONTINUOUS & *probability*, const CONTINUOUS & *absoluteErrorNeg*, const CONTINUOUS & *absoluteErrorPos*) `[inherited]`

Definition at line 627 of file quantile_estimation.cc.

References SequentialStoppingCriteria_QE::estimate::absoluteErrorNeg, SequentialStopping-Criteria_QE::estimate::absoluteErrorPos, SequentialStoppingCriteria_QE::estimateMap, SequentialStoppingCriteria_QE::estimate::location, and SequentialStoppingCriteria_-QE::estimate::probability.

Referenced by spectral_analysis_QE::checkQuantiles(), batch_mean_QE::checkQuantiles(), and pooling_QE::checkQuantiles().

8.7.3.5 void SequentialStoppingCriteria_QE::reset (void) `[inherited]`

Definition at line 639 of file quantile_estimation.cc.

References SequentialStoppingCriteria_QE::estimateMap.

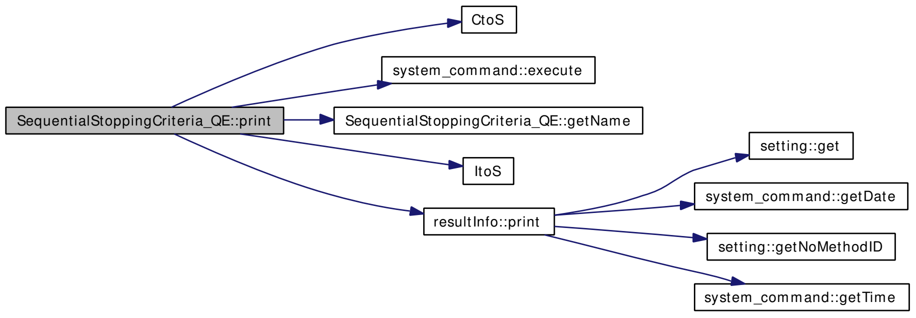
Referenced by spectral_analysis_QE::checkQuantiles(), batch_mean_QE::checkQuantiles(), and pooling_QE::checkQuantiles().

8.7.3.6 void SequentialStoppingCriteria_QE::print (bool *isFinal* = `false`) `[inherited]`

Definition at line 652 of file quantile_estimation.cc.

References CONTINUOUS, CtoS(), SequentialStoppingCriteria_QE::estimateMap, system_-command::execute(), SequentialStoppingCriteria_QE::getName(), ItoS(), lib_system, Sequential-StoppingCriteria_QE::m_counter, SequentialStoppingCriteria_QE::m_processedIndexes, result-Info::print(), and resultfile.

Here is the call graph for this function:



8.7.3.7 void SequentialStoppingCriteria_QE::setProcessedIndexes (INDEX *i*) `[inline, inherited]`

Definition at line 118 of file quantile_estimation.h.

References SequentialStoppingCriteria_QE::m_processedIndexes.

Referenced by spectral_analysis_QE::checkQuantiles(), batch_mean_QE::checkQuantiles(), and pooling_QE::checkQuantiles().

8.7.4 Field Documentation

8.7.4.1 INDEX deterministic_SSC_QE::m_maxTests `[private]`

Definition at line 147 of file quantile_estimation.h.

8.7.4.2 INDEX deterministic_SSC_QE::m_actTests `[private]`

Definition at line 148 of file quantile_estimation.h.

8.7.4.3 std::map<CONTINUOUS,estimate> SequentialStoppingCriteria_-QE::estimateMap `[protected, inherited]`

Definition at line 131 of file quantile_estimation.h.

Referenced by SequentialStoppingCriteria_QE::insert(), SequentialStoppingCriteria_QE::print(), and SequentialStoppingCriteria_QE::reset().

8.7.4.4 INDEX SequentialStoppingCriteria_QE::m_counter `[protected, inherited]`

Definition at line 132 of file quantile_estimation.h.

Referenced by SequentialStoppingCriteria_QE::print().

8.7.4.5 INDEX SequentialStoppingCriteria_QE::m_processedIndexes `[protected, inherited]`

Definition at line 133 of file quantile_estimation.h.

Referenced by SequentialStoppingCriteria_QE::print(), and SequentialStoppingCriteria_QE::set-ProcessedIndexes().

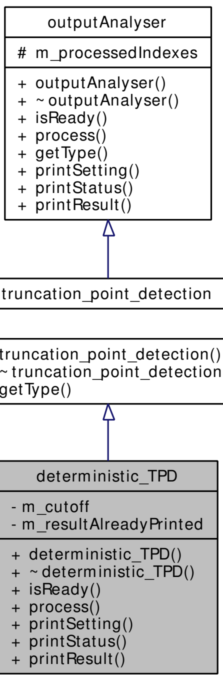
The documentation for this class was generated from the following files:

- **quantile_estimation.h**
- **quantile_estimation.cc**

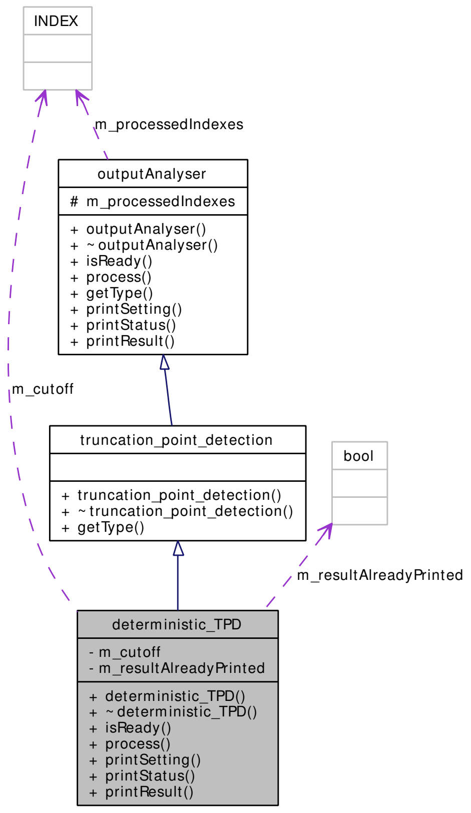
8.8 deterministic_TPD Class Reference

`#include <truncation_point_detection.h>`

Inheritance diagram for deterministic_TPD:



Collaboration diagram for deterministic_TPD:



Public Member Functions

- **deterministic_TPD** (void)
- ~**deterministic_TPD** (void)
- bool **isReady** (void) const
- void **process** (const std::list< CONTINUOUS > &)
- void **printSetting** (void)
- void **printStatus** (void)
- void **printResult** (void)
- virtual **TypeOfMethod** **getType** (void) const

Protected Attributes

- INDEX **m_processedIndexes**

Private Attributes

- INDEX **m_cutoff**
- bool **m_resultAlreadyPrinted**

8.8.1 Detailed Description

Definition at line 14 of file truncation_point_detection.h.

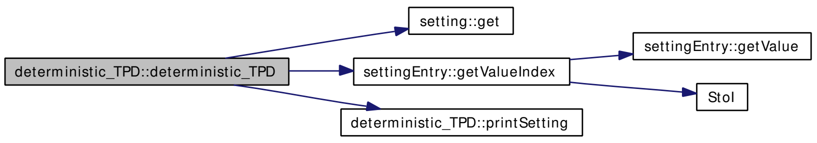
8.8.2 Constructor & Destructor Documentation

8.8.2.1 deterministic_TPD::deterministic_TPD (void)

Definition at line 22 of file truncation_point_detection.cc.

References setting::get(), settingEntry::getValueIndex(), lib_setting, m_cutoff, printSetting(), s_cutoff, and s_deterministic_TPD.

Here is the call graph for this function:


setting::get
settingEntry::getValue
deterministic_TPD::deterministic_TPD
settingEntry::getValueIndex
StoI
deterministic_TPD::printSetting

8.8.2.2 deterministic_TPD::~deterministic_TPD (void)

Definition at line 34 of file truncation_point_detection.cc.

8.8.3 Member Function Documentation

8.8.3.1 bool deterministic_TPD::isReady (void) const `[virtual]`

Reimplemented from **outputAnalyser** (p. 183).

Definition at line 38 of file truncation_point_detection.cc.

References m_cutoff, and outputAnalyser::m_processedIndexes.

Referenced by process().

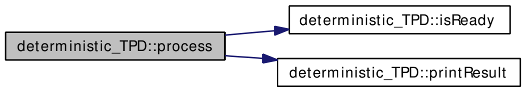
8.8.3.2 void deterministic_TPD::process (const std::list< CONTINUOUS > &) `[virtual]`

Reimplemented from **outputAnalyser** (p. 183).

Definition at line 43 of file truncation_point_detection.cc.

References isReady(), outputAnalyser::m_processedIndexes, and printResult().

Here is the call graph for this function:


deterministic_TPD::isReady
deterministic_TPD::process
deterministic_TPD::printResult

8.8.3.3 void deterministic_TPD::printSetting (void) `[virtual]`

Reimplemented from **outputAnalyser** (p. 183).

Definition at line 48 of file truncation_point_detection.cc.

References logfile, m_cutoff, s_cutoff, s_deterministic_TPD, s_execute, and s_yes.

Referenced by deterministic_TPD().

8.8.3.4 void deterministic_TPD::printStatus (void) `[virtual]`

Reimplemented from **outputAnalyser** (p. 183).

Definition at line 59 of file truncation_point_detection.cc.

References logfile, m_cutoff, outputAnalyser::m_processedIndexes, and s_deterministic_TPD.

8.8.3.5 void deterministic_TPD::printResult (void) `[virtual]`

Reimplemented from **outputAnalyser** (p. 183).

Definition at line 66 of file truncation_point_detection.cc.

References logfile, m_cutoff, outputAnalyser::m_processedIndexes, m_resultAlreadyPrinted, and s_deterministic_TPD.

Referenced by process().

8.8.3.6 TypeOfMethod truncation_point_detection::getType (void) const `[virtual, inherited]`

Reimplemented from **outputAnalyser** (p. 87).

Definition at line 14 of file truncation_point_detection.cc.

References IDENTICAL.

8.8.4 Field Documentation

8.8.4.1 INDEX deterministic_TPD::m_cutoff `[private]`

Definition at line 25 of file truncation_point_detection.h.

Referenced by deterministic_TPD(), isReady(), printResult(), printSetting(), and printStatus().

8.8.4.2 bool deterministic_TPD::m_resultAlreadyPrinted `[private]`

Definition at line 26 of file truncation_point_detection.h.

Referenced by printResult().

8.8.4.3 INDEX outputAnalyser::m_processedIndexes `[protected, inherited]`

Definition at line 20 of file basic.h.

Referenced by evolution::calculateQuantiles(), spectral_analysis_QE::checkQuantiles(), batch_-mean_QE::checkQuantiles(), pooling_QE::checkQuantiles(), isReady(), evolution::isReady(), sequential_TPD::printResult(), printResult(), spectral_analysis_QE::printResult(), batch_-mean_QE::printResult(), pooling_QE::printResult(), batching::printResult(), sequential_-TPD::printStatus(), printStatus(), evolution::printStatus(), spectral_analysis_QE::print-Status(), batch_mean_QE::printStatus(), pooling_QE::printStatus(), batching::print-Status(), sequential_TPD::process(), process(), evolution::process(), spectral_analysis_-QE::process(), batch_mean_QE::process(), pooling_QE::process(), batching::process(), output-Analyser::process(), sequential_TPD::sub_collect(), sequential_TPD::sub_compare(), and sequential_TPD::sub_initialize().

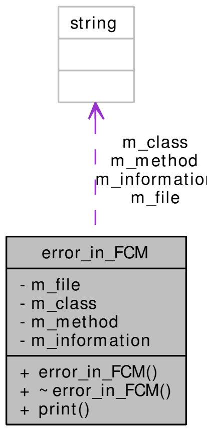
The documentation for this class was generated from the following files:

- **truncation_point_detection.h**
- **truncation_point_detection.cc**

8.9 error_in_FCM Class Reference

`#include <error.h>`

Collaboration diagram for error_in_FCM:



Public Member Functions

- **error_in_FCM** (const std::string &f, const std::string &c, const std::string &m, const std::string &i)
- ~**error_in_FCM** ()
- const std::string **print** (void)

Private Attributes

- const std::string **m_file**
- const std::string **m_class**
- const std::string **m_method**
- const std::string **m_information**

8.9.1 Detailed Description

Definition at line 8 of file error.h.

8.9.2 Constructor & Destructor Documentation

8.9.2.1 error_in_FCM::error_in_FCM (const std::string & *f*, const std::string & *c*, const std::string & *m*, const std::string & *i*)

Definition at line 4 of file error.cc.

8.9.2.2 error_in_FCM::~error_in_FCM ()

Definition at line 14 of file error.cc.

8.9.3 Member Function Documentation

8.9.3.1 const std::string error_in_FCM::print (void)

Definition at line 17 of file error.cc.

References m_class, m_file, m_information, and m_method.

Referenced by main().

8.9.4 Field Documentation

8.9.4.1 const std::string error_in_FCM::m_file `[private]`

Definition at line 16 of file error.h.

Referenced by print().

8.9.4.2 const std::string error_in_FCM::m_class `[private]`

Definition at line 17 of file error.h.

Referenced by print().

8.9.4.3 const std::string error_in_FCM::m_method `[private]`

Definition at line 18 of file error.h.

Referenced by print().

8.9.4.4 const std::string error_in_FCM::m_information `[private]`

Definition at line 19 of file error.h.

Referenced by print().

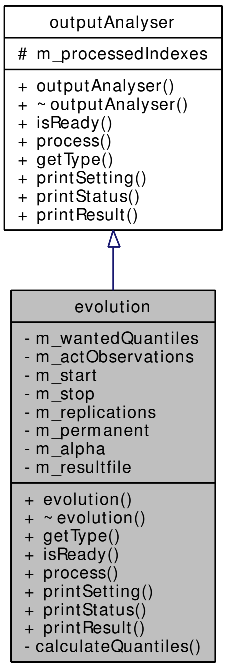
The documentation for this class was generated from the following files:

- **error.h**
- **error.cc**

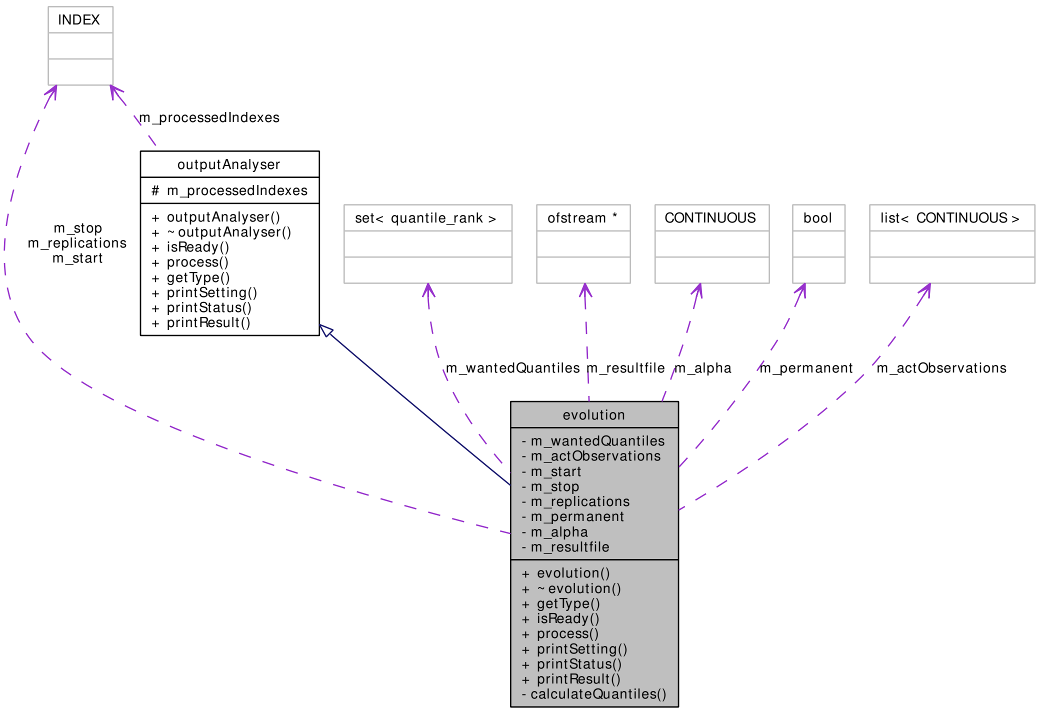
8.10 evolution Class Reference

`#include <time_evolution.h>`

Inheritance diagram for evolution:



Collaboration diagram for evolution:



Public Member Functions

- **evolution** (void)
- ~**evolution** (void)
- **TypeOfMethod getType** (void) const
- bool **isReady** (void) const
- void **process** (const std::list< CONTINUOUS > &)
- void **printSetting** (void)
- void **printStatus** (void)
- void **printResult** (void)

Protected Attributes

- INDEX **m_processedIndexes**

Private Member Functions

- void **calculateQuantiles** (void)

Private Attributes

- std::set< **quantile_rank** > **m_wantedQuantiles**
- std::list< CONTINUOUS > **m_actObservations**
- INDEX **m_start**
- INDEX **m_stop**
- INDEX **m_replications**

- bool **m_permanent**
- CONTINUOUS **m_alpha**
- std::ofstream ∗ **m_resultfile**

8.10.1 Detailed Description

Definition at line 7 of file time_evolution.h.

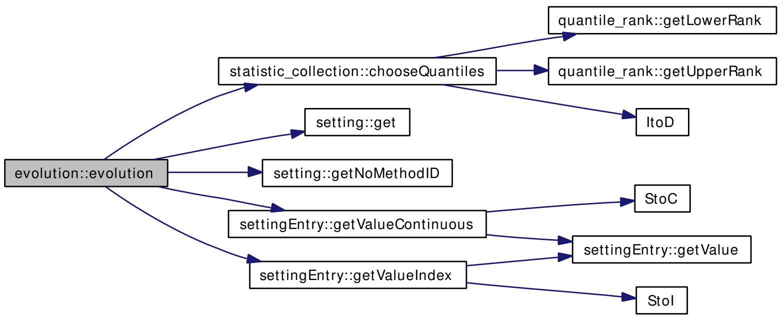
8.10.2 Constructor & Destructor Documentation

8.10.2.1 evolution::evolution (void)

Definition at line 4 of file time_evolution.cc.

References statistic_collection::chooseQuantiles(), setting::get(), setting::getNoMethodID(), settingEntry::getValueContinuous(), settingEntry::getValueIndex(), lib_setting, lib_statistic, m_alpha, m_permanent, m_replications, m_resultfile, m_start, m_stop, m_wantedQuantiles, s_alpha, s_evolution, s_replications, s_start, and s_stop.

Here is the call graph for this function:

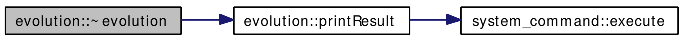

quantile_rank::getLowerRank
statistic_collection::chooseQuantiles
quantile_rank::getUpperRank
setting::get
ItoD
evolution::evolution
setting::getNoMethodID
StoC
settingEntry::getValueContinuous
settingEntry::getValue
settingEntry::getValueIndex
StoI

8.10.2.2 evolution::∼evolution (void)

Definition at line 96 of file time_evolution.cc.

References m_permanent, and printResult().

Here is the call graph for this function:



8.10.3 Member Function Documentation

8.10.3.1 TypeOfMethod evolution::getType (void) const `[virtual]`

Reimplemented from **outputAnalyser** (p. 87).

Definition at line 120 of file time_evolution.cc.

References EVOLUTION.

8.10.3.2 bool evolution::isReady (void) const `[virtual]`

Reimplemented from **outputAnalyser** (p. 183).

Definition at line 100 of file time_evolution.cc.

References m_permanent, outputAnalyser::m_processedIndexes, and m_stop.

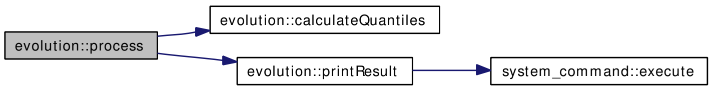
8.10.3.3 void evolution::process (const std::list< CONTINUOUS > &) `[virtual]`

Reimplemented from **outputAnalyser** (p. 183).

Definition at line 106 of file time_evolution.cc.

References calculateQuantiles(), m_actObservations, m_permanent, outputAnalyser::m_-processedIndexes, m_replications, m_start, m_stop, m_wantedQuantiles, and printResult().

Here is the call graph for this function:



8.10.3.4 void evolution::printSetting (void) `[virtual]`

Reimplemented from **outputAnalyser** (p. 183).

Definition at line 124 of file time_evolution.cc.

References logfile, m_permanent, m_start, m_stop, m_wantedQuantiles, s_evolution, s_-execute, s_no, s_permanent, s_start, s_stop, and s_yes.

8.10.3.5 void evolution::printStatus (void) `[virtual]`

Reimplemented from **outputAnalyser** (p. 183).

Definition at line 143 of file time_evolution.cc.

References logfile, m_permanent, outputAnalyser::m_processedIndexes, m_start, m_stop, s_-evolution, s_no, s_permanent, s_start, s_stop, and s_yes.

8.10.3.6 void evolution::printResult (void) `[virtual]`

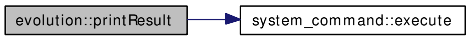
Reimplemented from **outputAnalyser** (p. 183).

Definition at line 155 of file time_evolution.cc.

References system_command::execute(), lib_system, m_resultfile, and s_evolution.

Referenced by process(), and ~evolution().

Here is the call graph for this function:



8.10.3.7 void evolution::calculateQuantiles (void) [private]

Definition at line 167 of file time_evolution.cc.

References INDEX, m_actObservations, outputAnalyser::m_processedIndexes, m_resultfile, and m_wantedQuantiles.

Referenced by process().

8.10.4 Field Documentation

8.10.4.1 std::set<quantile_rank> evolution::m_wantedQuantiles [private]

Definition at line 22 of file time_evolution.h.

Referenced by calculateQuantiles(), evolution(), printSetting(), and process().

8.10.4.2 std::list<CONTINUOUS> evolution::m_actObservations [private]

Definition at line 23 of file time_evolution.h.

Referenced by calculateQuantiles(), and process().

8.10.4.3 INDEX evolution::m_start [private]

Definition at line 24 of file time_evolution.h.

Referenced by evolution(), printSetting(), printStatus(), and process().

8.10.4.4 INDEX evolution::m_stop [private]

Definition at line 25 of file time_evolution.h.

Referenced by evolution(), isReady(), printSetting(), printStatus(), and process().

8.10.4.5 INDEX evolution::m_replications [private]

Definition at line 26 of file time_evolution.h.

Referenced by evolution(), and process().

8.10.4.6 bool evolution::m_permanent [private]

Definition at line 27 of file time_evolution.h.

Referenced by evolution(), isReady(), printSetting(), printStatus(), process(), and ∼evolution().

8.10.4.7 CONTINUOUS evolution::m_alpha [private]

Definition at line 28 of file time_evolution.h.

Referenced by evolution().

8.10.4.8 std::ofstream∗ evolution::m_resultfile [private]

Definition at line 29 of file time_evolution.h.

Referenced by calculateQuantiles(), evolution(), and printResult().

8.10.4.9 INDEX outputAnalyser::m_processedIndexes [protected, inherited]

Definition at line 20 of file basic.h.

Referenced by calculateQuantiles(), spectral_analysis_QE::checkQuantiles(), batch_mean_-QE::checkQuantiles(), pooling_QE::checkQuantiles(), deterministic_TPD::isReady(), isReady(), sequential_TPD::printResult(), deterministic_TPD::printResult(), spectral_analysis_QE::print-Result(), batch_mean_QE::printResult(), pooling_QE::printResult(), batching::printResult(), sequential_TPD::printStatus(), deterministic_TPD::printStatus(), printStatus(), spectral_-analysis_QE::printStatus(), batch_mean_QE::printStatus(), pooling_QE::printStatus(), batching::printStatus(), sequential_TPD::process(), deterministic_TPD::process(), pro-cess(), spectral_analysis_QE::process(), batch_mean_QE::process(), pooling_QE::process(), batching::process(), outputAnalyser::process(), sequential_TPD::sub_collect(), sequential_-TPD::sub_compare(), and sequential_TPD::sub_initialize().

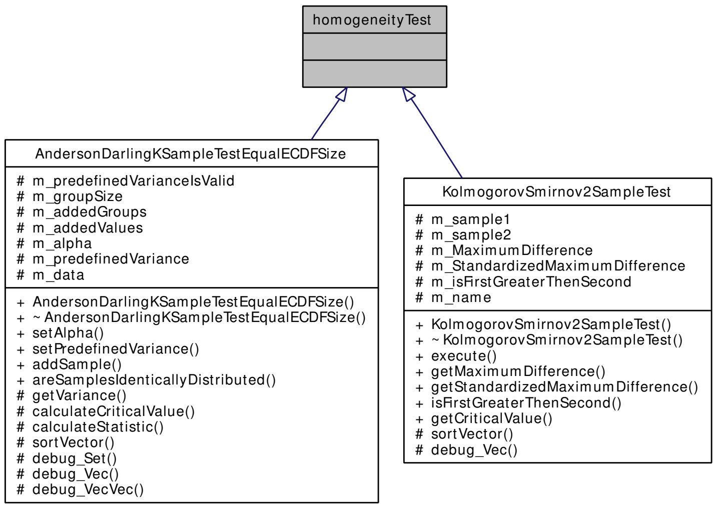
The documentation for this class was generated from the following files:

- **time_evolution.h**
- **time_evolution.cc**

8.11 homogeneityTest Class Reference

`#include <homogeneityTests.h>`

Inheritance diagram for homogeneityTest:


homogeneityTest
AndersonDarlingKSampleTestEqualECDFSize
# m_predefinedVarianceIsValid
# m_groupSize
# m_addedGroups
# m_addedValues
# m_alpha
# m_predefinedVariance
# m_data
+ AndersonDarlingKSampleTestEqualECDFSize()
+ ~AndersonDarlingKSampleTestEqualECDFSize()
+ setAlpha()
+ setPredefinedVariance()
+ addSample()
+ areSamplesIdenticallyDistributed()
# getVariance()
# calculateCriticalValue()
# calculateStatistic()
# sortVector()
# debug_Set()
# debug_Vec()
# debug_VecVec()
KolmogorovSmirnov2SampleTest
# m_sample1
# m_sample2
# m_MaximumDifference
# m_StandardizedMaximumDifference
# m_isFirstGreaterThenSecond
# m_name
+ KolmogorovSmirnov2SampleTest()
+ ~KolmogorovSmirnov2SampleTest()
+ execute()
+ getMaximumDifference()
+ getStandardizedMaximumDifference()
+ isFirstGreaterThenSecond()
+ getCriticalValue()
# sortVector()
# debug_Vec()

8.11.1 Detailed Description

Definition at line 9 of file homogeneityTests.h.

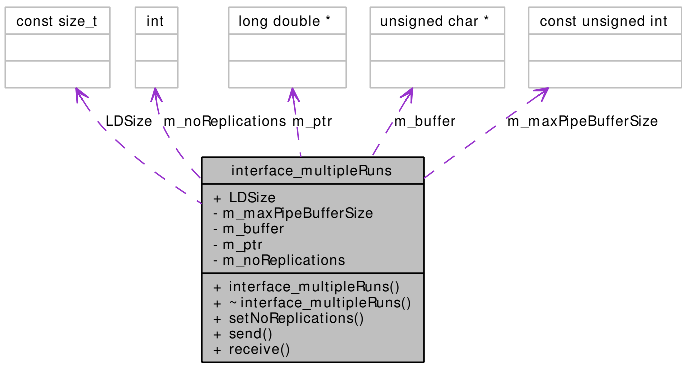
The documentation for this class was generated from the following file:

- **homogeneityTests.h**

8.12 interface_multipleRuns Class Reference

`#include <interface.h>`

Collaboration diagram for interface_multipleRuns:



Public Member Functions

- **interface_multipleRuns** (void)
- ∼**interface_multipleRuns** (void)
- void **setNoReplications** (int replications)
- bool **send** (const std::list< long double > &, int=STDOUT_FILENO)
- bool **receive** (std::list< long double > &, int=STDIN_FILENO)

Data Fields

- const size_t **LDSize**

Private Attributes

- const unsigned int **m_maxPipeBufferSize**
- unsigned char ∗ **m_buffer**
- long double ∗ **m_ptr**
- int **m_noReplications**

8.12.1 Detailed Description

Definition at line 29 of file interface.h.

8.12.2 Constructor & Destructor Documentation

8.12.2.1 interface_multipleRuns::interface_multipleRuns (void)

Definition at line 67 of file interface.cc.

References m_ptr.

8.12.2.2 interface_multipleRuns::∼interface_multipleRuns (void)

Definition at line 74 of file interface.cc.

References m_buffer, and m_ptr.

8.12.3 Member Function Documentation

8.12.3.1 void interface_multipleRuns::setNoReplications (int *replications*)

Definition at line 80 of file interface.cc.

References LDSize, m_buffer, and m_noReplications.

Referenced by main().

8.12.3.2 bool interface_multipleRuns::send (const std::list< long double > &, int = `STDOUT_FILENO`)

Definition at line 86 of file interface.cc.

References LDSize, m_buffer, m_maxPipeBufferSize, m_noReplications, and m_ptr.

8.12.3.3 bool interface_multipleRuns::receive (std::list< long double > &, int = `STDIN_FILENO`)

Definition at line 121 of file interface.cc.

References LDSize, m_buffer, m_maxPipeBufferSize, m_noReplications, and m_ptr.

Referenced by main().

8.12.4 Field Documentation

8.12.4.1 const size_t interface_multipleRuns::LDSize

Definition at line 35 of file interface.h.

Referenced by receive(), send(), and setNoReplications().

8.12.4.2 const unsigned int interface_multipleRuns::m_maxPipeBufferSize `[private]`

Definition at line 41 of file interface.h.

Referenced by receive(), and send().

8.12.4.3 unsigned char∗ interface_multipleRuns::m_buffer `[private]`

Definition at line 42 of file interface.h.

Referenced by receive(), send(), setNoReplications(), and ∼interface_multipleRuns().

8.12.4.4 long double∗ interface_multipleRuns::m_ptr [private]

Definition at line 43 of file interface.h.

Referenced by interface_multipleRuns(), receive(), send(), and ∼interface_multipleRuns().

8.12.4.5 int interface_multipleRuns::m_noReplications [private]

Definition at line 44 of file interface.h.

Referenced by receive(), send(), and setNoReplications().

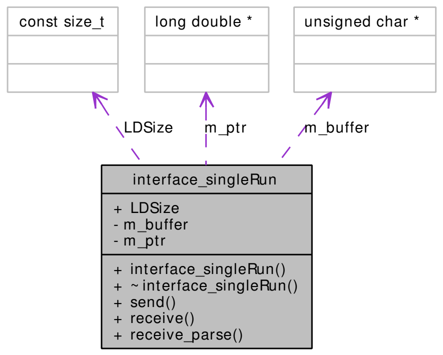
The documentation for this class was generated from the following files:

- **interface.h**
- **interface.cc**

8.13 interface_singleRun Class Reference

`#include <interface.h>`

Collaboration diagram for interface_singleRun:



Public Member Functions

- **interface_singleRun** (void)
- ~**interface_singleRun** (void)
- bool **send** (const long double &, int=STDOUT_FILENO)
- bool **receive** (long double &, int=STDIN_FILENO)
- bool **receive_parse** (long double &, int=STDIN_FILENO)

Data Fields

- const size_t **LDSize**

Private Attributes

- unsigned char ∗ **m_buffer**
- long double ∗ **m_ptr**

8.13.1 Detailed Description

Definition at line 13 of file interface.h.

8.13.2 Constructor & Destructor Documentation

8.13.2.1 interface_singleRun::interface_singleRun (void)

Definition at line 13 of file interface.cc.

References LDSize, m_buffer, and m_ptr.

8.13.2.2 interface_singleRun::∼interface_singleRun (void)

Definition at line 19 of file interface.cc.

References m_buffer, and m_ptr.

8.13.3 Member Function Documentation

8.13.3.1 bool interface_singleRun::send (const long double &, int = `STDOUT_FILENO`)

Definition at line 25 of file interface.cc.

References LDSize, m_buffer, and m_ptr.

8.13.3.2 bool interface_singleRun::receive (long double &, int = `STDIN_FILENO`)

Definition at line 35 of file interface.cc.

References LDSize, m_buffer, and m_ptr.

8.13.3.3 bool interface_singleRun::receive_parse (long double &, int = `STDIN_FILENO`)

Definition at line 45 of file interface.cc.

8.13.4 Field Documentation

8.13.4.1 const size_t interface_singleRun::LDSize

Definition at line 18 of file interface.h.

Referenced by interface_singleRun(), receive(), and send().

8.13.4.2 unsigned char∗ interface_singleRun::m_buffer `[private]`

Definition at line 25 of file interface.h.

Referenced by interface_singleRun(), receive(), send(), and ∼interface_singleRun().

8.13.4.3 long double∗ interface_singleRun::m_ptr `[private]`

Definition at line 26 of file interface.h.

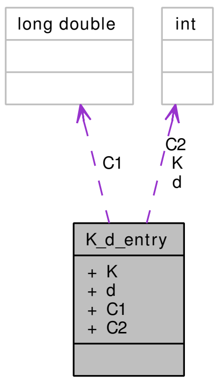
Referenced by interface_singleRun(), receive(), send(), and ∼interface_singleRun().

The documentation for this class was generated from the following files:

- **interface.h**
- **interface.cc**

8.14 K_d_entry Struct Reference

Collaboration diagram for K_d_entry:



Data Fields

- int **K**
- int **d**
- long double **C1**
- int **C2**

8.14.1 Detailed Description

Definition at line 154 of file akaroa_import.cc.

8.14.2 Field Documentation

8.14.2.1 int K_d_entry::K

Definition at line 154 of file akaroa_import.cc.

Referenced by akaroa_import::LookUp_K_d().

8.14.2.2 int K_d_entry::d

Definition at line 154 of file akaroa_import.cc.

Referenced by akaroa_import::LookUp_K_d().

8.14.2.3 long double K_d_entry::C1

Definition at line 154 of file akaroa_import.cc.

Referenced by akaroa_import::LookUp_K_d().

8.14.2.4 int K_d_entry::C2

Definition at line 154 of file akaroa_import.cc.

Referenced by akaroa_import::LookUp_K_d().

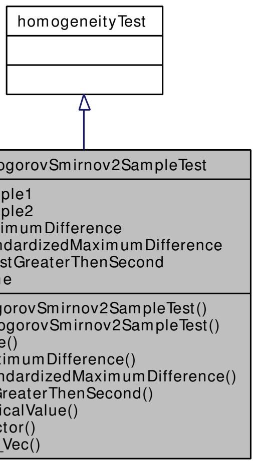
The documentation for this struct was generated from the following file:

- **akaroa_import.cc**

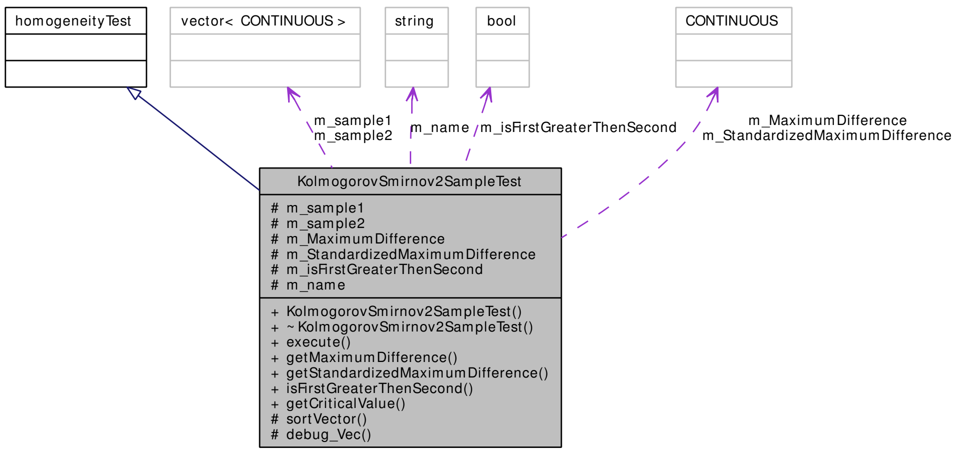
8.15 KolmogorovSmirnov2SampleTest Class Reference

`#include <homogeneityTests.h>`

Inheritance diagram for KolmogorovSmirnov2SampleTest:


homogeneityTest
KolmogorovSmirnov2SampleTest
# m_sample1
# m_sample2
# m_MaximumDifference
# m_StandardizedMaximumDifference
# m_isFirstGreaterThenSecond
# m_name
+ KolmogorovSmirnov2SampleTest()
+ ~KolmogorovSmirnov2SampleTest()
+ execute()
+ getMaximumDifference()
+ getStandardizedMaximumDifference()
+ isFirstGreaterThenSecond()
+ getCriticalValue()
# sortVector()
# debug_Vec()

Collaboration diagram for KolmogorovSmirnov2SampleTest:


homogeneityTest
vector< CONTINUOUS >
string
bool
CONTINUOUS
m_sample1
m_sample2
m_name
m_isFirstGreaterThenSecond
m_MaximumDifference
m_StandardizedMaximumDifference
KolmogorovSmirnov2SampleTest
# m_sample1
# m_sample2
# m_MaximumDifference
# m_StandardizedMaximumDifference
# m_isFirstGreaterThenSecond
# m_name
+ KolmogorovSmirnov2SampleTest()
+ ~KolmogorovSmirnov2SampleTest()
+ execute()
+ getMaximumDifference()
+ getStandardizedMaximumDifference()
+ isFirstGreaterThenSecond()
+ getCriticalValue()
# sortVector()
# debug_Vec()

Public Member Functions

- **KolmogorovSmirnov2SampleTest** (const std::vector< CONTINUOUS > ∗, const std::vector< CONTINUOUS > ∗, std::string="_NoDiagram_")
- ∼**KolmogorovSmirnov2SampleTest** ()
- bool **execute** (void)
- CONTINUOUS **getMaximumDifference** (void) const
- CONTINUOUS **getStandardizedMaximumDifference** (void) const
- bool **isFirstGreaterThenSecond** (void) const
- CONTINUOUS **getCriticalValue** (void) const

Protected Member Functions

- void **sortVector** (std::vector< CONTINUOUS > &)
- void **debug_Vec** (std::vector< CONTINUOUS > &)

Protected Attributes

- std::vector< CONTINUOUS > **m_sample1**
- std::vector< CONTINUOUS > **m_sample2**
- CONTINUOUS **m_MaximumDifference**
- CONTINUOUS **m_StandardizedMaximumDifference**
- bool **m_isFirstGreaterThenSecond**
- std::string **m_name**

8.15.1 Detailed Description

Definition at line 54 of file homogeneityTests.h.

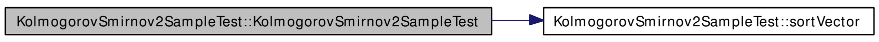
8.15.2 Constructor & Destructor Documentation

8.15.2.1 KolmogorovSmirnov2SampleTest::KolmogorovSmirnov2SampleTest (const std::vector< CONTINUOUS > *, const std::vector< CONTINUOUS > *, std::string = "_NoDiagram_")

Definition at line 265 of file homogeneityTests.cc.

References INDEX, m_sample1, m_sample2, and sortVector().

Here is the call graph for this function:


KolmogorovSmirnov2SampleTest::KolmogorovSmirnov2SampleTest
KolmogorovSmirnov2SampleTest::sortVector

8.15.2.2 KolmogorovSmirnov2SampleTest::∼KolmogorovSmirnov2SampleTest ()

Definition at line 283 of file homogeneityTests.cc.

8.15.3 Member Function Documentation

8.15.3.1 bool KolmogorovSmirnov2SampleTest::execute (void)

Definition at line 286 of file homogeneityTests.cc.

8.15.3.2 CONTINUOUS KolmogorovSmirnov2SampleTest::getMaximumDifference (void) const

Definition at line 416 of file homogeneityTests.cc.

8.15.3.3 CONTINUOUS KolmogorovSmirnov2SampleTest::getStandardizedMaximumDifference (void) const

Definition at line 420 of file homogeneityTests.cc.

8.15.3.4 bool KolmogorovSmirnov2SampleTest::isFirstGreaterThenSecond (void) const

Definition at line 424 of file homogeneityTests.cc.

8.15.3.5 CONTINUOUS KolmogorovSmirnov2SampleTest::getCriticalValue (void) const

Definition at line 428 of file homogeneityTests.cc.

8.15.3.6 void KolmogorovSmirnov2SampleTest::sortVector (std::vector< CONTINUOUS > &) `[protected]`

Definition at line 448 of file homogeneityTests.cc.

Referenced by KolmogorovSmirnov2SampleTest().

8.15.3.7 void KolmogorovSmirnov2SampleTest::debug_Vec (std::vector< CONTINUOUS > &) `[protected]`

Definition at line 460 of file homogeneityTests.cc.

8.15.4 Field Documentation

8.15.4.1 std::vector<CONTINUOUS> KolmogorovSmirnov2SampleTest::m_sample1 `[protected]`

Definition at line 68 of file homogeneityTests.h.

Referenced by KolmogorovSmirnov2SampleTest().

8.15.4.2 std::vector<CONTINUOUS> KolmogorovSmirnov2SampleTest::m_sample2 `[protected]`

Definition at line 69 of file homogeneityTests.h.

Referenced by KolmogorovSmirnov2SampleTest().

8.15.4.3 CONTINUOUS KolmogorovSmirnov2SampleTest::m_MaximumDifference `[protected]`

Definition at line 70 of file homogeneityTests.h.

8.15.4.4 CONTINUOUS KolmogorovSmirnov2SampleTest::m_StandardizedMaximumDifference `[protected]`

Definition at line 71 of file homogeneityTests.h.

8.15.4.5 bool KolmogorovSmirnov2SampleTest::m_isFirstGreaterThenSecond `[protected]`

Definition at line 72 of file homogeneityTests.h.

8.15.4.6 std::string KolmogorovSmirnov2SampleTest::m_name `[protected]`

Definition at line 73 of file homogeneityTests.h.

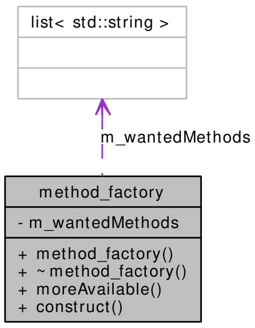
The documentation for this class was generated from the following files:

- **homogeneityTests.h**
- **homogeneityTests.cc**

8.16 method_factory Class Reference

`#include <method_factory.h>`

Collaboration diagram for method_factory:



Public Member Functions

- **method_factory** (void)
- ~**method_factory** (void)
- bool **moreAvailable** (void)
- **outputAnalyser** ∗ **construct** (void)

Private Attributes

- std::list< std::string > **m_wantedMethods**

8.16.1 Detailed Description

Definition at line 13 of file method_factory.h.

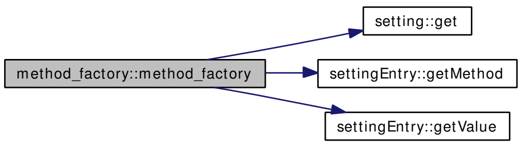
8.16.2 Constructor & Destructor Documentation

8.16.2.1 method_factory::method_factory (void)

Definition at line 4 of file method_factory.cc.

References setting::get(), settingEntry::getMethod(), settingEntry::getValue(), INDEX, lib_-setting, m_wantedMethods, s_batch_mean_QE, s_deterministic_TPD, s_evolution, s_-execute, s_pooling_QE, s_sequential_batching, s_sequential_TPD, s_spectral_analysis_QE, and s_yes.

Here is the call graph for this function:



8.16.2.2 method_factory::~method_factory (void)

Definition at line 26 of file method_factory.cc.

8.16.3 Member Function Documentation

8.16.3.1 bool method_factory::moreAvailable (void)

Definition at line 29 of file method_factory.cc.

References m_wantedMethods.

Referenced by controller::initialize().

8.16.3.2 outputAnalyser * method_factory::construct (void)

Definition at line 33 of file method_factory.cc.

References m_wantedMethods, s_batch_mean_QE, s_deterministic_TPD, s_evolution, s_-pooling_QE, s_sequential_batching, s_sequential_TPD, and s_spectral_analysis_QE.

Referenced by controller::initialize().

8.16.4 Field Documentation

8.16.4.1 std::list<std::string> method_factory::m_wantedMethods `[private]`

Definition at line 21 of file method_factory.h.

Referenced by construct(), method_factory(), and moreAvailable().

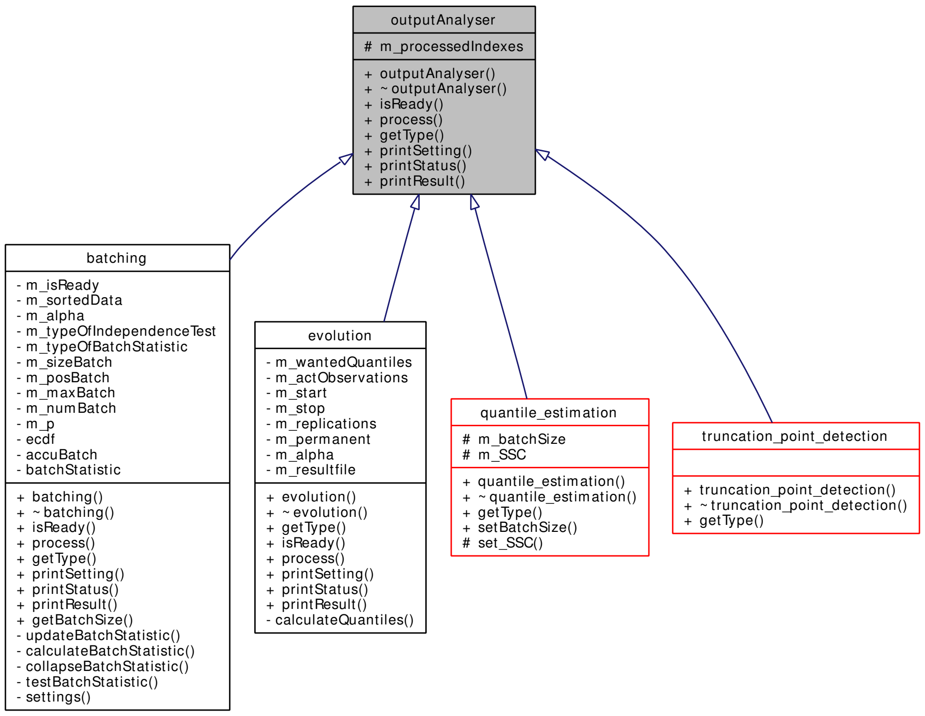
The documentation for this class was generated from the following files:

- **method_factory.h**
- **method_factory.cc**

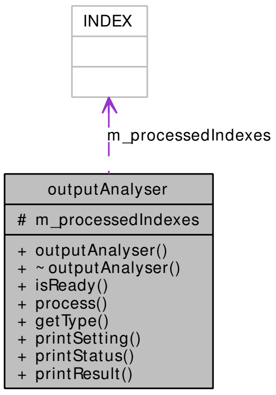
8.17 outputAnalyser Class Reference

`#include <basic.h>`

Inheritance diagram for outputAnalyser:



Collaboration diagram for outputAnalyser:



Public Member Functions

- **outputAnalyser** (void)
- virtual ~**outputAnalyser** (void)
- virtual bool **isReady** (void) const
- virtual void **process** (const std::list< CONTINUOUS > &)

- virtual **TypeOfMethod getType** (void) const
- virtual void **printSetting** (void)
- virtual void **printStatus** (void)
- virtual void **printResult** (void)

Protected Attributes

- INDEX **m_processedIndexes**

8.17.1 Detailed Description

Definition at line 8 of file basic.h.

8.17.2 Constructor & Destructor Documentation

8.17.2.1 outputAnalyser::outputAnalyser (void)

Definition at line 4 of file basic.cc.

8.17.2.2 outputAnalyser::~outputAnalyser (void) `[virtual]`

Definition at line 8 of file basic.cc.

8.17.3 Member Function Documentation

8.17.3.1 bool outputAnalyser::isReady (void) const `[virtual]`

Reimplemented in **batching** (p. 40), **pooling_QE** (p. 92), **batch_mean_QE** (p. 31), **spectral_analysis_QE** (p. 153), **evolution** (p. 69), **deterministic_TPD** (p. 61), and **sequential_TPD** (p. 128).

Definition at line 11 of file basic.cc.

8.17.3.2 void outputAnalyser::process (const std::list< CONTINUOUS > &) `[virtual]`

Reimplemented in **batching** (p. 40), **pooling_QE** (p. 92), **batch_mean_QE** (p. 32), **spectral_analysis_QE** (p. 153), **evolution** (p. 69), **deterministic_TPD** (p. 61), and **sequential_TPD** (p. 128).

Definition at line 15 of file basic.cc.

References m_processedIndexes.

8.17.3.3 TypeOfMethod outputAnalyser::getType (void) const `[virtual]`

Reimplemented in **batching** (p. 40), **quantile_estimation** (p. 156), **evolution** (p. 68), and **truncation_point_detection** (p. 183).

Definition at line 19 of file basic.cc.

References NON.

8.17.3.4 void outputAnalyser::printSetting (void) `[virtual]`

Reimplemented in **batching** (p. 41), **pooling_QE** (p. 92), **batch_mean_QE** (p. 32), **spectral_analysis_QE** (p. 154), **evolution** (p. 69), **deterministic_TPD** (p. 61), and **sequential_TPD** (p. 129).

Definition at line 23 of file basic.cc.

8.17.3.5 void outputAnalyser::printStatus (void) `[virtual]`

Reimplemented in **batching** (p. 41), **pooling_QE** (p. 92), **batch_mean_QE** (p. 32), **spectral_analysis_QE** (p. 154), **evolution** (p. 69), **deterministic_TPD** (p. 62), and **sequential_TPD** (p. 129).

Definition at line 26 of file basic.cc.

8.17.3.6 void outputAnalyser::printResult (void) `[virtual]`

Reimplemented in **batching** (p. 41), **pooling_QE** (p. 92), **batch_mean_QE** (p. 32), **spectral_analysis_QE** (p. 154), **evolution** (p. 69), **deterministic_TPD** (p. 62), and **sequential_TPD** (p. 129).

Definition at line 29 of file basic.cc.

8.17.4 Field Documentation

8.17.4.1 INDEX outputAnalyser::m_processedIndexes `[protected]`

Definition at line 20 of file basic.h.

Referenced by evolution::calculateQuantiles(), spectral_analysis_QE::checkQuantiles(), batch_-mean_QE::checkQuantiles(), pooling_QE::checkQuantiles(), deterministic_TPD::isReady(), evolution::isReady(), sequential_TPD::printResult(), deterministic_TPD::printResult(), spectral_analysis_QE::printResult(), batch_mean_QE::printResult(), pooling_QE::print-Result(), batching::printResult(), sequential_TPD::printStatus(), deterministic_TPD::print-Status(), evolution::printStatus(), spectral_analysis_QE::printStatus(), batch_mean_QE::print-Status(), pooling_QE::printStatus(), batching::printStatus(), sequential_TPD::process(), deterministic_TPD::process(), evolution::process(), spectral_analysis_QE::process(), batch_-mean_QE::process(), pooling_QE::process(), batching::process(), process(), sequential_-TPD::sub_collect(), sequential_TPD::sub_compare(), and sequential_TPD::sub_initialize().

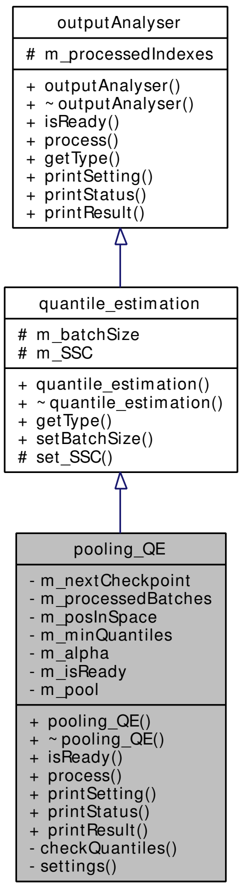
The documentation for this class was generated from the following files:

- **basic.h**
- **basic.cc**

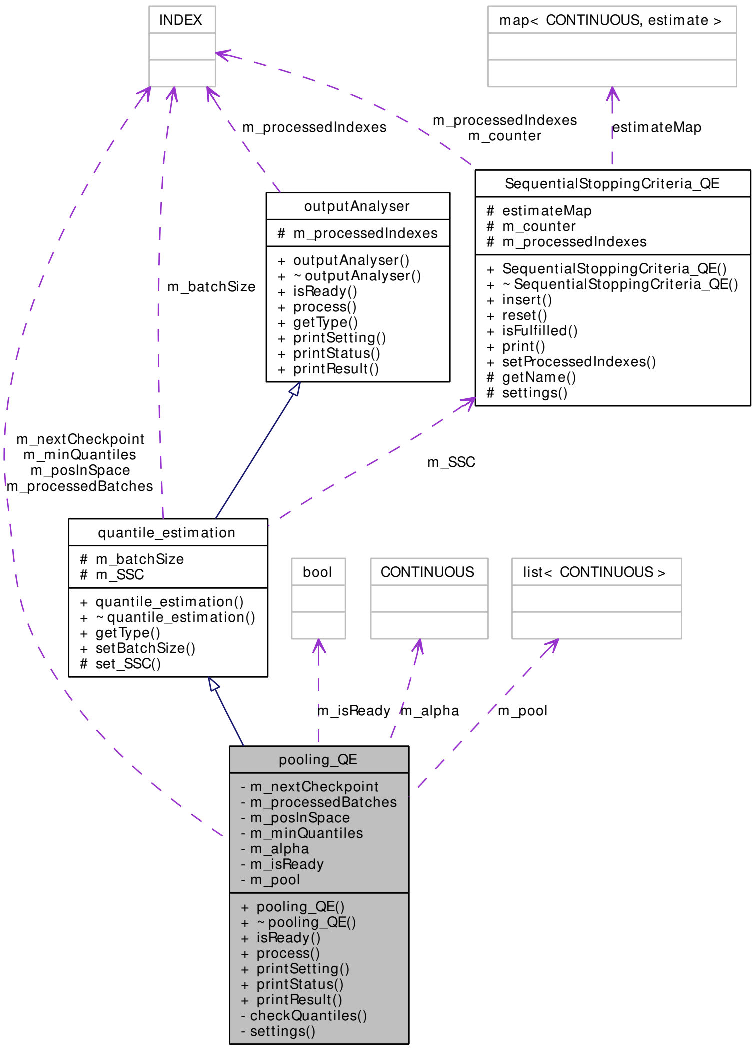
8.18 pooling_QE Class Reference

```
#include <quantile_estimation.h>
```

Inheritance diagram for pooling_QE:



Collaboration diagram for pooling_QE:



Public Member Functions

- **pooling_QE** (void)
- ~**pooling_QE** (void)
- bool **isReady** (void) const
- void **process** (const std::list< CONTINUOUS > &)
- void **printSetting** (void)
- void **printStatus** (void)
- void **printResult** (void)
- virtual **TypeOfMethod getType** (void) const
- void **setBatchSize** (INDEX p)

Protected Member Functions

- void **set_SSC** (void)

Protected Attributes

- INDEX **m_batchSize**
- **SequentialStoppingCriteria_QE** ∗ **m_SSC**
- INDEX **m_processedIndexes**

Private Member Functions

- bool **checkQuantiles** (void)
- void **settings** (void)

Private Attributes

- INDEX **m_nextCheckpoint**
- INDEX **m_processedBatches**
- INDEX **m_posInSpace**
- INDEX **m_minQuantiles**
- CONTINUOUS **m_alpha**
- bool **m_isReady**
- std::list< CONTINUOUS > **m_pool**

8.18.1 Detailed Description

Definition at line 30 of file quantile_estimation.h.

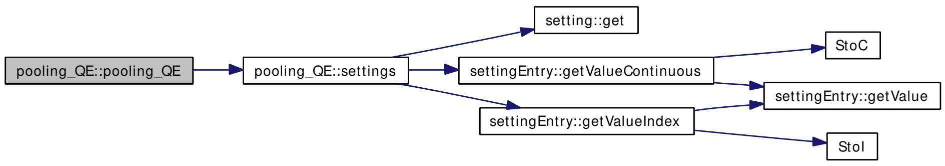
8.18.2 Constructor & Destructor Documentation

8.18.2.1 pooling_QE::pooling_QE (void)

Definition at line 74 of file quantile_estimation.cc.

References settings().

Here is the call graph for this function:



8.18.2.2 pooling_QE::∼pooling_QE (void)

Definition at line 85 of file quantile_estimation.cc.

8.18.3 Member Function Documentation

8.18.3.1 bool pooling_QE::isReady (void) const [virtual]

Reimplemented from **outputAnalyser** (p. 183).

Definition at line 88 of file quantile_estimation.cc.

References m_isReady.

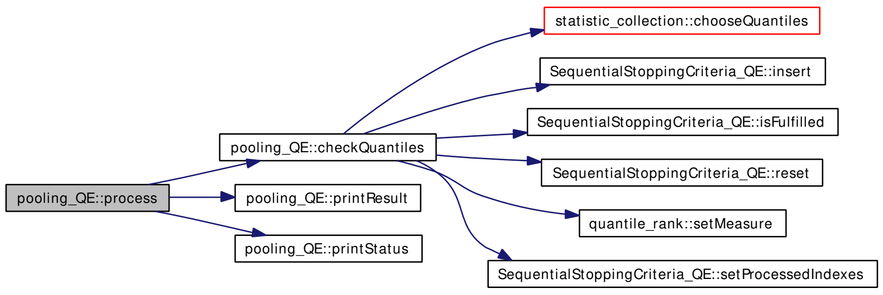
8.18.3.2 void pooling_QE::process (const std::list< CONTINUOUS > &) [virtual]

Reimplemented from **outputAnalyser** (p. 183).

Definition at line 92 of file quantile_estimation.cc.

References checkQuantiles(), quantile_estimation::m_batchSize, m_isReady, m_nextCheckpoint, m_pool, m_posInSpace, m_processedBatches, outputAnalyser::m_processedIndexes, printResult(), and printStatus().

Here is the call graph for this function:


statistic_collection::chooseQuantiles
SequentialStoppingCriteria_QE::insert
SequentialStoppingCriteria_QE::isFulfilled
pooling_QE::checkQuantiles
SequentialStoppingCriteria_QE::reset
pooling_QE::process
pooling_QE::printResult
quantile_rank::setMeasure
pooling_QE::printStatus
SequentialStoppingCriteria_QE::setProcessedIndexes

8.18.3.3 void pooling_QE::printSetting (void) [virtual]

Reimplemented from **outputAnalyser** (p. 183).

Definition at line 117 of file quantile_estimation.cc.

References logfile, m_minQuantiles, s_execute, s_pooling_QE, s_quantiles_min, and s_yes.

8.18.3.4 void pooling_QE::printStatus (void) [virtual]

Reimplemented from **outputAnalyser** (p. 183).

Definition at line 128 of file quantile_estimation.cc.

References logfile, quantile_estimation::m_batchSize, m_nextCheckpoint, m_pool, m_posInSpace, m_processedBatches, outputAnalyser::m_processedIndexes, and s_pooling_QE.

Referenced by process().

8.18.3.5 void pooling_QE::printResult (void) [virtual]

Reimplemented from **outputAnalyser** (p. 183).

Definition at line 139 of file quantile_estimation.cc.

References logfile, quantile_estimation::m_batchSize, m_nextCheckpoint, m_pool, m_posInSpace, m_processedBatches, outputAnalyser::m_processedIndexes, and s_pooling_QE.

Referenced by process().

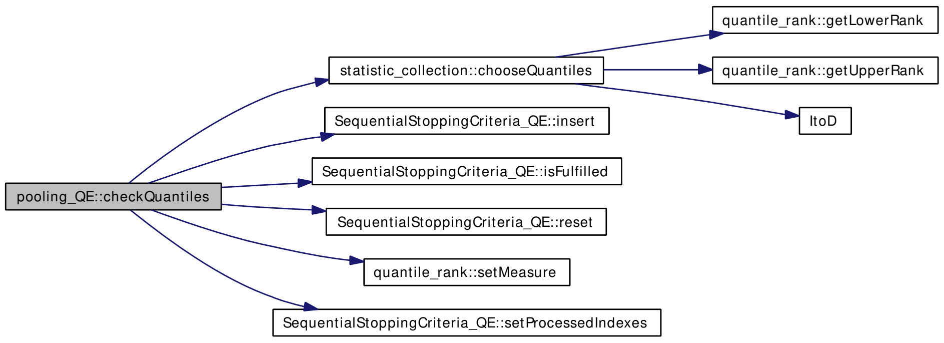
8.18.3.6 bool pooling_QE::checkQuantiles (void) `[private]`

Definition at line 150 of file quantile_estimation.cc.

References statistic_collection::chooseQuantiles(), CONTINUOUS, INDEX, SequentialStoppingCriteria_QE::insert(), SequentialStoppingCriteria_QE::isFulfilled(), lib_statistic, m_alpha, m_minQuantiles, m_pool, outputAnalyser::m_processedIndexes, quantile_estimation::m_SSC, SequentialStoppingCriteria_QE::reset(), quantile_rank::setMeasure(), and SequentialStoppingCriteria_QE::setProcessedIndexes().

Referenced by process().

Here is the call graph for this function:


quantile_rank::getLowerRank
statistic_collection::chooseQuantiles
quantile_rank::getUpperRank
SequentialStoppingCriteria_QE::insert
ItoD
SequentialStoppingCriteria_QE::isFulfilled
pooling_QE::checkQuantiles
SequentialStoppingCriteria_QE::reset
quantile_rank::setMeasure
SequentialStoppingCriteria_QE::setProcessedIndexes

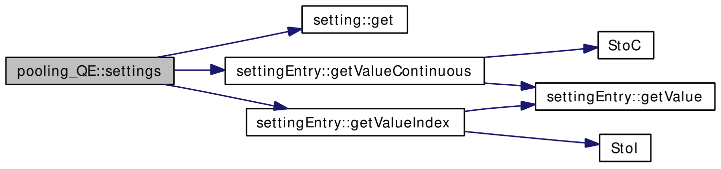
8.18.3.7 void pooling_QE::settings (void) `[private]`

Definition at line 209 of file quantile_estimation.cc.

References setting::get(), settingEntry::getValueContinuous(), settingEntry::getValueIndex(), lib_setting, m_alpha, m_minQuantiles, s_alpha, s_pooling_QE, and s_quantiles_min.

Referenced by pooling_QE().

Here is the call graph for this function:



8.18.3.8 TypeOfMethod quantile_estimation::getType (void) const `[virtual, inherited]`

Reimplemented from **outputAnalyser** (p. 87).

Definition at line 22 of file quantile_estimation.cc.

References ESTIMATOR.

8.18.3.9 void quantile_estimation::setBatchSize (INDEX *p*) `[inherited]`

Definition at line 26 of file quantile_estimation.cc.

References quantile_estimation::m_batchSize.

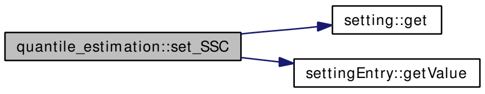
8.18.3.10 void quantile_estimation::set_SSC (void) `[protected, inherited]`

Definition at line 31 of file quantile_estimation.cc.

References setting::get(), settingEntry::getValue(), lib_setting, quantile_estimation::m_SSC, s_-confidenceInterval_SSC_QE, s_deterministic_SSC_QE, s_execute, s_relativeErrorQuantile_-SSC_QE, s_relativeErrorRange_SSC_QE, and s_yes.

Referenced by quantile_estimation::quantile_estimation().

Here is the call graph for this function:



8.18.4 Field Documentation

8.18.4.1 INDEX pooling_QE::m_nextCheckpoint `[private]`

Definition at line 45 of file quantile_estimation.h.

Referenced by printResult(), printStatus(), and process().

8.18.4.2 INDEX pooling_QE::m_processedBatches `[private]`

Definition at line 46 of file quantile_estimation.h.

Referenced by printResult(), printStatus(), and process().

8.18.4.3 INDEX pooling_QE::m_posInSpace `[private]`

Definition at line 47 of file quantile_estimation.h.

Referenced by printResult(), printStatus(), and process().

8.18.4.4 INDEX pooling_QE::m_minQuantiles `[private]`

Definition at line 48 of file quantile_estimation.h.

Referenced by checkQuantiles(), printSetting(), and settings().

8.18.4.5 CONTINUOUS pooling_QE::m_alpha `[private]`

Definition at line 49 of file quantile_estimation.h.

Referenced by checkQuantiles(), and settings().

8.18.4.6 bool pooling_QE::m_isReady `[private]`

Definition at line 50 of file quantile_estimation.h.

Referenced by isReady(), and process().

8.18.4.7 std::list<CONTINUOUS> pooling_QE::m_pool `[private]`

Definition at line 51 of file quantile_estimation.h.

Referenced by checkQuantiles(), printResult(), printStatus(), and process().

8.18.4.8 INDEX quantile_estimation::m_batchSize `[protected, inherited]`

Definition at line 26 of file quantile_estimation.h.

Referenced by spectral_analysis_QE::checkQuantiles(), batch_mean_QE::checkQuantiles(), spectral_analysis_QE::collapse(), batch_mean_QE::collapse(), spectral_analysis_QE::print-Result(), batch_mean_QE::printResult(), printResult(), spectral_analysis_QE::printStatus(), batch_mean_QE::printStatus(), printStatus(), spectral_analysis_QE::process(), batch_mean_-QE::process(), process(), and quantile_estimation::setBatchSize().

8.18.4.9 SequentialStoppingCriteria_QE* quantile_estimation::m_SSC `[protected, inherited]`

Definition at line 27 of file quantile_estimation.h.

Referenced by spectral_analysis_QE::checkQuantiles(), batch_mean_QE::checkQuantiles(), checkQuantiles(), quantile_estimation::set_SSC(), and quantile_estimation::∼quantile_-estimation().

8.18.4.10 INDEX outputAnalyser::m_processedIndexes `[protected, inherited]`

Definition at line 20 of file basic.h.

Referenced by evolution::calculateQuantiles(), spectral_analysis_QE::checkQuantiles(), batch_-mean_QE::checkQuantiles(), checkQuantiles(), deterministic_TPD::isReady(), evolution::is-Ready(), sequential_TPD::printResult(), deterministic_TPD::printResult(), spectral_-analysis_QE::printResult(), batch_mean_QE::printResult(), printResult(), batching::print-Result(), sequential_TPD::printStatus(), deterministic_TPD::printStatus(), evolution::print-Status(), spectral_analysis_QE::printStatus(), batch_mean_QE::printStatus(), printStatus(), batching::printStatus(), sequential_TPD::process(), deterministic_TPD::process(), evolu-tion::process(), spectral_analysis_QE::process(), batch_mean_QE::process(), process(), batching::process(), outputAnalyser::process(), sequential_TPD::sub_collect(), sequential_-TPD::sub_compare(), and sequential_TPD::sub_initialize().

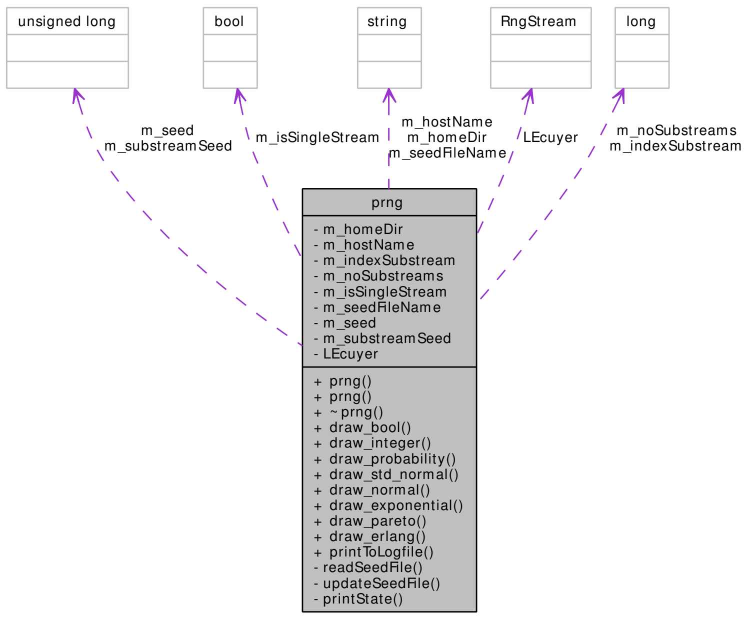
The documentation for this class was generated from the following files:

- **quantile_estimation.h**
- **quantile_estimation.cc**

8.19 prng Class Reference

`#include <prng.h>`

Collaboration diagram for prng:



Public Member Functions

- **prng** (void)
- **prng** (long indexSubstream, long noSubstreams)
- ~**prng** (void)
- bool **draw_bool** (void)
- long **draw_integer** (long low, long high)
- double **draw_probability** (void)
- double **draw_std_normal** (void)
- double **draw_normal** (double mu, double sigma)
- double **draw_exponential** (double beta)
- double **draw_pareto** (double alpha)
- double **draw_erlang** (double beta, long dim)
- void **printToLogfile** (void)

Private Member Functions

- void **readSeedFile** (void)
- void **updateSeedFile** (void)
- void **printState** (void)

Private Attributes

- std::string **m_homeDir**
- std::string **m_hostName**
- long **m_indexSubstream**
- long **m_noSubstreams**
- bool **m_isSingleStream**
- std::string **m_seedFileName**
- unsigned long **m_seed** [6]
- unsigned long **m_substreamSeed** [6]
- RngStream **LEcuyer**

8.19.1 Detailed Description

Definition at line 7 of file prng.h.

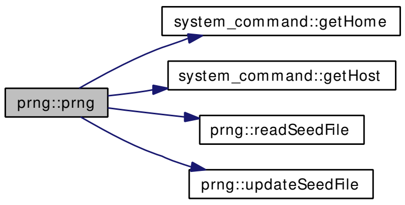
8.19.2 Constructor & Destructor Documentation

8.19.2.1 prng::prng (void)

Definition at line 15 of file prng.cc.

References system_command::getHome(), system_command::getHost(), LEcuyer, lib_system, m_homeDir, m_hostName, m_seed, m_substreamSeed, readSeedFile(), and updateSeedFile().

Here is the call graph for this function:

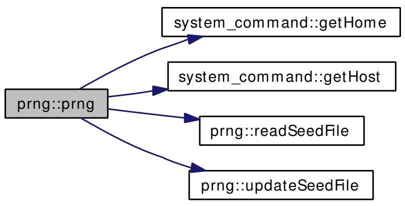


8.19.2.2 prng::prng (long *indexSubstream*, long *noSubstreams*)

Definition at line 53 of file prng.cc.

References system_command::getHome(), system_command::getHost(), LEcuyer, lib_system, m_homeDir, m_hostName, m_seed, m_substreamSeed, readSeedFile(), and updateSeedFile().

Here is the call graph for this function:



8.19.2.3 prng::∼prng (void)

Definition at line 79 of file prng.cc.

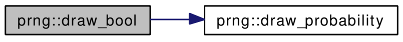
8.19.3 Member Function Documentation

8.19.3.1 bool prng::draw_bool (void)

Definition at line 82 of file prng.cc.

References draw_probability().

Here is the call graph for this function:



8.19.3.2 long prng::draw_integer (long *low*, long *high*)

Definition at line 88 of file prng.cc.

References LEcuyer.

Referenced by statistic_collection::generateRandomPermutation(), and sequential_TPD::sub_-compare().

8.19.3.3 double prng::draw_probability (void)

Definition at line 92 of file prng.cc.

References LEcuyer.

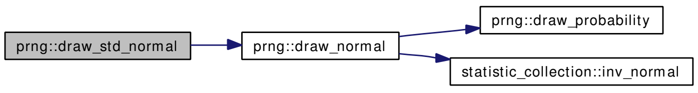
Referenced by draw_bool(), draw_erlang(), draw_exponential(), draw_normal(), draw_-pareto(), and sequential_TPD::sub_compare().

8.19.3.4 double prng::draw_std_normal (void)

Definition at line 96 of file prng.cc.

References draw_normal().

Here is the call graph for this function:



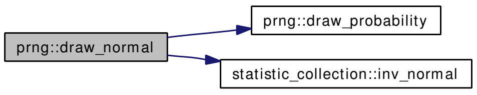
8.19.3.5 double prng::draw_normal (double *mu*, double *sigma*)

Definition at line 100 of file prng.cc.

References draw_probability(), statistic_collection::inv_normal(), and lib_statistic.

Referenced by draw_std_normal().

Here is the call graph for this function:

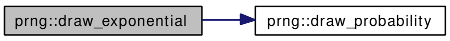


8.19.3.6 double prng::draw_exponential (double *beta*)

Definition at line 107 of file prng.cc.

References draw_probability().

Here is the call graph for this function:

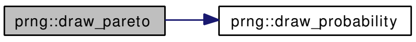


8.19.3.7 double prng::draw_pareto (double *alpha*)

Definition at line 114 of file prng.cc.

References draw_probability().

Here is the call graph for this function:

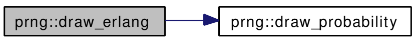


8.19.3.8 double prng::draw_erlang (double *beta*, long *dim*)

Definition at line 121 of file prng.cc.

References draw_probability().

Here is the call graph for this function:



8.19.3.9 void prng::printToLogfile (void)

Definition at line 133 of file prng.cc.

References logfile, m_indexSubstream, m_isSingleStream, m_noSubstreams, m_seed, and m_-substreamSeed.

Referenced by main().

8.19.3.10 void prng::readSeedFile (void) `[private]`

Definition at line 153 of file prng.cc.

References m_homeDir, m_hostName, m_isSingleStream, m_seed, and m_seedFileName.

Referenced by prng().

8.19.3.11 void prng::updateSeedFile (void) `[private]`

Definition at line 174 of file prng.cc.

References LEcuyer, and m_seedFileName.

Referenced by prng().

8.19.3.12 void prng::printState (void) `[private]`

Definition at line 185 of file prng.cc.

References LEcuyer.

8.19.4 Field Documentation

8.19.4.1 std::string prng::m_homeDir `[private]`

Definition at line 25 of file prng.h.

Referenced by prng(), and readSeedFile().

8.19.4.2 std::string prng::m_hostName `[private]`

Definition at line 26 of file prng.h.

Referenced by prng(), and readSeedFile().

8.19.4.3 long prng::m_indexSubstream `[private]`

Definition at line 32 of file prng.h.

Referenced by printToLogfile().

8.19.4.4 long prng::m_noSubstreams `[private]`

Definition at line 33 of file prng.h.

Referenced by printToLogfile().

8.19.4.5 bool prng::m_isSingleStream `[private]`

Definition at line 34 of file prng.h.

Referenced by printToLogfile(), and readSeedFile().

8.19.4.6 std::string prng::m_seedFileName [private]

Definition at line 35 of file prng.h.

Referenced by readSeedFile(), and updateSeedFile().

8.19.4.7 unsigned long prng::m_seed[6] [private]

Definition at line 36 of file prng.h.

Referenced by printToLogfile(), prng(), and readSeedFile().

8.19.4.8 unsigned long prng::m_substreamSeed[6] [private]

Definition at line 37 of file prng.h.

Referenced by printToLogfile(), and prng().

8.19.4.9 RngStream prng::LEcuyer [private]

Definition at line 39 of file prng.h.

Referenced by draw_integer(), draw_probability(), printState(), prng(), and updateSeedFile().

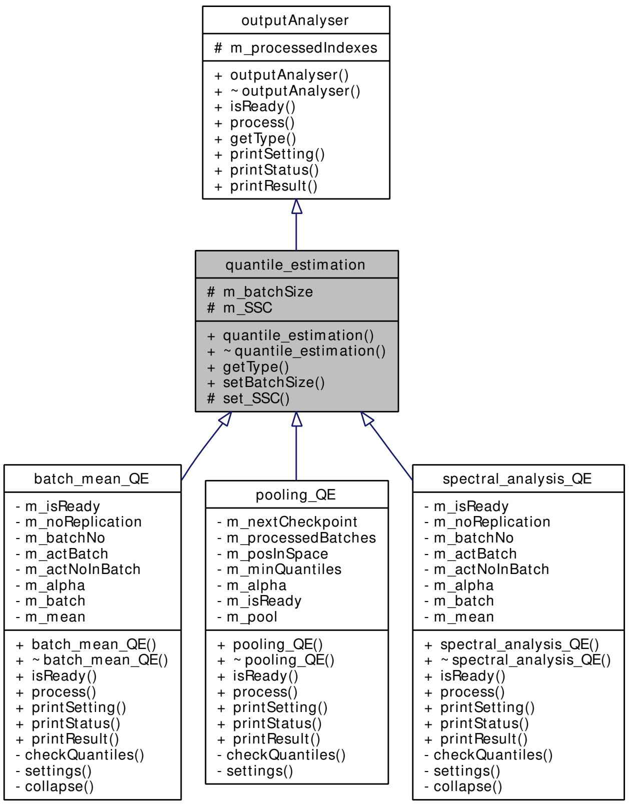
The documentation for this class was generated from the following files:

- **prng.h**
- **prng.cc**

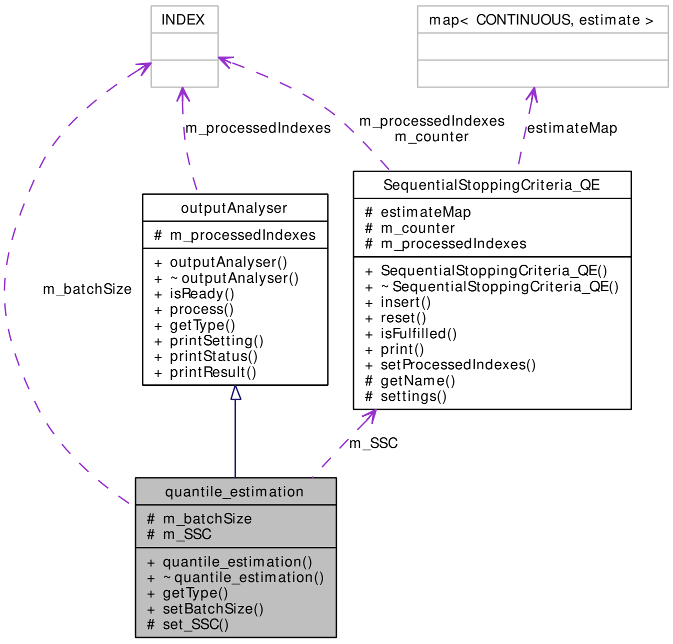
8.20 quantile_estimation Class Reference

`#include <quantile_estimation.h>`

Inheritance diagram for quantile_estimation:



Collaboration diagram for quantile_estimation:



Public Member Functions

- **quantile_estimation** (void)
- virtual ~**quantile_estimation** (void)
- virtual **TypeOfMethod** **getType** (void) const
- void **setBatchSize** (INDEX p)
- virtual bool **isReady** (void) const
- virtual void **process** (const std::list< CONTINUOUS > &)
- virtual void **printSetting** (void)
- virtual void **printStatus** (void)
- virtual void **printResult** (void)

Protected Member Functions

- void **set_SSC** (void)

Protected Attributes

- INDEX **m_batchSize**
- **SequentialStoppingCriteria_QE** ∗ **m_SSC**
- INDEX **m_processedIndexes**

8.20.1 Detailed Description

Definition at line 10 of file quantile_estimation.h.

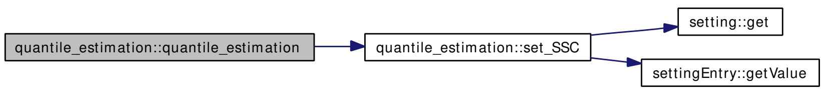
8.20.2 Constructor & Destructor Documentation

8.20.2.1 quantile_estimation::quantile_estimation (void)

Definition at line 8 of file quantile_estimation.cc.

References set_SSC().

Here is the call graph for this function:


quantile_estimation::quantile_estimation
quantile_estimation::set_SSC
setting::get
settingEntry::getValue

8.20.2.2 quantile_estimation::~quantile_estimation (void) [virtual]

Definition at line 15 of file quantile_estimation.cc.

References m_SSC.

8.20.3 Member Function Documentation

8.20.3.1 TypeOfMethod quantile_estimation::getType (void) const [virtual]

Reimplemented from **outputAnalyser** (p. 87).

Definition at line 22 of file quantile_estimation.cc.

References ESTIMATOR.

8.20.3.2 void quantile_estimation::setBatchSize (INDEX *p*)

Definition at line 26 of file quantile_estimation.cc.

References m_batchSize.

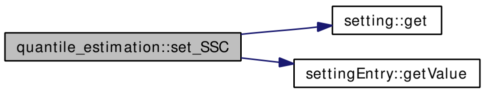
8.20.3.3 void quantile_estimation::set_SSC (void) [protected]

Definition at line 31 of file quantile_estimation.cc.

References setting::get(), settingEntry::getValue(), lib_setting, m_SSC, s_confidenceInterval_-SSC_QE, s_deterministic_SSC_QE, s_execute, s_relativeErrorQuantile_SSC_QE, s_relative-ErrorRange_SSC_QE, and s_yes.

Referenced by quantile_estimation().

Here is the call graph for this function:



8.20.3.4 bool outputAnalyser::isReady (void) const `[virtual, inherited]`

Reimplemented in **batching** (p. 40), **pooling_QE** (p. 92), **batch_mean_QE** (p. 31), **spectral_analysis_QE** (p. 153), **evolution** (p. 69), **deterministic_TPD** (p. 61), and **sequential_TPD** (p. 128).

Definition at line 11 of file basic.cc.

8.20.3.5 void outputAnalyser::process (const std::list< CONTINUOUS > &) `[virtual, inherited]`

Reimplemented in **batching** (p. 40), **pooling_QE** (p. 92), **batch_mean_QE** (p. 32), **spectral_analysis_QE** (p. 153), **evolution** (p. 69), **deterministic_TPD** (p. 61), and **sequential_TPD** (p. 128).

Definition at line 15 of file basic.cc.

References outputAnalyser::m_processedIndexes.

8.20.3.6 void outputAnalyser::printSetting (void) `[virtual, inherited]`

Reimplemented in **batching** (p. 41), **pooling_QE** (p. 92), **batch_mean_QE** (p. 32), **spectral_analysis_QE** (p. 154), **evolution** (p. 69), **deterministic_TPD** (p. 61), and **sequential_TPD** (p. 129).

Definition at line 23 of file basic.cc.

8.20.3.7 void outputAnalyser::printStatus (void) `[virtual, inherited]`

Reimplemented in **batching** (p. 41), **pooling_QE** (p. 92), **batch_mean_QE** (p. 32), **spectral_analysis_QE** (p. 154), **evolution** (p. 69), **deterministic_TPD** (p. 62), and **sequential_TPD** (p. 129).

Definition at line 26 of file basic.cc.

8.20.3.8 void outputAnalyser::printResult (void) `[virtual, inherited]`

Reimplemented in **batching** (p. 41), **pooling_QE** (p. 92), **batch_mean_QE** (p. 32), **spectral_analysis_QE** (p. 154), **evolution** (p. 69), **deterministic_TPD** (p. 62), and **sequential_TPD** (p. 129).

Definition at line 29 of file basic.cc.

8.20.4 Field Documentation

8.20.4.1 INDEX quantile_estimation::m_batchSize `[protected]`

Definition at line 26 of file quantile_estimation.h.

Referenced by spectral_analysis_QE::checkQuantiles(), batch_mean_QE::checkQuantiles(), spectral_analysis_QE::collapse(), batch_mean_QE::collapse(), spectral_analysis_QE::print-Result(), batch_mean_QE::printResult(), pooling_QE::printResult(), spectral_analysis_-QE::printStatus(), batch_mean_QE::printStatus(), pooling_QE::printStatus(), spectral_-

analysis_QE::process(), batch_mean_QE::process(), pooling_QE::process(), and setBatchSize().

8.20.4.2 SequentialStoppingCriteria_QE* quantile_estimation::m_SSC [protected]

Definition at line 27 of file quantile_estimation.h.

Referenced by spectral_analysis_QE::checkQuantiles(), batch_mean_QE::checkQuantiles(), pooling_QE::checkQuantiles(), set_SSC(), and ~quantile_estimation().

8.20.4.3 INDEX outputAnalyser::m_processedIndexes [protected, inherited]

Definition at line 20 of file basic.h.

Referenced by evolution::calculateQuantiles(), spectral_analysis_QE::checkQuantiles(), batch_-mean_QE::checkQuantiles(), pooling_QE::checkQuantiles(), deterministic_TPD::isReady(), evolution::isReady(), sequential_TPD::printResult(), deterministic_TPD::printResult(), spectral_analysis_QE::printResult(), batch_mean_QE::printResult(), pooling_QE::print-Result(), batching::printResult(), sequential_TPD::printStatus(), deterministic_TPD::print-Status(), evolution::printStatus(), spectral_analysis_QE::printStatus(), batch_mean_QE::print-Status(), pooling_QE::printStatus(), batching::printStatus(), sequential_TPD::process(), deterministic_TPD::process(), evolution::process(), spectral_analysis_QE::process(), batch_-mean_QE::process(), pooling_QE::process(), batching::process(), outputAnalyser::process(), sequential_TPD::sub_collect(), sequential_TPD::sub_compare(), and sequential_TPD::sub_-initialize().

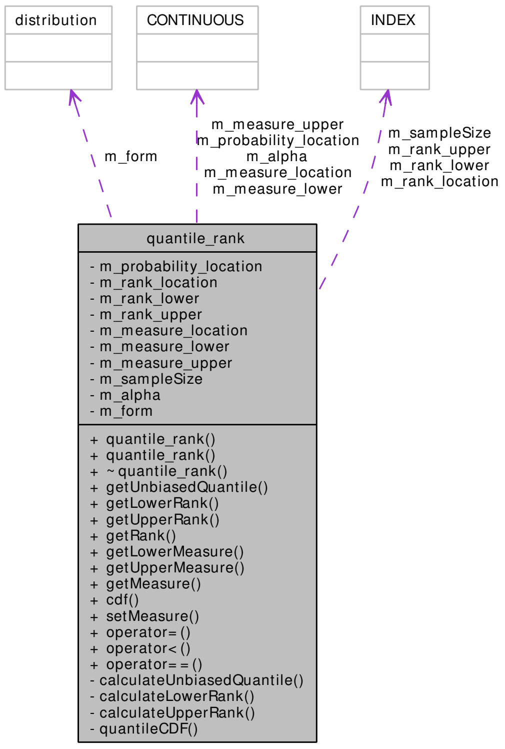
The documentation for this class was generated from the following files:

- **quantile_estimation.h**
- **quantile_estimation.cc**

8.21 quantile_rank Class Reference

`#include <statistic.h>`

Collaboration diagram for quantile_rank:



Public Member Functions

- **quantile_rank** (INDEX rank, INDEX sampleSize, CONTINUOUS alpha, **distribution** form=UNSPECIFIED)
- **quantile_rank** (const **quantile_rank** &other)
- ~**quantile_rank** (void)
- CONTINUOUS **getUnbiasedQuantile** (void) const
- INDEX **getLowerRank** (void) const
- INDEX **getUpperRank** (void) const
- INDEX **getRank** (void) const
- CONTINUOUS **getLowerMeasure** (void) const
- CONTINUOUS **getUpperMeasure** (void) const
- CONTINUOUS **getMeasure** (void) const
- void **cdf** (std::list< CONTINUOUS > &cumulation) const
- void **setMeasure** (CONTINUOUS measure_lower, CONTINUOUS measure_location, CONTINUOUS measure_upper)
- const **quantile_rank** & **operator=** (const **quantile_rank** &other)
- bool **operator<** (const **quantile_rank** &other) const
- bool **operator==** (const **quantile_rank** &other) const

Private Member Functions

- CONTINUOUS **calculateUnbiasedQuantile** (INDEX rank, INDEX sampleSize, **distribution** form=UNSPECIFIED)
- INDEX **calculateLowerRank** (CONTINUOUS quantile, INDEX rank, INDEX sampleSize, CONTINUOUS alpha)
- INDEX **calculateUpperRank** (CONTINUOUS quantile, INDEX rank, INDEX sampleSize, CONTINUOUS alpha)
- CONTINUOUS **quantileCDF** (INDEX rank, INDEX p, CONTINUOUS q) const

Private Attributes

- CONTINUOUS **m_probability_location**
- INDEX **m_rank_location**
- INDEX **m_rank_lower**
- INDEX **m_rank_upper**
- CONTINUOUS **m_measure_location**
- CONTINUOUS **m_measure_lower**
- CONTINUOUS **m_measure_upper**
- INDEX **m_sampleSize**
- CONTINUOUS **m_alpha**
- **distribution m_form**

8.21.1 Detailed Description

Definition at line 152 of file statistic.h.

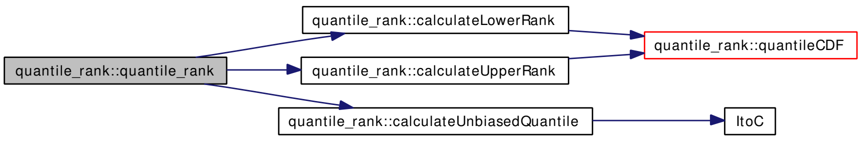
8.21.2 Constructor & Destructor Documentation

8.21.2.1 quantile_rank::quantile_rank (INDEX *rank*, INDEX *sampleSize*, CONTINUOUS *alpha*, distribution *form* = `UNSPECIFIED`)

Definition at line 1544 of file statistic.cc.

References calculateLowerRank(), calculateUnbiasedQuantile(), calculateUpperRank(), m_alpha, m_form, m_probability_location, m_rank_location, m_rank_lower, m_rank_upper, and m_sampleSize.

Here is the call graph for this function:


quantile_rank::quantile_rank
quantile_rank::calculateLowerRank
quantile_rank::calculateUpperRank
quantile_rank::calculateUnbiasedQuantile
quantile_rank::quantileCDF
ItoC

8.21.2.2 quantile_rank::quantile_rank (const quantile_rank & *other*)

Definition at line 1567 of file statistic.cc.

8.21.2.3 quantile_rank::∼quantile_rank (void)

Definition at line 1580 of file statistic.cc.

8.21.3 Member Function Documentation

8.21.3.1 CONTINUOUS quantile_rank::getUnbiasedQuantile (void) const `[inline]`

Definition at line 162 of file statistic.h.

References m_probability_location.

8.21.3.2 INDEX quantile_rank::getLowerRank (void) const `[inline]`

Definition at line 163 of file statistic.h.

References m_rank_lower.

Referenced by statistic_collection::chooseQuantiles(), and statistic_collection::chooseQuantiles_-old().

8.21.3.3 INDEX quantile_rank::getUpperRank (void) const `[inline]`

Definition at line 164 of file statistic.h.

References m_rank_upper.

Referenced by statistic_collection::chooseQuantiles(), and statistic_collection::chooseQuantiles_-old().

8.21.3.4 INDEX quantile_rank::getRank (void) const `[inline]`

Definition at line 165 of file statistic.h.

References m_rank_location.

Referenced by statistic_collection::chooseQuantiles_old().

8.21.3.5 CONTINUOUS quantile_rank::getLowerMeasure (void) const `[inline]`

Definition at line 166 of file statistic.h.

References m_measure_lower.

8.21.3.6 CONTINUOUS quantile_rank::getUpperMeasure (void) const `[inline]`

Definition at line 167 of file statistic.h.

References m_measure_upper.

8.21.3.7 CONTINUOUS quantile_rank::getMeasure (void) const `[inline]`

Definition at line 168 of file statistic.h.

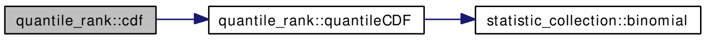
References m_measure_location.

8.21.3.8 void quantile_rank::cdf (std::list< CONTINUOUS > & *cumulation*) const

Definition at line 1654 of file statistic.cc.

References INDEX, m_probability_location, m_sampleSize, and quantileCDF().

Here is the call graph for this function:



8.21.3.9 void quantile_rank::setMeasure (CONTINUOUS *measure_lower*, CONTINUOUS *measure_location*, CONTINUOUS *measure_upper*) `[inline]`

Definition at line 171 of file statistic.h.

References m_measure_location, m_measure_lower, and m_measure_upper.

Referenced by pooling_QE::checkQuantiles().

8.21.3.10 const quantile_rank& quantile_rank::operator= (const quantile_rank & *other*) `[inline]`

Definition at line 179 of file statistic.h.

References m_alpha, m_measure_location, m_measure_lower, m_measure_upper, m_-probability_location, m_rank_location, m_rank_lower, m_rank_upper, and m_sampleSize.

8.21.3.11 bool quantile_rank::operator< (const quantile_rank & *other*) const `[inline]`

Definition at line 192 of file statistic.h.

References m_rank_location.

8.21.3.12 bool quantile_rank::operator== (const quantile_rank & *other*) const `[inline]`

Definition at line 196 of file statistic.h.

References m_alpha, m_rank_location, and m_sampleSize.

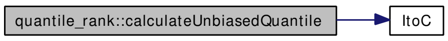
8.21.3.13 CONTINUOUS quantile_rank::calculateUnbiasedQuantile (INDEX *rank*, INDEX *sampleSize*, distribution *form* = `UNSPECIFIED`) `[private]`

Definition at line 1583 of file statistic.cc.

References CONTINUOUS, EXPONENTIAL, ItoC(), NORMAL, UNIFORM, and UNSPECIFIED.

Referenced by quantile_rank().

Here is the call graph for this function:



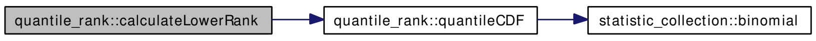
8.21.3.14 INDEX quantile_rank::calculateLowerRank (CONTINUOUS *quantile*, INDEX *rank*, INDEX *sampleSize*, CONTINUOUS *alpha*) `[private]`

Definition at line 1622 of file statistic.cc.

References INDEX, and quantileCDF().

Referenced by quantile_rank().

Here is the call graph for this function:


quantile_rank::calculateLowerRank
quantile_rank::quantileCDF
statistic_collection::binomial

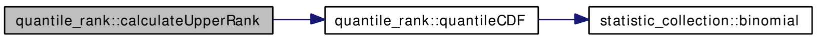
8.21.3.15 INDEX quantile_rank::calculateUpperRank (CONTINUOUS *quantile*, INDEX *rank*, INDEX *sampleSize*, CONTINUOUS *alpha*) `[private]`

Definition at line 1634 of file statistic.cc.

References INDEX, and quantileCDF().

Referenced by quantile_rank().

Here is the call graph for this function:


quantile_rank::calculateUpperRank
quantile_rank::quantileCDF
statistic_collection::binomial

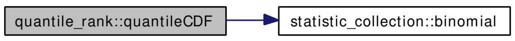
8.21.3.16 CONTINUOUS quantile_rank::quantileCDF (INDEX *rank*, INDEX *p*, CONTINUOUS *q*) const `[private]`

Definition at line 1646 of file statistic.cc.

References statistic_collection::binomial(), CONTINUOUS, and lib_statistic.

Referenced by calculateLowerRank(), calculateUpperRank(), and cdf().

Here is the call graph for this function:



8.21.4 Field Documentation

8.21.4.1 CONTINUOUS quantile_rank::m_probability_location `[private]`

Definition at line 202 of file statistic.h.

Referenced by cdf(), getUnbiasedQuantile(), operator=(), and quantile_rank().

8.21.4.2 INDEX quantile_rank::m_rank_location `[private]`

Definition at line 206 of file statistic.h.

Referenced by getRank(), operator<(), operator=(), operator==(), and quantile_rank().

8.21.4.3 INDEX quantile_rank::m_rank_lower `[private]`

Definition at line 207 of file statistic.h.

Referenced by getLowerRank(), operator=(), and quantile_rank().

8.21.4.4 INDEX quantile_rank::m_rank_upper `[private]`

Definition at line 208 of file statistic.h.

Referenced by getUpperRank(), operator=(), and quantile_rank().

8.21.4.5 CONTINUOUS quantile_rank::m_measure_location `[private]`

Definition at line 209 of file statistic.h.

Referenced by getMeasure(), operator=(), and setMeasure().

8.21.4.6 CONTINUOUS quantile_rank::m_measure_lower `[private]`

Definition at line 210 of file statistic.h.

Referenced by getLowerMeasure(), operator=(), and setMeasure().

8.21.4.7 CONTINUOUS quantile_rank::m_measure_upper `[private]`

Definition at line 211 of file statistic.h.

Referenced by getUpperMeasure(), operator=(), and setMeasure().

8.21.4.8 INDEX quantile_rank::m_sampleSize `[private]`

Definition at line 212 of file statistic.h.

Referenced by cdf(), operator=(), operator==(), and quantile_rank().

8.21.4.9 CONTINUOUS quantile_rank::m_alpha `[private]`

Definition at line 213 of file statistic.h.

Referenced by operator=(), operator==(), and quantile_rank().

8.21.4.10 distribution quantile_rank::m_form `[private]`

Definition at line 214 of file statistic.h.

Referenced by quantile_rank().

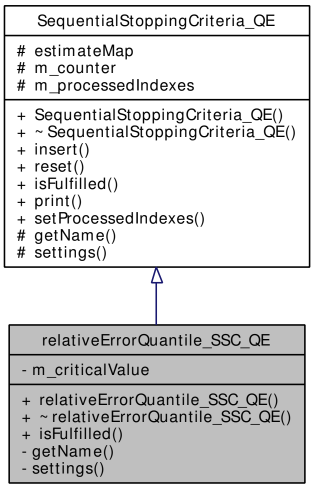
The documentation for this class was generated from the following files:

- **statistic.h**
- **statistic.cc**

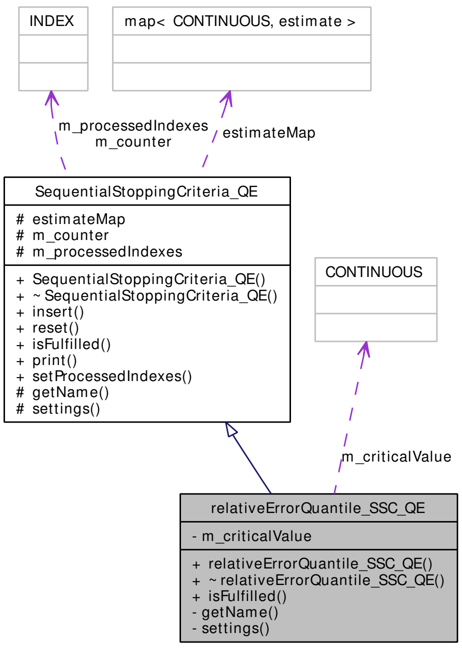
8.22 relativeErrorQuantile_SSC_QE Class Reference

`#include <quantile_estimation.h>`

Inheritance diagram for relativeErrorQuantile_SSC_QE:


SequentialStoppingCriteria_QE
# estimateMap
# m_counter
# m_processedIndexes
+ SequentialStoppingCriteria_QE()
+ ~SequentialStoppingCriteria_QE()
+ insert()
+ reset()
+ isFulfilled()
+ print()
+ setProcessedIndexes()
# getName()
# settings()
relativeErrorQuantile_SSC_QE
- m_criticalValue
+ relativeErrorQuantile_SSC_QE()
+ ~relativeErrorQuantile_SSC_QE()
+ isFulfilled()
- getName()
- settings()

Collaboration diagram for relativeErrorQuantile_SSC_QE:


INDEX
map< CONTINUOUS, estimate >
m_processedIndexes
m_counter
estimateMap
CONTINUOUS
m_criticalValue
SequentialStoppingCriteria_QE
relativeErrorQuantile_SSC_QE

Public Member Functions

- **relativeErrorQuantile_SSC_QE** (void)
- ~**relativeErrorQuantile_SSC_QE** (void)
- bool **isFulfilled** (void)

- void **insert** (const CONTINUOUS &location, const CONTINUOUS &probability, const CONTINUOUS &absoluteErrorNeg, const CONTINUOUS &absoluteErrorPos)
- void **reset** (void)
- void **print** (bool isFinal=false)
- void **setProcessedIndexes** (INDEX i)

Protected Attributes

- std::map< CONTINUOUS, estimate > **estimateMap**
- INDEX **m_counter**
- INDEX **m_processedIndexes**

Private Member Functions

- std::string **getName** (void)
- void **settings** (void)

Private Attributes

- CONTINUOUS **m_criticalValue**

8.22.1 Detailed Description

Definition at line 163 of file quantile_estimation.h.

8.22.2 Constructor & Destructor Documentation

8.22.2.1 relativeErrorQuantile_SSC_QE::relativeErrorQuantile_SSC_QE (void)

Definition at line 835 of file quantile_estimation.cc.

8.22.2.2 relativeErrorQuantile_SSC_QE::~relativeErrorQuantile_SSC_QE (void)

Definition at line 841 of file quantile_estimation.cc.

8.22.3 Member Function Documentation

8.22.3.1 bool relativeErrorQuantile_SSC_QE::isFulfilled (void) `[virtual]`

Reimplemented from **SequentialStoppingCriteria_QE** (p. 138).

Definition at line 844 of file quantile_estimation.cc.

References CONTINUOUS, and m_criticalValue.

8.22.3.2 std::string relativeErrorQuantile_SSC_QE::getName (void) `[inline, private, virtual]`

Reimplemented from **SequentialStoppingCriteria_QE** (p. 138).

Definition at line 172 of file quantile_estimation.h.

References s_relativeErrorQuantile_SSC_QE.

8.22.3.3 void relativeErrorQuantile_SSC_QE::settings (void) `[private, virtual]`

Reimplemented from **SequentialStoppingCriteria_QE** (p. 139).

Definition at line 862 of file quantile_estimation.cc.

8.22.3.4 void SequentialStoppingCriteria_QE::insert (const CONTINUOUS & *location*, const CONTINUOUS & *probability*, const CONTINUOUS & *absoluteErrorNeg*, const CONTINUOUS & *absoluteErrorPos*) `[inherited]`

Definition at line 627 of file quantile_estimation.cc.

References SequentialStoppingCriteria_QE::estimate::absoluteErrorNeg, SequentialStopping-Criteria_QE::estimate::absoluteErrorPos, SequentialStoppingCriteria_QE::estimateMap, SequentialStoppingCriteria_QE::estimate::location, and SequentialStoppingCriteria_-QE::estimate::probability.

Referenced by spectral_analysis_QE::checkQuantiles(), batch_mean_QE::checkQuantiles(), and pooling_QE::checkQuantiles().

8.22.3.5 void SequentialStoppingCriteria_QE::reset (void) `[inherited]`

Definition at line 639 of file quantile_estimation.cc.

References SequentialStoppingCriteria_QE::estimateMap.

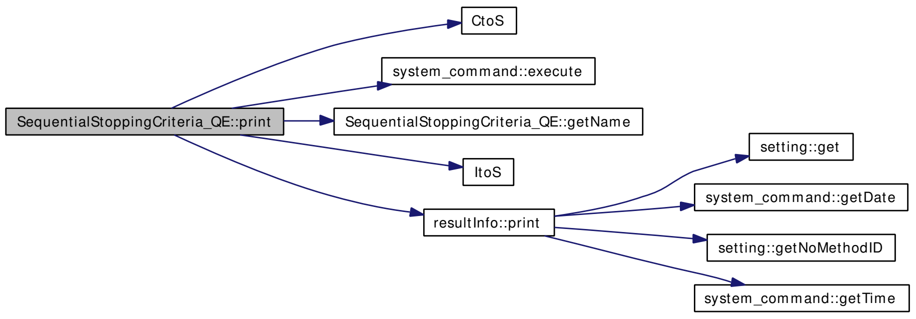
Referenced by spectral_analysis_QE::checkQuantiles(), batch_mean_QE::checkQuantiles(), and pooling_QE::checkQuantiles().

8.22.3.6 void SequentialStoppingCriteria_QE::print (bool *isFinal* = `false`) `[inherited]`

Definition at line 652 of file quantile_estimation.cc.

References CONTINUOUS, CtoS(), SequentialStoppingCriteria_QE::estimateMap, system_-command::execute(), SequentialStoppingCriteria_QE::getName(), ItoS(), lib_system, Sequential-StoppingCriteria_QE::m_counter, SequentialStoppingCriteria_QE::m_processedIndexes, result-Info::print(), and resultfile.

Here is the call graph for this function:



8.22.3.7 void SequentialStoppingCriteria_QE::setProcessedIndexes (INDEX *i*) [inline, inherited]

Definition at line 118 of file quantile_estimation.h.

References SequentialStoppingCriteria_QE::m_processedIndexes.

Referenced by spectral_analysis_QE::checkQuantiles(), batch_mean_QE::checkQuantiles(), and pooling_QE::checkQuantiles().

8.22.4 Field Documentation

8.22.4.1 CONTINUOUS relativeErrorQuantile_SSC_QE::m_criticalValue [private]

Definition at line 175 of file quantile_estimation.h.

Referenced by isFulfilled().

8.22.4.2 std::map<CONTINUOUS,estimate> SequentialStoppingCriteria_-QE::estimateMap [protected, inherited]

Definition at line 131 of file quantile_estimation.h.

Referenced by SequentialStoppingCriteria_QE::insert(), SequentialStoppingCriteria_QE::print(), and SequentialStoppingCriteria_QE::reset().

8.22.4.3 INDEX SequentialStoppingCriteria_QE::m_counter [protected, inherited]

Definition at line 132 of file quantile_estimation.h.

Referenced by SequentialStoppingCriteria_QE::print().

8.22.4.4 INDEX SequentialStoppingCriteria_QE::m_processedIndexes [protected, inherited]

Definition at line 133 of file quantile_estimation.h.

Referenced by SequentialStoppingCriteria_QE::print(), and SequentialStoppingCriteria_QE::set-ProcessedIndexes().

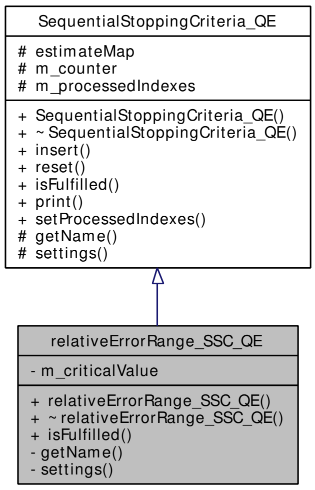
The documentation for this class was generated from the following files:

- **quantile_estimation.h**
- **quantile_estimation.cc**

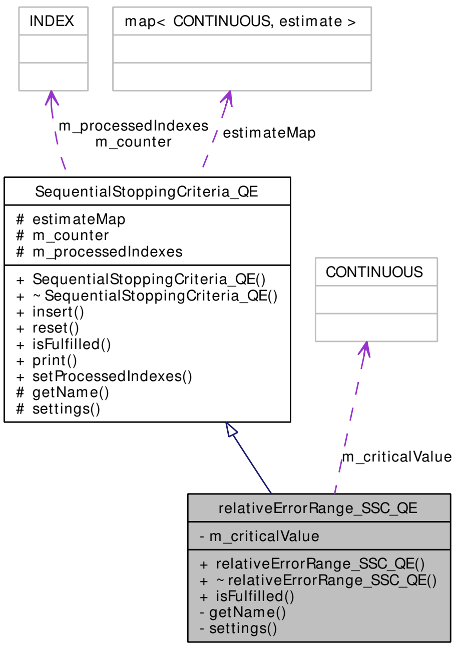
8.23 relativeErrorRange_SSC_QE Class Reference

`#include <quantile_estimation.h>`

Inheritance diagram for relativeErrorRange_SSC_QE:



Collaboration diagram for relativeErrorRange_SSC_QE:



Public Member Functions

- **relativeErrorRange_SSC_QE** (void)
- ∼**relativeErrorRange_SSC_QE** (void)
- bool **isFulfilled** (void)

- void **insert** (const CONTINUOUS &location, const CONTINUOUS &probability, const CONTINUOUS &absoluteErrorNeg, const CONTINUOUS &absoluteErrorPos)
- void **reset** (void)
- void **print** (bool isFinal=false)
- void **setProcessedIndexes** (INDEX i)

Protected Attributes

- std::map< CONTINUOUS, estimate > **estimateMap**
- INDEX **m_counter**
- INDEX **m_processedIndexes**

Private Member Functions

- std::string **getName** (void)
- void **settings** (void)

Private Attributes

- CONTINUOUS **m_criticalValue**

8.23.1 Detailed Description

Definition at line 178 of file quantile_estimation.h.

8.23.2 Constructor & Destructor Documentation

8.23.2.1 relativeErrorRange_SSC_QE::relativeErrorRange_SSC_QE (void)

Definition at line 876 of file quantile_estimation.cc.

8.23.2.2 relativeErrorRange_SSC_QE::∼relativeErrorRange_SSC_QE (void)

Definition at line 882 of file quantile_estimation.cc.

8.23.3 Member Function Documentation

8.23.3.1 bool relativeErrorRange_SSC_QE::isFulfilled (void) `[virtual]`

Reimplemented from **SequentialStoppingCriteria_QE** (p. 138).

Definition at line 885 of file quantile_estimation.cc.

8.23.3.2 std::string relativeErrorRange_SSC_QE::getName (void) `[inline, private, virtual]`

Reimplemented from **SequentialStoppingCriteria_QE** (p. 138).

Definition at line 187 of file quantile_estimation.h.

References s_relativeErrorRange_SSC_QE.

8.23.3.3 void relativeErrorRange_SSC_QE::settings (void) `[private, virtual]`

Reimplemented from **SequentialStoppingCriteria_QE** (p. 139).

Definition at line 908 of file quantile_estimation.cc.

8.23.3.4 void SequentialStoppingCriteria_QE::insert (const CONTINUOUS & *location*, const CONTINUOUS & *probability*, const CONTINUOUS & *absoluteErrorNeg*, const CONTINUOUS & *absoluteErrorPos*) `[inherited]`

Definition at line 627 of file quantile_estimation.cc.

References SequentialStoppingCriteria_QE::estimate::absoluteErrorNeg, SequentialStopping-Criteria_QE::estimate::absoluteErrorPos, SequentialStoppingCriteria_QE::estimateMap, SequentialStoppingCriteria_QE::estimate::location, and SequentialStoppingCriteria_-QE::estimate::probability.

Referenced by spectral_analysis_QE::checkQuantiles(), batch_mean_QE::checkQuantiles(), and pooling_QE::checkQuantiles().

8.23.3.5 void SequentialStoppingCriteria_QE::reset (void) `[inherited]`

Definition at line 639 of file quantile_estimation.cc.

References SequentialStoppingCriteria_QE::estimateMap.

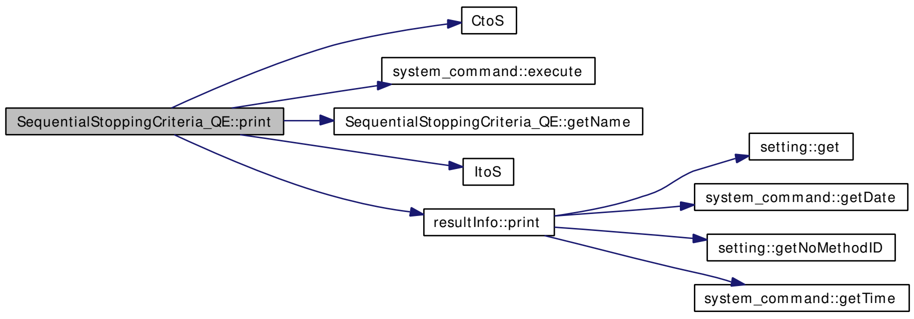
Referenced by spectral_analysis_QE::checkQuantiles(), batch_mean_QE::checkQuantiles(), and pooling_QE::checkQuantiles().

8.23.3.6 void SequentialStoppingCriteria_QE::print (bool *isFinal* = `false`) `[inherited]`

Definition at line 652 of file quantile_estimation.cc.

References CONTINUOUS, CtoS(), SequentialStoppingCriteria_QE::estimateMap, system_-command::execute(), SequentialStoppingCriteria_QE::getName(), ItoS(), lib_system, Sequential-StoppingCriteria_QE::m_counter, SequentialStoppingCriteria_QE::m_processedIndexes, result-Info::print(), and resultfile.

Here is the call graph for this function:



8.23.3.7 void SequentialStoppingCriteria_QE::setProcessedIndexes (INDEX *i*) `[inline, inherited]`

Definition at line 118 of file quantile_estimation.h.

References SequentialStoppingCriteria_QE::m_processedIndexes.

Referenced by spectral_analysis_QE::checkQuantiles(), batch_mean_QE::checkQuantiles(), and pooling_QE::checkQuantiles().

8.23.4 Field Documentation

8.23.4.1 CONTINUOUS relativeErrorRange_SSC_QE::m_criticalValue `[private]`

Definition at line 190 of file quantile_estimation.h.

8.23.4.2 std::map<CONTINUOUS,estimate> SequentialStoppingCriteria_-QE::estimateMap `[protected, inherited]`

Definition at line 131 of file quantile_estimation.h.

Referenced by SequentialStoppingCriteria_QE::insert(), SequentialStoppingCriteria_QE::print(), and SequentialStoppingCriteria_QE::reset().

8.23.4.3 INDEX SequentialStoppingCriteria_QE::m_counter `[protected, inherited]`

Definition at line 132 of file quantile_estimation.h.

Referenced by SequentialStoppingCriteria_QE::print().

8.23.4.4 INDEX SequentialStoppingCriteria_QE::m_processedIndexes `[protected, inherited]`

Definition at line 133 of file quantile_estimation.h.

Referenced by SequentialStoppingCriteria_QE::print(), and SequentialStoppingCriteria_QE::set-ProcessedIndexes().

The documentation for this class was generated from the following files:

- **quantile_estimation.h**
- **quantile_estimation.cc**

8.24 resultInfo Class Reference

`#include <resultfile.h>`

Public Member Functions

- void **print** (const std::string &message, const std::string &method)

8.24.1 Detailed Description

Definition at line 8 of file resultfile.h.

8.24.2 Member Function Documentation

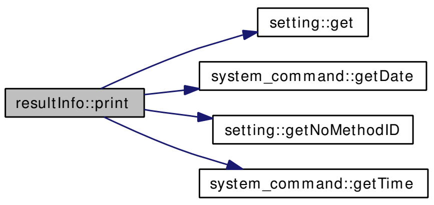
8.24.2.1 void resultInfo::print (const std::string & *message*, const std::string & *method*)

Definition at line 12 of file resultfile.cc.

References setting::get(), system_command::getDate(), setting::getNoMethodID(), system_-command::getTime(), lib_setting, and lib_system.

Referenced by SequentialStoppingCriteria_QE::print(), sequential_TPD::printResult(), and batching::printResult().

Here is the call graph for this function:



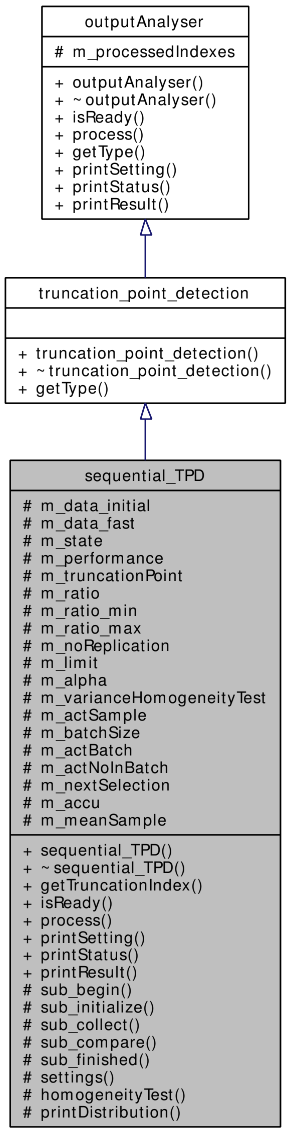
The documentation for this class was generated from the following files:

- **resultfile.h**
- **resultfile.cc**

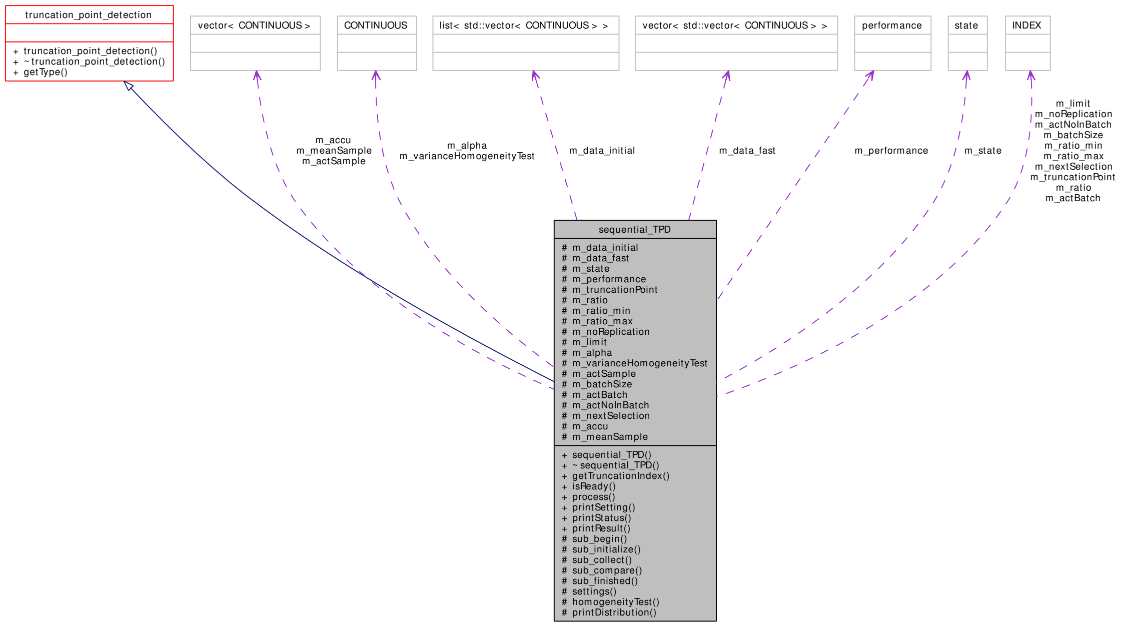
8.25 sequential_TPD Class Reference

`#include <truncation_point_detection.h>`

Inheritance diagram for sequential_TPD:



Collaboration diagram for sequential_TPD:



Public Member Functions

- **sequential_TPD** ()
- virtual ~**sequential_TPD** (void)
- INDEX **getTruncationIndex** (void) const
- virtual bool **isReady** (void) const
- virtual void **process** (const std::list< CONTINUOUS > &)
- virtual void **printSetting** (void)
- virtual void **printStatus** (void)
- virtual void **printResult** (void)
- virtual **TypeOfMethod getType** (void) const

Protected Types

- enum **state** { **begin** = 1, **initialize**, **collect**, **finished** }
- enum **performance** { **exact** = 1, **precise**, **fast** }

Protected Member Functions

- void **sub_begin** (void)
- void **sub_initialize** (void)
- void **sub_collect** (void)
- void **sub_compare** (void)
- void **sub_finished** (void)
- void **settings** (void)
- bool **homogeneityTest** (std::vector< CONTINUOUS > &p1, std::vector< CONTINUOUS > &p2)
- void **printDistribution** (void)

Protected Attributes

- std::list< std::vector< CONTINUOUS > > **m_data_initial**
- std::vector< std::vector< CONTINUOUS > > **m_data_fast**
- **state m_state**
- **performance m_performance**
- INDEX **m_truncationPoint**
- INDEX **m_ratio**
- INDEX **m_ratio_min**
- INDEX **m_ratio_max**
- INDEX **m_noReplication**
- INDEX **m_limit**
- CONTINUOUS **m_alpha**
- CONTINUOUS **m_varianceHomogeneityTest**
- std::vector< CONTINUOUS > **m_actSample**
- INDEX **m_batchSize**
- INDEX **m_actBatch**
- INDEX **m_actNoInBatch**
- INDEX **m_nextSelection**
- std::vector< CONTINUOUS > **m_accu**
- std::vector< CONTINUOUS > **m_meanSample**
- INDEX **m_processedIndexes**

8.25.1 Detailed Description

Definition at line 29 of file truncation_point_detection.h.

8.25.2 Member Enumeration Documentation

8.25.2.1 enum sequential_TPD::state `[protected]`

Enumerator:

begin

initialize

collect

finished

Definition at line 43 of file truncation_point_detection.h.

8.25.2.2 enum sequential_TPD::performance `[protected]`

Enumerator:

exact

precise

fast

Definition at line 44 of file truncation_point_detection.h.

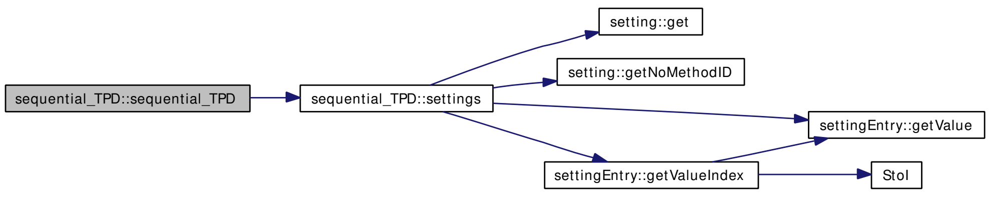
8.25.3 Constructor & Destructor Documentation

8.25.3.1 sequential_TPD::sequential_TPD ()

Definition at line 79 of file truncation_point_detection.cc.

References INDEX, m_accu, m_actSample, m_meanSample, m_noReplication, and settings().

Here is the call graph for this function:



8.25.3.2 sequential_TPD::~sequential_TPD (void) `[virtual]`

Definition at line 100 of file truncation_point_detection.cc.

8.25.4 Member Function Documentation

8.25.4.1 INDEX sequential_TPD::getTruncationIndex (void) const

Definition at line 103 of file truncation_point_detection.cc.

References finished, m_state, and m_truncationPoint.

8.25.4.2 bool sequential_TPD::isReady (void) const `[virtual]`

Reimplemented from **outputAnalyser** (p. 183).

Definition at line 108 of file truncation_point_detection.cc.

References finished, and m_state.

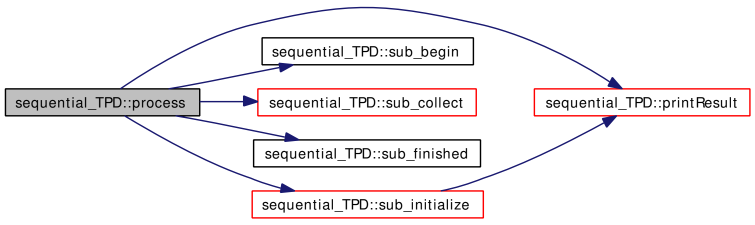
8.25.4.3 void sequential_TPD::process (const std::list< CONTINUOUS > &) `[virtual]`

Reimplemented from **outputAnalyser** (p. 183).

Definition at line 113 of file truncation_point_detection.cc.

References begin, collect, exact, fast, finished, INDEX, initialize, logfile, m_actSample, m_-limit, m_noReplication, m_performance, outputAnalyser::m_processedIndexes, m_state, m_-truncationPoint, precise, printResult(), s_sequential_TPD, sub_begin(), sub_collect(), sub_-finished(), and sub_initialize().

Here is the call graph for this function:


sequential_TPD::process
sequential_TPD::sub_begin
sequential_TPD::sub_collect
sequential_TPD::sub_finished
sequential_TPD::sub_initialize
sequential_TPD::printResult

8.25.4.4 void sequential_TPD::printSetting (void) [virtual]

Reimplemented from **outputAnalyser** (p. 183).

Definition at line 147 of file truncation_point_detection.cc.

References exact, fast, ItoS(), logfile, m_alpha, m_limit, m_performance, m_ratio, m_ratio_max, m_ratio_min, precise, s_alpha, s_auto, s_exact, s_execute, s_fast, s_limit, s_performance, s_precise, s_ratio, s_ratio_max, s_ratio_min, s_sequential_TPD, and s_yes.

Here is the call graph for this function:

sequential_TPD::printSetting
ItoS

8.25.4.5 void sequential_TPD::printStatus (void) [virtual]

Reimplemented from **outputAnalyser** (p. 183).

Definition at line 174 of file truncation_point_detection.cc.

References begin, collect, exact, fast, finished, initialize, logfile, m_actBatch, m_actNoInBatch, m_alpha, m_batchSize, m_data_fast, m_data_initial, m_limit, m_nextSelection, m_noReplication, m_performance, outputAnalyser::m_processedIndexes, m_ratio, m_ratio_max, m_ratio_min, m_state, m_truncationPoint, m_varianceHomogeneityTest, precise, s_exact, s_fast, s_precise, and s_sequential_TPD.

Referenced by sub_compare().

8.25.4.6 void sequential_TPD::printResult (void) [virtual]

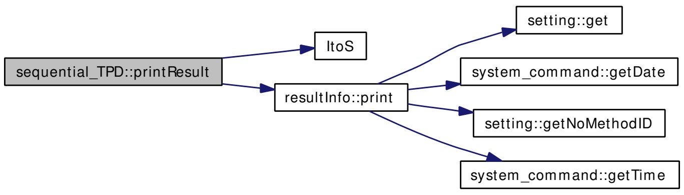
Reimplemented from **outputAnalyser** (p. 183).

Definition at line 211 of file truncation_point_detection.cc.

References begin, collect, exact, fast, finished, initialize, ItoS(), logfile, m_actBatch, m_actNoInBatch, m_alpha, m_batchSize, m_data_fast, m_data_initial, m_limit, m_nextSelection, m_noReplication, m_performance, outputAnalyser::m_processedIndexes, m_ratio, m_ratio_max, m_ratio_min, m_state, m_truncationPoint, m_varianceHomogeneityTest, precise, resultInfo::print(), resultfile, s_exact, s_fast, s_precise, and s_sequential_TPD.

Referenced by process(), sub_compare(), and sub_initialize().

Here is the call graph for this function:



8.25.4.7 void sequential_TPD::sub_begin (void) [protected]

Definition at line 251 of file truncation_point_detection.cc.

References INDEX, initialize, m_accu, m_actSample, m_data_initial, m_noReplication, m_-performance, m_state, and precise.

Referenced by process().

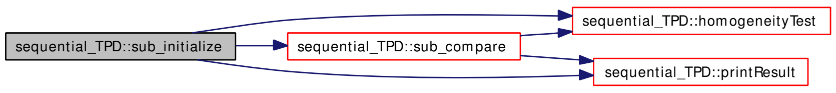
8.25.4.8 void sequential_TPD::sub_initialize (void) [protected]

Definition at line 258 of file truncation_point_detection.cc.

References fast, finished, homogeneityTest(), INDEX, m_accu, m_actSample, m_data_fast, m_-data_initial, m_noReplication, m_performance, outputAnalyser::m_processedIndexes, m_ratio, m_ratio_max, m_ratio_min, m_state, m_truncationPoint, precise, printResult(), and sub_-compare().

Referenced by process().

Here is the call graph for this function:


sequential_TPD::sub_initialize
sequential_TPD::homogeneityTest
sequential_TPD::sub_compare
sequential_TPD::printResult

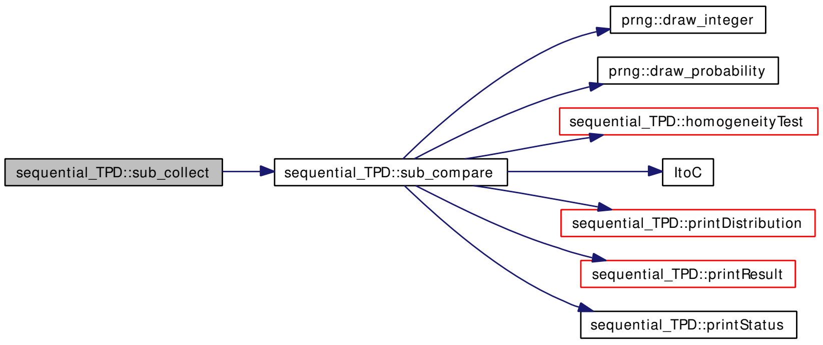
8.25.4.9 void sequential_TPD::sub_collect (void) [protected]

Definition at line 287 of file truncation_point_detection.cc.

References exact, fast, INDEX, m_accu, m_actBatch, m_actNoInBatch, m_actSample, m_-batchSize, m_data_fast, m_data_initial, m_nextSelection, m_noReplication, m_performance, outputAnalyser::m_processedIndexes, m_ratio, precise, and sub_compare().

Referenced by process().

Here is the call graph for this function:


sequential_TPD::sub_collect
sequential_TPD::sub_compare
prng::draw_integer
prng::draw_probability
sequential_TPD::homogeneityTest
ItoC
sequential_TPD::printDistribution
sequential_TPD::printResult
sequential_TPD::printStatus

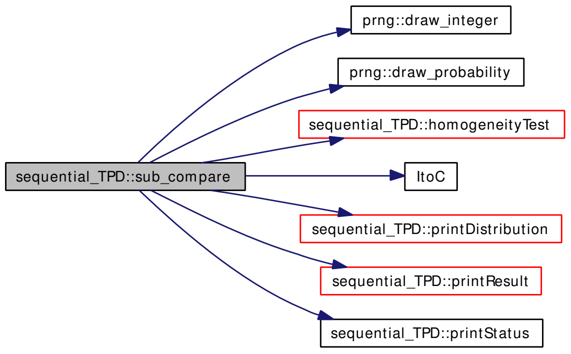
8.25.4.10 void sequential_TPD::sub_compare (void) [protected]

Definition at line 315 of file truncation_point_detection.cc.

References collect, prng::draw_integer(), prng::draw_probability(), exact, fast, finished, homogeneityTest(), INDEX, ItoC(), lib_prng, m_accu, m_actBatch, m_actNoInBatch, m_-batchSize, m_data_fast, m_data_initial, m_meanSample, m_nextSelection, m_noReplication, m_performance, outputAnalyser::m_processedIndexes, m_ratio, m_state, m_truncationPoint, precise, printDistribution(), printResult(), and printStatus().

Referenced by sub_collect(), and sub_initialize().

Here is the call graph for this function:


sequential_TPD::sub_compare
prng::draw_integer
prng::draw_probability
sequential_TPD::homogeneityTest
ItoC
sequential_TPD::printDistribution
sequential_TPD::printResult
sequential_TPD::printStatus

8.25.4.11 void sequential_TPD::sub_finished (void) [protected]

Definition at line 418 of file truncation_point_detection.cc.

Referenced by process().

8.25.4.12 void sequential_TPD::settings (void) [protected]

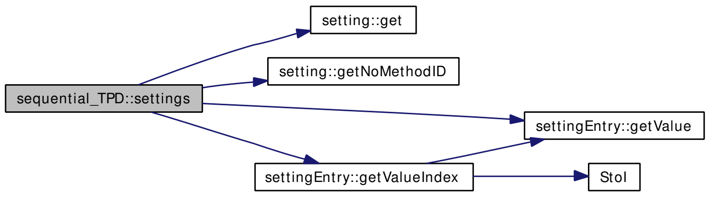
Definition at line 422 of file truncation_point_detection.cc.

References exact, fast, setting::get(), setting::getNoMethodID(), settingEntry::getValue(), setting-Entry::getValueIndex(), lib_setting, m_alpha, m_limit, m_noReplication, m_performance, m_-

ratio, m_ratio_max, m_ratio_min, precise, s_alpha, s_auto, s_exact, s_limit, s_performance, s_precise, s_ratio, s_ratio_max, s_ratio_min, s_replications, and s_sequential_TPD.

Referenced by sequential_TPD().

Here is the call graph for this function:



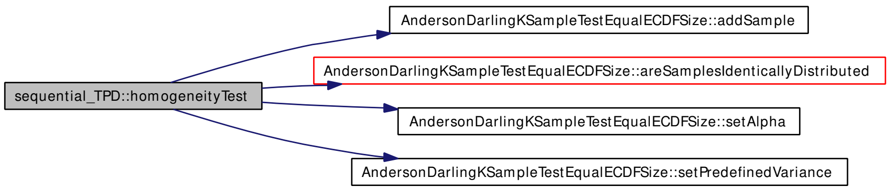
8.25.4.13 bool sequential_TPD::homogeneityTest (std::vector< CONTINUOUS > & *p1*, std::vector< CONTINUOUS > & *p2*) [protected]

Definition at line 475 of file truncation_point_detection.cc.

References AndersonDarlingKSampleTestEqualECDFSize::addSample(), AndersonDarlingKSampleTestEqualECDFSize::areSamplesIdenticallyDistributed(), CONTINUOUS, m_alpha, m_noReplication, m_varianceHomogeneityTest, AndersonDarlingKSampleTestEqualECDFSize::setAlpha(), and AndersonDarlingKSampleTestEqualECDFSize::setPredefinedVariance().

Referenced by sub_compare(), and sub_initialize().

Here is the call graph for this function:


AndersonDarlingKSampleTestEqualECDFSize::addSample
AndersonDarlingKSampleTestEqualECDFSize::areSamplesIdenticallyDistributed
sequential_TPD::homogeneityTest
AndersonDarlingKSampleTestEqualECDFSize::setAlpha
AndersonDarlingKSampleTestEqualECDFSize::setPredefinedVariance

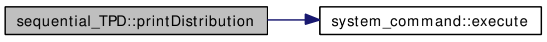
8.25.4.14 void sequential_TPD::printDistribution (void) [protected]

Definition at line 493 of file truncation_point_detection.cc.

References exact, system_command::execute(), fast, INDEX, lib_system, m_data_fast, m_data_initial, m_performance, m_ratio, m_truncationPoint, precise, s_exact, s_fast, s_precise, and s_sequential_TPD.

Referenced by sub_compare().

Here is the call graph for this function:



8.25.4.15 TypeOfMethod truncation_point_detection::getType (void) const `[virtual, inherited]`

Reimplemented from **outputAnalyser** (p. 87).

Definition at line 14 of file truncation_point_detection.cc.

References IDENTICAL.

8.25.5 Field Documentation

8.25.5.1 std::list< std::vector<CONTINUOUS> > sequential_TPD::m_data_-initial `[protected]`

Definition at line 46 of file truncation_point_detection.h.

Referenced by printDistribution(), printResult(), printStatus(), sub_begin(), sub_collect(), sub_-compare(), and sub_initialize().

8.25.5.2 std::vector< std::vector<CONTINUOUS> > sequential_TPD::m_data_-fast `[protected]`

Definition at line 47 of file truncation_point_detection.h.

Referenced by printDistribution(), printResult(), printStatus(), sub_collect(), sub_compare(), and sub_initialize().

8.25.5.3 state sequential_TPD::m_state `[protected]`

Definition at line 49 of file truncation_point_detection.h.

Referenced by getTruncationIndex(), isReady(), printResult(), printStatus(), process(), sub_-begin(), sub_compare(), and sub_initialize().

8.25.5.4 performance sequential_TPD::m_performance `[protected]`

Definition at line 50 of file truncation_point_detection.h.

Referenced by printDistribution(), printResult(), printSetting(), printStatus(), process(), set-tings(), sub_begin(), sub_collect(), sub_compare(), and sub_initialize().

8.25.5.5 INDEX sequential_TPD::m_truncationPoint `[protected]`

Definition at line 51 of file truncation_point_detection.h.

Referenced by getTruncationIndex(), printDistribution(), printResult(), printStatus(), process(), sub_compare(), and sub_initialize().

8.25.5.6 INDEX sequential_TPD::m_ratio `[protected]`

Definition at line 52 of file truncation_point_detection.h.

Referenced by printDistribution(), printResult(), printSetting(), printStatus(), settings(), sub_-collect(), sub_compare(), and sub_initialize().

8.25.5.7 INDEX sequential_TPD::m_ratio_min [protected]

Definition at line 53 of file truncation_point_detection.h.

Referenced by printResult(), printSetting(), printStatus(), settings(), and sub_initialize().

8.25.5.8 INDEX sequential_TPD::m_ratio_max [protected]

Definition at line 54 of file truncation_point_detection.h.

Referenced by printResult(), printSetting(), printStatus(), settings(), and sub_initialize().

8.25.5.9 INDEX sequential_TPD::m_noReplication [protected]

Definition at line 55 of file truncation_point_detection.h.

Referenced by homogeneityTest(), printResult(), printStatus(), process(), sequential_TPD(), settings(), sub_begin(), sub_collect(), sub_compare(), and sub_initialize().

8.25.5.10 INDEX sequential_TPD::m_limit [protected]

Definition at line 56 of file truncation_point_detection.h.

Referenced by printResult(), printSetting(), printStatus(), process(), and settings().

8.25.5.11 CONTINUOUS sequential_TPD::m_alpha [protected]

Definition at line 57 of file truncation_point_detection.h.

Referenced by homogeneityTest(), printResult(), printSetting(), printStatus(), and settings().

8.25.5.12 CONTINUOUS sequential_TPD::m_varianceHomogeneityTest [protected]

Definition at line 58 of file truncation_point_detection.h.

Referenced by homogeneityTest(), printResult(), and printStatus().

8.25.5.13 std::vector<CONTINUOUS> sequential_TPD::m_actSample [protected]

Definition at line 59 of file truncation_point_detection.h.

Referenced by process(), sequential_TPD(), sub_begin(), sub_collect(), and sub_initialize().

8.25.5.14 INDEX sequential_TPD::m_batchSize [protected]

Definition at line 73 of file truncation_point_detection.h.

Referenced by printResult(), printStatus(), sub_collect(), and sub_compare().

8.25.5.15 INDEX sequential_TPD::m_actBatch [protected]

Definition at line 74 of file truncation_point_detection.h.

Referenced by printResult(), printStatus(), sub_collect(), and sub_compare().

8.25.5.16 INDEX sequential_TPD::m_actNoInBatch [protected]

Definition at line 75 of file truncation_point_detection.h.

Referenced by printResult(), printStatus(), sub_collect(), and sub_compare().

8.25.5.17 INDEX sequential_TPD::m_nextSelection [protected]

Definition at line 76 of file truncation_point_detection.h.

Referenced by printResult(), printStatus(), sub_collect(), and sub_compare().

8.25.5.18 std::vector<CONTINUOUS> sequential_TPD::m_accu [protected]

Definition at line 79 of file truncation_point_detection.h.

Referenced by sequential_TPD(), sub_begin(), sub_collect(), sub_compare(), and sub_-initialize().

8.25.5.19 std::vector<CONTINUOUS> sequential_TPD::m_meanSample [protected]

Definition at line 80 of file truncation_point_detection.h.

Referenced by sequential_TPD(), and sub_compare().

8.25.5.20 INDEX outputAnalyser::m_processedIndexes [protected, inherited]

Definition at line 20 of file basic.h.

Referenced by evolution::calculateQuantiles(), spectral_analysis_QE::checkQuantiles(), batch_-mean_QE::checkQuantiles(), pooling_QE::checkQuantiles(), deterministic_TPD::isReady(), evolution::isReady(), printResult(), deterministic_TPD::printResult(), spectral_analysis_-QE::printResult(), batch_mean_QE::printResult(), pooling_QE::printResult(), batching::print-Result(), printStatus(), deterministic_TPD::printStatus(), evolution::printStatus(), spectral_-analysis_QE::printStatus(), batch_mean_QE::printStatus(), pooling_QE::printStatus(), batching::printStatus(), process(), deterministic_TPD::process(), evolution::process(), spectral_-analysis_QE::process(), batch_mean_QE::process(), pooling_QE::process(), batching::process(), outputAnalyser::process(), sub_collect(), sub_compare(), and sub_initialize().

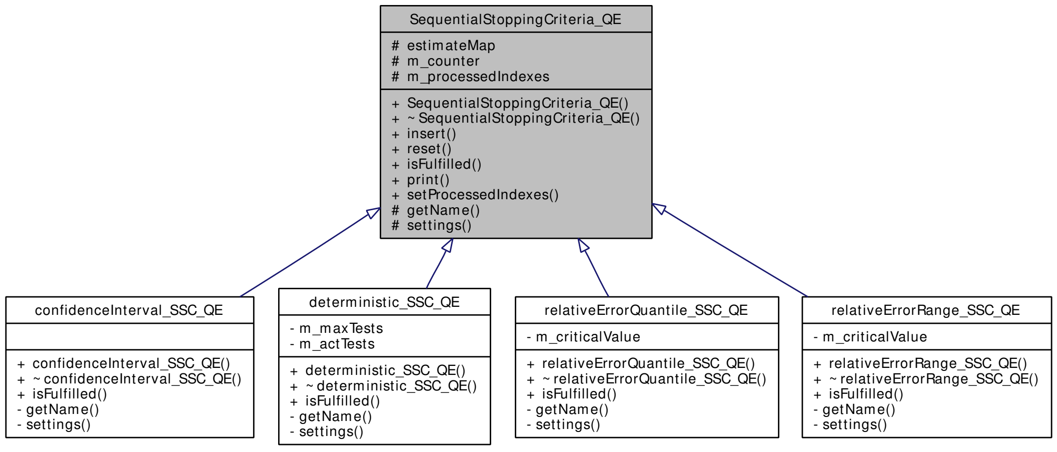
The documentation for this class was generated from the following files:

- **truncation_point_detection.h**
- **truncation_point_detection.cc**

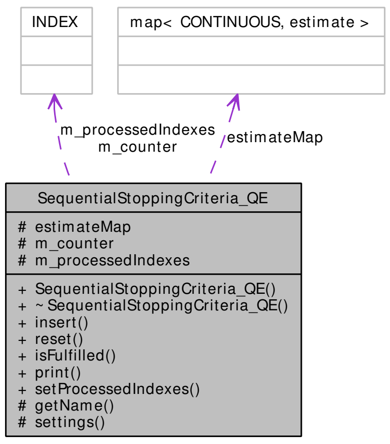
8.26 SequentialStoppingCriteria_QE Class Reference

`#include <quantile_estimation.h>`

Inheritance diagram for SequentialStoppingCriteria_QE:



Collaboration diagram for SequentialStoppingCriteria_QE:



Public Member Functions

- **SequentialStoppingCriteria_QE** (void)
- virtual ~**SequentialStoppingCriteria_QE** (void)
- void **insert** (const CONTINUOUS &location, const CONTINUOUS &probability, const CONTINUOUS &absoluteErrorNeg, const CONTINUOUS &absoluteErrorPos)
- void **reset** (void)
- virtual bool **isFulfilled** (void)
- void **print** (bool isFinal=false)
- void **setProcessedIndexes** (INDEX i)

Protected Member Functions

- virtual std::string **getName** (void)
- virtual void **settings** (void)

Protected Attributes

- std::map< CONTINUOUS, **estimate** > **estimateMap**
- INDEX **m_counter**
- INDEX **m_processedIndexes**

Data Structures

- struct **estimate**

8.26.1 Detailed Description

Definition at line 106 of file quantile_estimation.h.

8.26.2 Constructor & Destructor Documentation

8.26.2.1 SequentialStoppingCriteria_QE::SequentialStoppingCriteria_QE (void)

Definition at line 619 of file quantile_estimation.cc.

8.26.2.2 SequentialStoppingCriteria_QE::~SequentialStoppingCriteria_QE (void) `[virtual]`

Definition at line 624 of file quantile_estimation.cc.

8.26.3 Member Function Documentation

8.26.3.1 void SequentialStoppingCriteria_QE::insert (const CONTINUOUS & *location*, const CONTINUOUS & *probability*, const CONTINUOUS & *absoluteErrorNeg*, const CONTINUOUS & *absoluteErrorPos*)

Definition at line 627 of file quantile_estimation.cc.

References SequentialStoppingCriteria_QE::estimate::absoluteErrorNeg, SequentialStopping-Criteria_QE::estimate::absoluteErrorPos, estimateMap, SequentialStoppingCriteria_-QE::estimate::location, and SequentialStoppingCriteria_QE::estimate::probability.

Referenced by spectral_analysis_QE::checkQuantiles(), batch_mean_QE::checkQuantiles(), and pooling_QE::checkQuantiles().

8.26.3.2 void SequentialStoppingCriteria_QE::reset (void)

Definition at line 639 of file quantile_estimation.cc.

References estimateMap.

Referenced by spectral_analysis_QE::checkQuantiles(), batch_mean_QE::checkQuantiles(), and pooling_QE::checkQuantiles().

8.26.3.3 bool SequentialStoppingCriteria_QE::isFulfilled (void) `[virtual]`

Reimplemented in **deterministic_SSC_QE** (p. 55), **confidenceInterval_SSC_QE** (p. 47), **relativeErrorQuantile_SSC_QE** (p. 116), and **relativeErrorRange_SSC_QE** (p. 121).

Definition at line 643 of file quantile_estimation.cc.

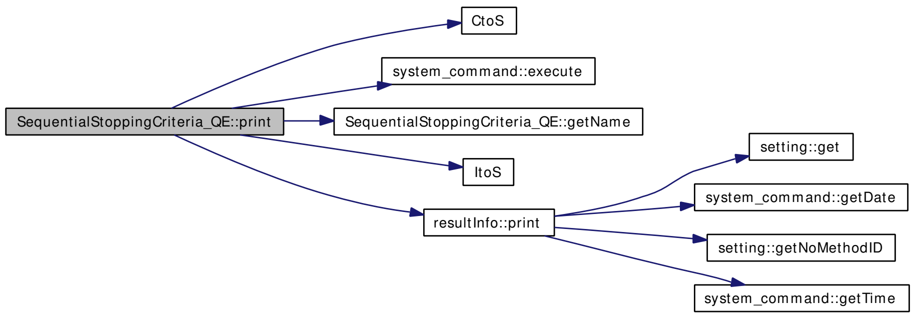
Referenced by spectral_analysis_QE::checkQuantiles(), batch_mean_QE::checkQuantiles(), and pooling_QE::checkQuantiles().

8.26.3.4 void SequentialStoppingCriteria_QE::print (bool *isFinal* = `false`)

Definition at line 652 of file quantile_estimation.cc.

References CONTINUOUS, CtoS(), estimateMap, system_command::execute(), getName(), ItoS(), lib_system, m_counter, m_processedIndexes, resultInfo::print(), and resultfile.

Here is the call graph for this function:



8.26.3.5 void SequentialStoppingCriteria_QE::setProcessedIndexes (INDEX *i*) `[inline]`

Definition at line 118 of file quantile_estimation.h.

References m_processedIndexes.

Referenced by spectral_analysis_QE::checkQuantiles(), batch_mean_QE::checkQuantiles(), and pooling_QE::checkQuantiles().

8.26.3.6 virtual std::string SequentialStoppingCriteria_QE::getName (void) `[inline, protected, virtual]`

Reimplemented in **deterministic_SSC_QE** (p. 56), **confidenceInterval_SSC_QE** (p. 47), **relativeErrorQuantile_SSC_QE** (p. 117), and **relativeErrorRange_SSC_QE** (p. 121).

Definition at line 128 of file quantile_estimation.h.

Referenced by print().

8.26.3.7 void SequentialStoppingCriteria_QE::settings (void) `[protected, virtual]`

Reimplemented in **deterministic_SSC_QE** (p. 56), **confidenceInterval_SSC_QE** (p. 48), **relativeErrorQuantile_SSC_QE** (p. 117), and **relativeErrorRange_SSC_QE** (p. 122).

Definition at line 648 of file quantile_estimation.cc.

8.26.4 Field Documentation

8.26.4.1 std::map<CONTINUOUS,estimate> SequentialStoppingCriteria_-QE::estimateMap `[protected]`

Definition at line 131 of file quantile_estimation.h.

Referenced by insert(), print(), and reset().

8.26.4.2 INDEX SequentialStoppingCriteria_QE::m_counter `[protected]`

Definition at line 132 of file quantile_estimation.h.

Referenced by print().

8.26.4.3 INDEX SequentialStoppingCriteria_QE::m_processedIndexes `[protected]`

Definition at line 133 of file quantile_estimation.h.

Referenced by print(), and setProcessedIndexes().

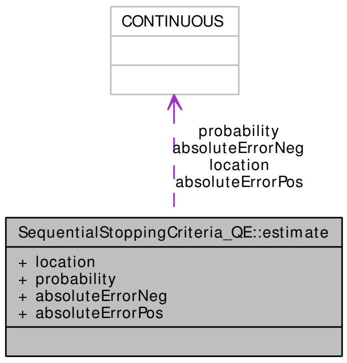
The documentation for this class was generated from the following files:

- **quantile_estimation.h**
- **quantile_estimation.cc**

8.27 SequentialStoppingCriteria_QE::estimate Struct Reference

`#include <quantile_estimation.h>`

Collaboration diagram for SequentialStoppingCriteria_QE::estimate:



Data Fields

- CONTINUOUS **location**
- CONTINUOUS **probability**
- CONTINUOUS **absoluteErrorNeg**
- CONTINUOUS **absoluteErrorPos**

8.27.1 Detailed Description

Definition at line 121 of file quantile_estimation.h.

8.27.2 Field Documentation

8.27.2.1 CONTINUOUS SequentialStoppingCriteria_QE::estimate::location

Definition at line 122 of file quantile_estimation.h.

Referenced by SequentialStoppingCriteria_QE::insert().

8.27.2.2 CONTINUOUS SequentialStoppingCriteria_QE::estimate::probability

Definition at line 123 of file quantile_estimation.h.

Referenced by SequentialStoppingCriteria_QE::insert().

8.27.2.3 CONTINUOUS SequentialStoppingCriteria_QE::estimate::absoluteError-Neg

Definition at line 124 of file quantile_estimation.h.

Referenced by SequentialStoppingCriteria_QE::insert().

8.27.2.4 CONTINUOUS SequentialStoppingCriteria_QE::estimate::absoluteErrorPos

Definition at line 125 of file quantile_estimation.h.

Referenced by SequentialStoppingCriteria_QE::insert().

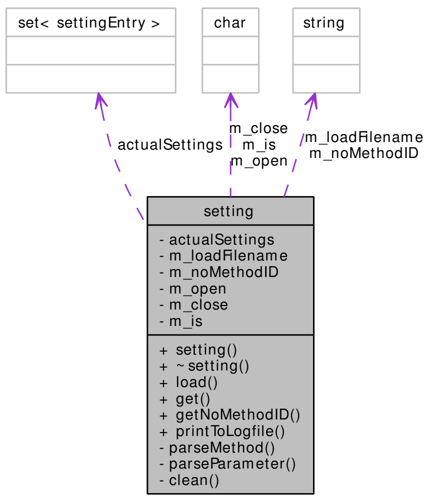
The documentation for this struct was generated from the following file:

- **quantile_estimation.h**

8.28 setting Class Reference

`#include <setting.h>`

Collaboration diagram for setting:



Public Member Functions

- **setting** (void)
- ~**setting** (void)
- void **load** (const std::string &)
- bool **get** (**settingEntry** &)
- const std::string & **getNoMethodID** (void) const
- void **printToLogfile** (void)

Private Member Functions

- bool **parseMethod** (const std::string &, std::string &)
- bool **parseParameter** (const std::string &, std::string &, std::string &)
- void **clean** (std::string &)

Private Attributes

- std::set< **settingEntry** > **actualSettings**
- std::string **m_loadFilename**
- std::string **m_noMethodID**
- char **m_open**
- char **m_close**
- char **m_is**

8.28.1 Detailed Description

Definition at line 39 of file setting.h.

8.28.2 Constructor & Destructor Documentation

8.28.2.1 setting::setting (void)

Definition at line 95 of file setting.cc.

8.28.2.2 setting::∼setting (void)

Definition at line 103 of file setting.cc.

8.28.3 Member Function Documentation

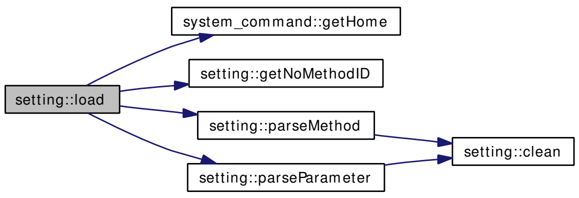
8.28.3.1 void setting::load (const std::string &)

Definition at line 106 of file setting.cc.

References actualSettings, system_command::getHome(), getNoMethodID(), lib_system, m_-loadFilename, parseMethod(), and parseParameter().

Referenced by main().

Here is the call graph for this function:



8.28.3.2 bool setting::get (settingEntry &)

Definition at line 146 of file setting.cc.

References actualSettings.

Referenced by deterministic_TPD::deterministic_TPD(), evolution::evolution(), main(), method_factory::method_factory(), resultInfo::print(), quantile_estimation::set_SSC(), sequential_TPD::settings(), spectral_analysis_QE::settings(), batch_mean_QE::settings(), pooling_QE::settings(), and batching::settings().

8.28.3.3 const std::string & setting::getNoMethodID (void) const

Definition at line 153 of file setting.cc.

References m_noMethodID.

Referenced by evolution::evolution(), load(), main(), resultInfo::print(), sequential_-TPD::settings(), spectral_analysis_QE::settings(), batch_mean_QE::settings(), and batching::settings().

8.28.3.4 void setting::printToLogfile (void)

Definition at line 157 of file setting.cc.

References actualSettings, logfile, m_close, m_is, m_loadFilename, and m_open.

Referenced by main().

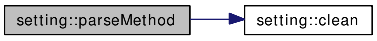
8.28.3.5 bool setting::parseMethod (const std::string &, std::string &) `[private]`

Definition at line 179 of file setting.cc.

References clean(), m_close, and m_open.

Referenced by load().

Here is the call graph for this function:



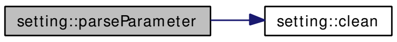
8.28.3.6 bool setting::parseParameter (const std::string &, std::string &, std::string &) `[private]`

Definition at line 192 of file setting.cc.

References clean(), and m_is.

Referenced by load().

Here is the call graph for this function:



8.28.3.7 void setting::clean (std::string &) `[private]`

Definition at line 208 of file setting.cc.

Referenced by parseMethod(), and parseParameter().

8.28.4 Field Documentation

8.28.4.1 std::set<settingEntry> setting::actualSettings `[private]`

Definition at line 51 of file setting.h.

Referenced by get(), load(), and printToLogfile().

8.28.4.2 std::string setting::m_loadFilename `[private]`

Definition at line 53 of file setting.h.

Referenced by load(), and printToLogfile().

8.28.4.3 std::string setting::m_noMethodID `[private]`

Definition at line 54 of file setting.h.

Referenced by getNoMethodID().

8.28.4.4 char setting::m_open `[private]`

Definition at line 55 of file setting.h.

Referenced by parseMethod(), and printToLogfile().

8.28.4.5 char setting::m_close `[private]`

Definition at line 56 of file setting.h.

Referenced by parseMethod(), and printToLogfile().

8.28.4.6 char setting::m_is `[private]`

Definition at line 57 of file setting.h.

Referenced by parseParameter(), and printToLogfile().

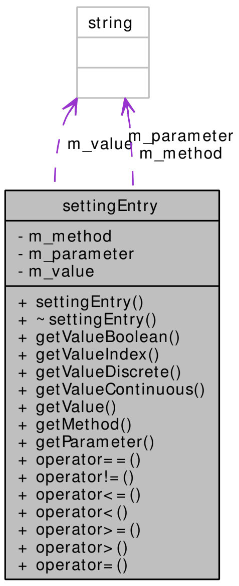
The documentation for this class was generated from the following files:

- **setting.h**
- **setting.cc**

8.29 settingEntry Class Reference

`#include <setting.h>`

Collaboration diagram for settingEntry:



Public Member Functions

- **settingEntry** (const std::string &, const std::string &, const std::string &)
- ~**settingEntry** ()
- bool **getValueBoolean** (void) const
- INDEX **getValueIndex** (void) const
- DISCRETE **getValueDiscrete** (void) const
- CONTINUOUS **getValueContinuous** (void) const
- const std::string & **getValue** (void) const
- const std::string & **getMethod** (void) const
- const std::string & **getParameter** (void) const
- bool **operator==** (const **settingEntry** &) const
- bool **operator!=** (const **settingEntry** &) const
- bool **operator<=** (const **settingEntry** &) const
- bool **operator<** (const **settingEntry** &) const
- bool **operator>=** (const **settingEntry** &) const
- bool **operator>** (const **settingEntry** &) const
- const **settingEntry** & **operator=** (const **settingEntry** &)

Private Attributes

- const std::string **m_method**
- const std::string **m_parameter**
- std::string **m_value**

8.29.1 Detailed Description

Definition at line 11 of file setting.h.

8.29.2 Constructor & Destructor Documentation

8.29.2.1 settingEntry::settingEntry (const std::string &, const std::string &, const std::string &)

Definition at line 13 of file setting.cc.

8.29.2.2 settingEntry::~settingEntry ()

Definition at line 21 of file setting.cc.

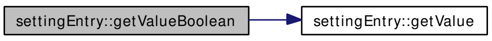
8.29.3 Member Function Documentation

8.29.3.1 bool settingEntry::getValueBoolean (void) const

Definition at line 24 of file setting.cc.

References getValue().

Here is the call graph for this function:



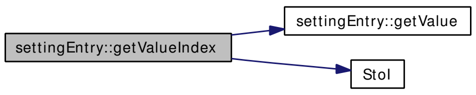
8.29.3.2 INDEX settingEntry::getValueIndex (void) const

Definition at line 29 of file setting.cc.

References getValue(), and StoI().

Referenced by deterministic_TPD::deterministic_TPD(), evolution::evolution(), sequential_-TPD::settings(), spectral_analysis_QE::settings(), batch_mean_QE::settings(), pooling_-QE::settings(), and batching::settings().

Here is the call graph for this function:

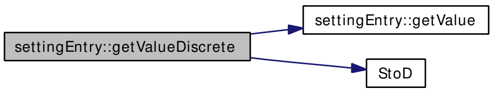


8.29.3.3 DISCRETE settingEntry::getValueDiscrete (void) const

Definition at line 33 of file setting.cc.

References getValue(), and StoD().

Here is the call graph for this function:



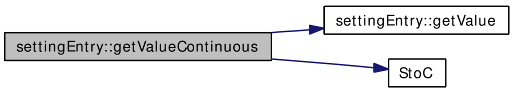
8.29.3.4 CONTINUOUS settingEntry::getValueContinuous (void) const

Definition at line 37 of file setting.cc.

References getValue(), and StoC().

Referenced by evolution::evolution(), spectral_analysis_QE::settings(), batch_mean_-QE::settings(), pooling_QE::settings(), and batching::settings().

Here is the call graph for this function:



8.29.3.5 const std::string & settingEntry::getValue (void) const

Definition at line 41 of file setting.cc.

References m_value.

Referenced by getValueBoolean(), getValueContinuous(), getValueDiscrete(), getValue-Index(), method_factory::method_factory(), quantile_estimation::set_SSC(), sequential_-TPD::settings(), and batching::settings().

8.29.3.6 const std::string & settingEntry::getMethod (void) const

Definition at line 45 of file setting.cc.

References m_method.

Referenced by method_factory::method_factory().

8.29.3.7 const std::string & settingEntry::getParameter (void) const

Definition at line 49 of file setting.cc.

References m_parameter.

8.29.3.8 bool settingEntry::operator== (const settingEntry &) const

Definition at line 53 of file setting.cc.

References m_method, and m_parameter.

8.29.3.9 bool settingEntry::operator!= (const settingEntry &) const

Definition at line 57 of file setting.cc.

References m_method, and m_parameter.

8.29.3.10 bool settingEntry::operator<= (const settingEntry &) const

Definition at line 61 of file setting.cc.

References m_method, and m_parameter.

8.29.3.11 bool settingEntry::operator< (const settingEntry &) const

Definition at line 68 of file setting.cc.

References m_method, and m_parameter.

8.29.3.12 bool settingEntry::operator>= (const settingEntry &) const

Definition at line 75 of file setting.cc.

References m_method, and m_parameter.

8.29.3.13 bool settingEntry::operator> (const settingEntry &) const

Definition at line 82 of file setting.cc.

References m_method, and m_parameter.

8.29.3.14 const settingEntry & settingEntry::operator= (const settingEntry &)

Definition at line 89 of file setting.cc.

References m_value.

8.29.4 Field Documentation

8.29.4.1 const std::string settingEntry::m_method `[private]`

Definition at line 34 of file setting.h.

Referenced by getMethod(), operator!=(), operator<(), operator<=(), operator==(), operator>(), and operator>=().

8.29.4.2 const std::string settingEntry::m_parameter `[private]`

Definition at line 35 of file setting.h.

Referenced by getParameter(), operator!=(), operator<(), operator<=(), operator==(), operator>(), and operator>=().

8.29.4.3 std::string settingEntry::m_value `[private]`

Definition at line 36 of file setting.h.

Referenced by getValue(), and operator=().

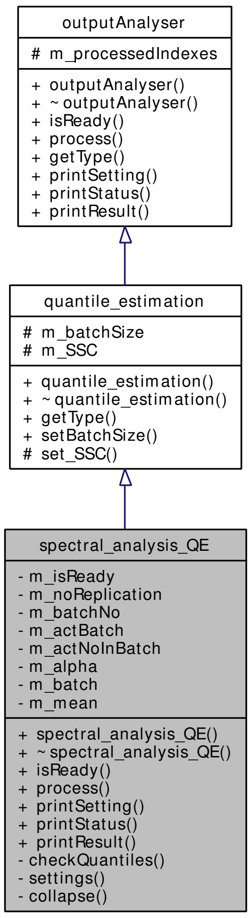
The documentation for this class was generated from the following files:

- **setting.h**
- **setting.cc**

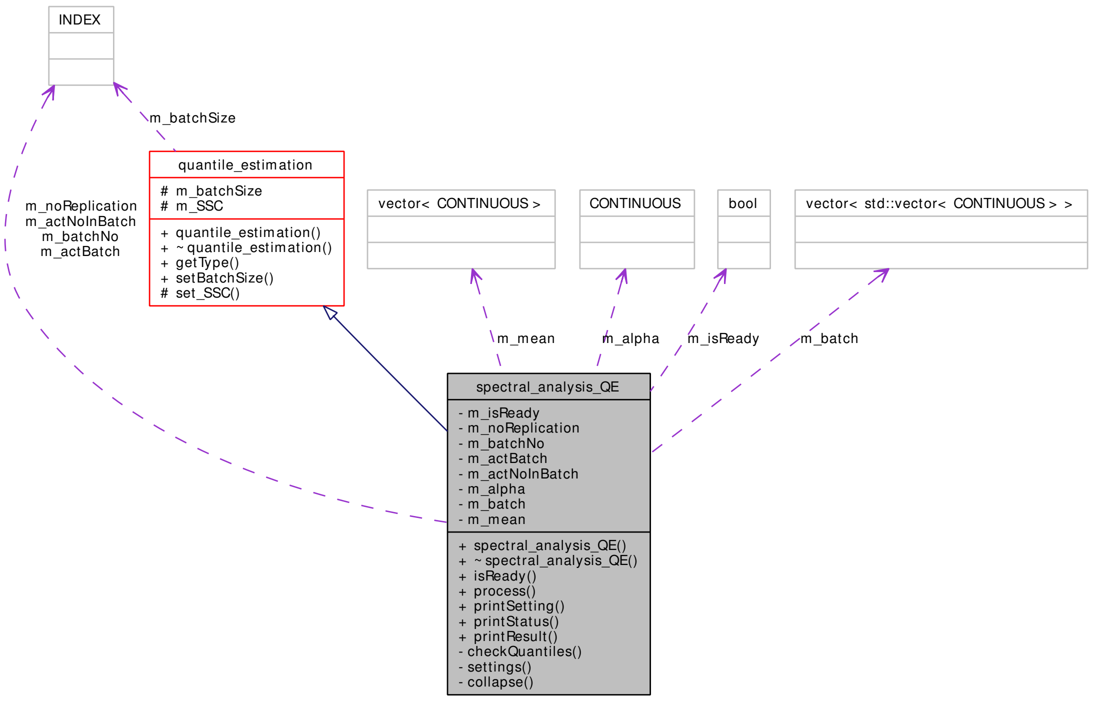
8.30 spectral_analysis_QE Class Reference

`#include <quantile_estimation.h>`

Inheritance diagram for spectral_analysis_QE:



Collaboration diagram for spectral_analysis_QE:



Public Member Functions

- **spectral_analysis_QE** (void)
- **~spectral_analysis_QE** (void)
- bool **isReady** (void) const
- void **process** (const std::list< CONTINUOUS > &)
- void **printSetting** (void)
- void **printStatus** (void)
- void **printResult** (void)
- virtual **TypeOfMethod getType** (void) const
- void **setBatchSize** (INDEX p)

Protected Member Functions

- void **set_SSC** (void)

Protected Attributes

- INDEX **m_batchSize**
- **SequentialStoppingCriteria_QE** * **m_SSC**
- INDEX **m_processedIndexes**

Private Member Functions

- bool **checkQuantiles** (void)
- void **settings** ()
- void **collapse** (void)

Private Attributes

- bool **m_isReady**
- INDEX **m_noReplication**
- INDEX **m_batchNo**
- INDEX **m_actBatch**
- INDEX **m_actNoInBatch**
- CONTINUOUS **m_alpha**
- std::vector< std::vector< CONTINUOUS > > **m_batch**
- std::vector< CONTINUOUS > **m_mean**

8.30.1 Detailed Description

Definition at line 80 of file quantile_estimation.h.

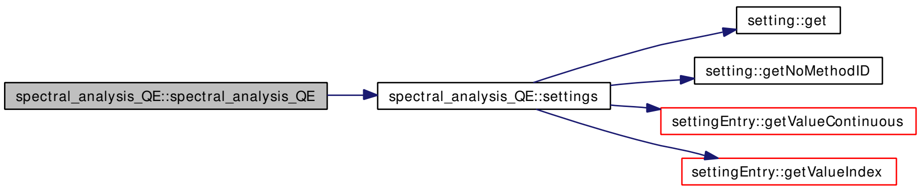
8.30.2 Constructor & Destructor Documentation

8.30.2.1 spectral_analysis_QE::spectral_analysis_QE (void)

Definition at line 420 of file quantile_estimation.cc.

References settings().

Here is the call graph for this function:


spectral_analysis_QE::spectral_analysis_QE
spectral_analysis_QE::settings
setting::get
setting::getNoMethodID
settingEntry::getValueContinuous
settingEntry::getValueIndex

8.30.2.2 spectral_analysis_QE::~spectral_analysis_QE (void)

Definition at line 431 of file quantile_estimation.cc.

8.30.3 Member Function Documentation

8.30.3.1 bool spectral_analysis_QE::isReady (void) const [virtual]

Reimplemented from **outputAnalyser** (p. 183).

Definition at line 434 of file quantile_estimation.cc.

References m_isReady.

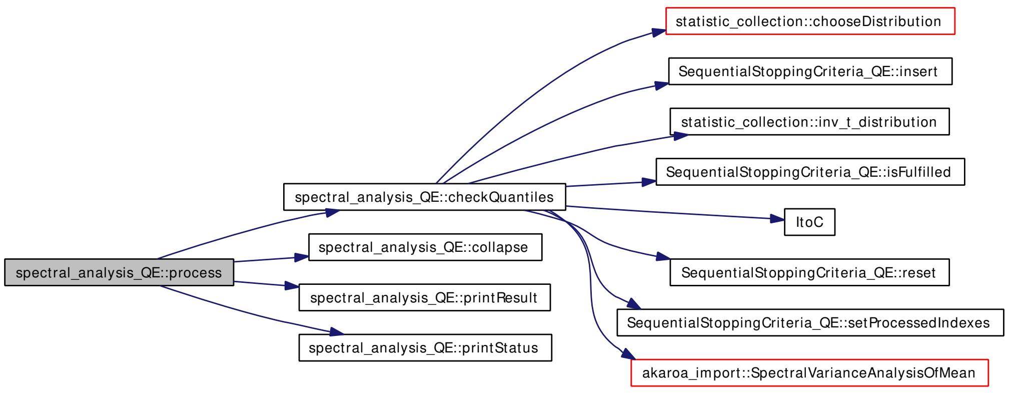
8.30.3.2 void spectral_analysis_QE::process (const std::list< CONTINUOUS > &) [virtual]

Reimplemented from **outputAnalyser** (p. 183).

Definition at line 438 of file quantile_estimation.cc.

References checkQuantiles(), collapse(), INDEX, m_actBatch, m_actNoInBatch, m_batch, m_-batchNo, quantile_estimation::m_batchSize, m_isReady, m_mean, m_noReplication, output-Analyser::m_processedIndexes, printResult(), and printStatus().

Here is the call graph for this function:


statistic_collection::chooseDistribution
SequentialStoppingCriteria_QE::insert
statistic_collection::inv_t_distribution
SequentialStoppingCriteria_QE::isFulfilled
spectral_analysis_QE::checkQuantiles
ltoC
spectral_analysis_QE::collapse
spectral_analysis_QE::process
SequentialStoppingCriteria_QE::reset
spectral_analysis_QE::printResult
SequentialStoppingCriteria_QE::setProcessedIndexes
spectral_analysis_QE::printStatus
akaroa_import::SpectralVarianceAnalysisOfMean

8.30.3.3 void spectral_analysis_QE::printSetting (void) [virtual]

Reimplemented from **outputAnalyser** (p. 183).

Definition at line 488 of file quantile_estimation.cc.

References logfile, m_batchNo, s_batches, s_execute, s_spectral_analysis_QE, and s_yes.

8.30.3.4 void spectral_analysis_QE::printStatus (void) [virtual]

Reimplemented from **outputAnalyser** (p. 183).

Definition at line 499 of file quantile_estimation.cc.

References logfile, m_actBatch, m_actNoInBatch, m_alpha, m_batchNo, quantile_-estimation::m_batchSize, m_noReplication, outputAnalyser::m_processedIndexes, and s_-spectral_analysis_QE.

Referenced by process().

8.30.3.5 void spectral_analysis_QE::printResult (void) [virtual]

Reimplemented from **outputAnalyser** (p. 183).

Definition at line 511 of file quantile_estimation.cc.

References logfile, m_actBatch, m_actNoInBatch, m_alpha, m_batchNo, quantile_-estimation::m_batchSize, m_noReplication, outputAnalyser::m_processedIndexes, and s_-spectral_analysis_QE.

Referenced by process().

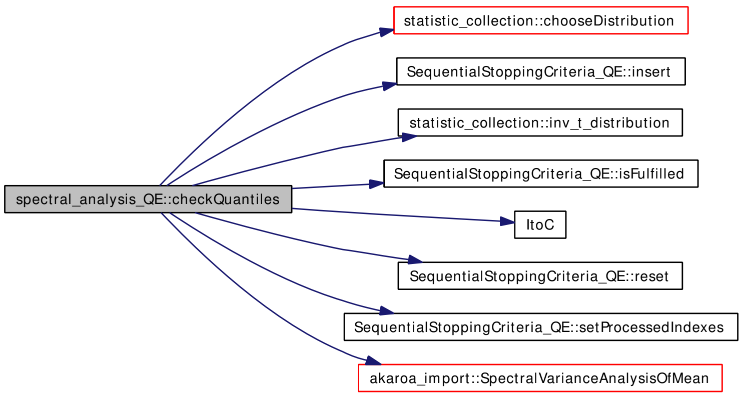
8.30.3.6 bool spectral_analysis_QE::checkQuantiles (void) `[private]`

Definition at line 523 of file quantile_estimation.cc.

References statistic_collection::chooseDistribution(), CONTINUOUS, INDEX, SequentialStoppingCriteria_QE::insert(), statistic_collection::inv_t_distribution(), SequentialStoppingCriteria_QE::isFulfilled(), ItoC(), lib_akaroa, lib_statistic, m_alpha, m_batch, m_batchNo, quantile_estimation::m_batchSize, m_mean, m_noReplication, outputAnalyser::m_processedIndexes, quantile_estimation::m_SSC, SequentialStoppingCriteria_QE::reset(), SequentialStoppingCriteria_QE::setProcessedIndexes(), and akaroa_import::SpectralVarianceAnalysisOfMean().

Referenced by process().

Here is the call graph for this function:


statistic_collection::chooseDistribution
SequentialStoppingCriteria_QE::insert
statistic_collection::inv_t_distribution
SequentialStoppingCriteria_QE::isFulfilled
spectral_analysis_QE::checkQuantiles
ItoC
SequentialStoppingCriteria_QE::reset
SequentialStoppingCriteria_QE::setProcessedIndexes
akaroa_import::SpectralVarianceAnalysisOfMean

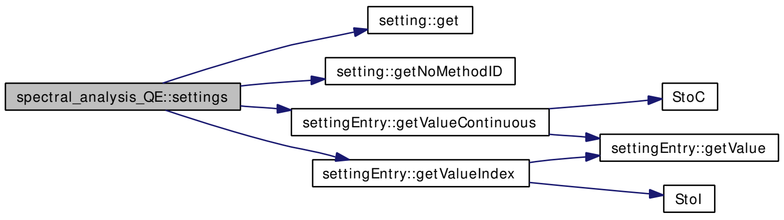
8.30.3.7 void spectral_analysis_QE::settings () `[private]`

Definition at line 574 of file quantile_estimation.cc.

References setting::get(), setting::getNoMethodID(), settingEntry::getValueContinuous(), settingEntry::getValueIndex(), lib_setting, m_alpha, m_batchNo, m_noReplication, s_alpha, s_batches, s_replications, and s_spectral_analysis_QE.

Referenced by spectral_analysis_QE().

Here is the call graph for this function:


setting::get
setting::getNoMethodID
spectral_analysis_QE::settings
StoC
settingEntry::getValueContinuous
settingEntry::getValue
settingEntry::getValueIndex
StoI

8.30.3.8 void spectral_analysis_QE::collapse (void) `[private]`

Definition at line 597 of file quantile_estimation.cc.

References INDEX, m_actBatch, m_actNoInBatch, m_batch, m_batchNo, quantile_-estimation::m_batchSize, and m_noReplication.

Referenced by process().

8.30.3.9 TypeOfMethod quantile_estimation::getType (void) const `[virtual, inherited]`

Reimplemented from **outputAnalyser** (p. 87).

Definition at line 22 of file quantile_estimation.cc.

References ESTIMATOR.

8.30.3.10 void quantile_estimation::setBatchSize (INDEX *p*) `[inherited]`

Definition at line 26 of file quantile_estimation.cc.

References quantile_estimation::m_batchSize.

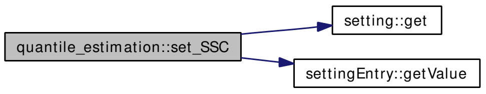
8.30.3.11 void quantile_estimation::set_SSC (void) `[protected, inherited]`

Definition at line 31 of file quantile_estimation.cc.

References setting::get(), settingEntry::getValue(), lib_setting, quantile_estimation::m_SSC, s_-confidenceInterval_SSC_QE, s_deterministic_SSC_QE, s_execute, s_relativeErrorQuantile_-SSC_QE, s_relativeErrorRange_SSC_QE, and s_yes.

Referenced by quantile_estimation::quantile_estimation().

Here is the call graph for this function:



8.30.4 Field Documentation

8.30.4.1 bool spectral_analysis_QE::m_isReady `[private]`

Definition at line 96 of file quantile_estimation.h.

Referenced by isReady(), and process().

8.30.4.2 INDEX spectral_analysis_QE::m_noReplication `[private]`

Definition at line 97 of file quantile_estimation.h.

Referenced by checkQuantiles(), collapse(), printResult(), printStatus(), process(), and settings().

8.30.4.3 INDEX spectral_analysis_QE::m_batchNo `[private]`

Definition at line 98 of file quantile_estimation.h.

Referenced by checkQuantiles(), collapse(), printResult(), printSetting(), printStatus(), process(), and settings().

8.30.4.4 INDEX spectral_analysis_QE::m_actBatch `[private]`

Definition at line 99 of file quantile_estimation.h.

Referenced by collapse(), printResult(), printStatus(), and process().

8.30.4.5 INDEX spectral_analysis_QE::m_actNoInBatch `[private]`

Definition at line 100 of file quantile_estimation.h.

Referenced by collapse(), printResult(), printStatus(), and process().

8.30.4.6 CONTINUOUS spectral_analysis_QE::m_alpha `[private]`

Definition at line 101 of file quantile_estimation.h.

Referenced by checkQuantiles(), printResult(), printStatus(), and settings().

8.30.4.7 std::vector< std::vector<CONTINUOUS> > spectral_analysis_QE::m_-batch `[private]`

Definition at line 102 of file quantile_estimation.h.

Referenced by checkQuantiles(), collapse(), and process().

8.30.4.8 std::vector< CONTINUOUS > spectral_analysis_QE::m_mean `[private]`

Definition at line 103 of file quantile_estimation.h.

Referenced by checkQuantiles(), and process().

8.30.4.9 INDEX quantile_estimation::m_batchSize `[protected, inherited]`

Definition at line 26 of file quantile_estimation.h.

Referenced by checkQuantiles(), batch_mean_QE::checkQuantiles(), collapse(), batch_mean_-QE::collapse(), printResult(), batch_mean_QE::printResult(), pooling_QE::printResult(), print-Status(), batch_mean_QE::printStatus(), pooling_QE::printStatus(), process(), batch_mean_-QE::process(), pooling_QE::process(), and quantile_estimation::setBatchSize().

8.30.4.10 SequentialStoppingCriteria_QE∗ quantile_estimation::m_SSC `[protected, inherited]`

Definition at line 27 of file quantile_estimation.h.

Referenced by checkQuantiles(), batch_mean_QE::checkQuantiles(), pooling_QE::check-Quantiles(), quantile_estimation::set_SSC(), and quantile_estimation::∼quantile_estimation().

8.30.4.11 INDEX outputAnalyser::m_processedIndexes `[protected, inherited]`

Definition at line 20 of file basic.h.

Referenced by evolution::calculateQuantiles(), checkQuantiles(), batch_mean_QE::check-Quantiles(), pooling_QE::checkQuantiles(), deterministic_TPD::isReady(), evolution::isReady(), sequential_TPD::printResult(), deterministic_TPD::printResult(), printResult(), batch_mean_-QE::printResult(), pooling_QE::printResult(), batching::printResult(), sequential_TPD::print-Status(), deterministic_TPD::printStatus(), evolution::printStatus(), printStatus(), batch_-mean_QE::printStatus(), pooling_QE::printStatus(), batching::printStatus(), sequential_-TPD::process(), deterministic_TPD::process(), evolution::process(), process(), batch_-mean_QE::process(), pooling_QE::process(), batching::process(), outputAnalyser::process(), sequential_TPD::sub_collect(), sequential_TPD::sub_compare(), and sequential_TPD::sub_-initialize().

The documentation for this class was generated from the following files:

- **quantile_estimation.h**
- **quantile_estimation.cc**

8.31 statistic_collection Class Reference

`#include <statistic.h>`

Public Types

- enum **TypeOfIndependenceTest** {
  RunsUpDown, **RunsAboveBelow**, **VonNeuman**, **PearsonStrelen**,
  PearsonPermutation }

Public Member Functions

- **distribution chooseDistribution** (const std::vector< CONTINUOUS > &sample, CONTINUOUS alpha)
- CONTINUOUS **binomial** (CONTINUOUS pr_success, INDEX no_success, INDEX no_trials) const
- CONTINUOUS **inv_binomial** (CONTINUOUS cumulation, INDEX no_success, INDEX no_trials) const
- CONTINUOUS **normal** (CONTINUOUS X, CONTINUOUS mean, CONTINUOUS variance) const
- CONTINUOUS **inv_normal** (CONTINUOUS cumulation, CONTINUOUS mean, CONTINUOUS variance) const
- CONTINUOUS **f_distribution** (CONTINUOUS X, INDEX df_numerator, INDEX df_denominator) const
- CONTINUOUS **inv_f_distribution** (CONTINUOUS cumulation, INDEX df_numerator, INDEX df_denominator) const
- CONTINUOUS **t_distribution** (CONTINUOUS X, CONTINUOUS df) const
- CONTINUOUS **inv_t_distribution** (CONTINUOUS cumulation, CONTINUOUS df) const
- CONTINUOUS **uniform** (CONTINUOUS X, CONTINUOUS a, CONTINUOUS b) const
- CONTINUOUS **inv_uniform** (CONTINUOUS cumulation, CONTINUOUS a, CONTINUOUS b) const
- CONTINUOUS **exponential** (CONTINUOUS X, CONTINUOUS mean) const
- CONTINUOUS **inv_exponential** (CONTINUOUS cumulation, CONTINUOUS mean) const
- CONTINUOUS **M_M_1_response** (CONTINUOUS X, CONTINUOUS lambda, CONTINUOUS mu) const
- CONTINUOUS **inv_M_M_1_response** (CONTINUOUS cumulation, CONTINUOUS lambda, CONTINUOUS mu) const
- CONTINUOUS **M_E2_1_response** (CONTINUOUS X, CONTINUOUS lambda, CONTINUOUS mu_exp) const
- CONTINUOUS **inv_M_E2_1_response** (CONTINUOUS cumulation, CONTINUOUS lambda, CONTINUOUS mu_exp) const
- CONTINUOUS **M_H2_1_response** (CONTINUOUS X, CONTINUOUS lambda, CONTINUOUS mu1, CONTINUOUS mu2, CONTINUOUS p) const
- CONTINUOUS **inv_M_H2_1_response** (CONTINUOUS cumulation, CONTINUOUS lambda, CONTINUOUS mu1, CONTINUOUS mu2, CONTINUOUS p) const
- CONTINUOUS **sinh** (CONTINUOUS x) const
- CONTINUOUS **cosh** (CONTINUOUS x) const
- CONTINUOUS **tanh** (CONTINUOUS x) const

- CONTINUOUS **coth** (CONTINUOUS x) const
- CONTINUOUS **asinh** (CONTINUOUS x) const
- CONTINUOUS **acosh** (CONTINUOUS x) const
- CONTINUOUS **atanh** (CONTINUOUS x) const
- CONTINUOUS **acoth** (CONTINUOUS x) const
- CONTINUOUS **sq** (CONTINUOUS x) const
- void **chooseQuantiles_old** (const INDEX sampleSize, std::set< **quantile_rank** > &result) const
- void **chooseQuantiles** (const INDEX sampleSize, std::set< **quantile_rank** > &result, const CONTINUOUS alpha) const
- bool **independenceTest** (const CONTINUOUS alpha, const std::list< CONTINUOUS > &data, const **TypeOfIndependenceTest** whichTest) const
- bool **runsUpDown** (const CONTINUOUS alpha, const std::list< CONTINUOUS > &data) const
- void **runsUpDown_statistic** (const std::list< CONTINUOUS > &data, INDEX &pos, INDEX &neg, INDEX &run) const
- bool **runsUpDown_test** (const CONTINUOUS alpha, const INDEX pos, const INDEX neg, const INDEX run) const
- bool **runsAboveBelow** (const CONTINUOUS alpha, const std::list< CONTINUOUS > &data) const
- void **runsAboveBelow_statistic** (const std::list< CONTINUOUS > &data, INDEX &pos, INDEX &neg, INDEX &run) const
- bool **runsAboveBelow_test** (const CONTINUOUS alpha, const INDEX pos, const INDEX neg, const INDEX run) const
- bool **vonNeumann** (const CONTINUOUS alpha, const std::list< CONTINUOUS > &data) const
- void **vonNeumann_statistic** (const std::list< CONTINUOUS > &data, CONTINUOUS &statistic) const
- bool **vonNeumann_test** (const CONTINUOUS alpha, const CONTINUOUS statistic, CONTINUOUS &criticalValue) const
- bool **pearsonStrelen** (const CONTINUOUS alpha, const std::list< CONTINUOUS > &data) const
- void **pearsonStrelen_statistic** (const std::list< CONTINUOUS > &data, CONTINUOUS &statistic) const
- bool **pearsonStrelen_test** (const CONTINUOUS alpha, const std::list< CONTINUOUS > &data, const CONTINUOUS statistic, CONTINUOUS &criticalValue) const
- bool **pearsonPermutation** (const CONTINUOUS alpha, const std::list< CONTINUOUS > &data) const
- void **pearsonPermutation_statistic** (const std::list< CONTINUOUS > &data, CONTINUOUS &statistic) const
- bool **pearsonPermutation_test** (const CONTINUOUS alpha, const std::list< CONTINUOUS > &data, const CONTINUOUS statistic, CONTINUOUS &criticalValueLow, CONTINUOUS &criticalValueHigh) const
- CONTINUOUS **binomialCoefficient** (const INDEX n, const INDEX k) const
- CONTINUOUS **binomialCoefficient** (const CONTINUOUS n, const DISCRETE k) const
- CONTINUOUS **binomialCoefficient** (const CONTINUOUS n, const CONTINUOUS k) const
- CONTINUOUS **pearsonsCorrelationCoefficient** (const std::list< CONTINUOUS > &, const std::list< CONTINUOUS > &) const
- CONTINUOUS **spearmansCorrelationCoefficient** (const std::list< CONTINUOUS > &, const std::list< CONTINUOUS > &) const

- CONTINUOUS **vonNeumannsCorrelationCoefficient** (const std::list< CONTINUOUS > &) const
- CONTINUOUS **mean** (const std::list< CONTINUOUS > &) const
- void **ranks** (const std::list< CONTINUOUS > &, std::list< CONTINUOUS > &) const
- void **generateRandomPermutation** (const std::list< CONTINUOUS > &, std::list< CONTINUOUS > &) const
- void **permutationAll** (const std::list< CONTINUOUS > &, std::list< std::list< CONTINUOUS > > &) const
- bool **siegelsRunTest** (const INDEX n1, const INDEX n2, const INDEX r, CONTINUOUS alpha, bool &valid) const
- bool **siegelsRunTest_small** (const INDEX n1, const INDEX n2, const INDEX r, CONTINUOUS alpha, bool &valid) const
- bool **siegelsRunTest_large** (const INDEX n1, const INDEX n2, const INDEX r, CONTINUOUS alpha, bool &valid) const
- CONTINUOUS **infiniteSumCorrelationCoefficients_MM1** (const CONTINUOUS interarrivalRate, const CONTINUOUS serviceRate) const
- CONTINUOUS **finiteSumCorrelationCoefficients_MM1** (const CONTINUOUS interarrivalRate, const CONTINUOUS serviceRate, const INDEX n) const

8.31.1 Detailed Description

Definition at line 17 of file statistic.h.

8.31.2 Member Enumeration Documentation

8.31.2.1 enum statistic_collection::TypeOfIndependenceTest

Enumerator:

RunsUpDown

RunsAboveBelow

VonNeuman

PearsonStrelen

PearsonPermutation

Definition at line 100 of file statistic.h.

8.31.3 Member Function Documentation

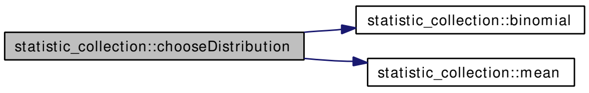
8.31.3.1 distribution statistic_collection::chooseDistribution (const std::vector< CONTINUOUS > & *sample*, CONTINUOUS *alpha*)

Definition at line 15 of file statistic.cc.

References binomial(), CONTINUOUS, EXPONENTIAL, INDEX, mean(), NORMAL, UNIFORM, and UNSPECIFIED.

Referenced by spectral_analysis_QE::checkQuantiles(), and batch_mean_QE::checkQuantiles().

Here is the call graph for this function:


statistic_collection::chooseDistribution
statistic_collection::binomial
statistic_collection::mean

8.31.3.2 CONTINUOUS statistic_collection::binomial (CONTINUOUS *pr_ success*, INDEX *no_ success*, INDEX *no_ trials*) const

Definition at line 70 of file statistic.cc.

References CONTINUOUS.

Referenced by chooseDistribution(), and quantile_rank::quantileCDF().

8.31.3.3 CONTINUOUS statistic_collection::inv_binomial (CONTINUOUS *cumulation*, INDEX *no_ success*, INDEX *no_ trials*) const

Definition at line 100 of file statistic.cc.

References CONTINUOUS.

8.31.3.4 CONTINUOUS statistic_collection::normal (CONTINUOUS *X*, CONTINUOUS *mean*, CONTINUOUS *variance*) const

Definition at line 130 of file statistic.cc.

References CONTINUOUS.

8.31.3.5 CONTINUOUS statistic_collection::inv_normal (CONTINUOUS *cumulation*, CONTINUOUS *mean*, CONTINUOUS *variance*) const

Definition at line 156 of file statistic.cc.

References CONTINUOUS.

Referenced by prng::draw_normal(), siegelsRunTest_large(), and vonNeumann_test().

8.31.3.6 CONTINUOUS statistic_collection::f_distribution (CONTINUOUS *X*, INDEX *df_ numerator*, INDEX *df_ denominator*) const

Definition at line 182 of file statistic.cc.

References CONTINUOUS.

8.31.3.7 CONTINUOUS statistic_collection::inv_f_distribution (CONTINUOUS *cumulation*, INDEX *df_ numerator*, INDEX *df_ denominator*) const

Definition at line 201 of file statistic.cc.

References CONTINUOUS.

8.31.3.8 CONTINUOUS statistic_collection::t_distribution (CONTINUOUS *X*, CONTINUOUS *df*) const

Definition at line 219 of file statistic.cc.

References CONTINUOUS.

8.31.3.9 CONTINUOUS statistic_collection::inv_t_distribution (CONTINUOUS *cumulation*, CONTINUOUS *df*) const

Definition at line 240 of file statistic.cc.

References CONTINUOUS.

Referenced by spectral_analysis_QE::checkQuantiles(), and batch_mean_QE::checkQuantiles().

8.31.3.10 CONTINUOUS statistic_collection::uniform (CONTINUOUS *X*, CONTINUOUS *a*, CONTINUOUS *b*) const

Definition at line 258 of file statistic.cc.

References CONTINUOUS.

8.31.3.11 CONTINUOUS statistic_collection::inv_uniform (CONTINUOUS *cumulation*, CONTINUOUS *a*, CONTINUOUS *b*) const

Definition at line 267 of file statistic.cc.

8.31.3.12 CONTINUOUS statistic_collection::exponential (CONTINUOUS *X*, CONTINUOUS *mean*) const

Definition at line 273 of file statistic.cc.

Referenced by M_M_1_response().

8.31.3.13 CONTINUOUS statistic_collection::inv_exponential (CONTINUOUS *cumulation*, CONTINUOUS *mean*) const

Definition at line 279 of file statistic.cc.

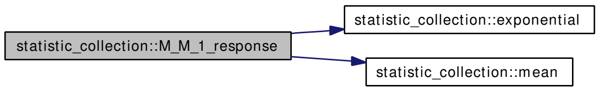
Referenced by inv_M_M_1_response().

8.31.3.14 CONTINUOUS statistic_collection::M_M_1_response (CONTINUOUS *X*, CONTINUOUS *lambda*, CONTINUOUS *mu*) const

Definition at line 285 of file statistic.cc.

References CONTINUOUS, exponential(), and mean().

Here is the call graph for this function:

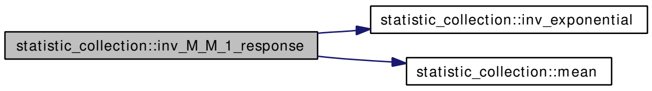

statistic_collection::M_M_1_response
statistic_collection::exponential
statistic_collection::mean

8.31.3.15 CONTINUOUS statistic_collection::inv_M_M_1_response (CONTINUOUS *cumulation*, CONTINUOUS *lambda*, CONTINUOUS *mu*) const

Definition at line 295 of file statistic.cc.

References CONTINUOUS, inv_exponential(), and mean().

Here is the call graph for this function:


statistic_collection::inv_M_M_1_response
statistic_collection::inv_exponential
statistic_collection::mean

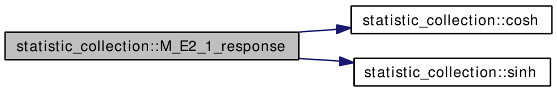
8.31.3.16 CONTINUOUS statistic_collection::M_E2_1_response (CONTINUOUS *X*, CONTINUOUS *lambda*, CONTINUOUS *mu_exp*) const

Definition at line 305 of file statistic.cc.

References CONTINUOUS, cosh(), and sinh().

Referenced by inv_M_E2_1_response().

Here is the call graph for this function:

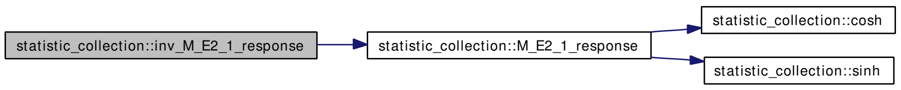

statistic_collection::M_E2_1_response
statistic_collection::cosh
statistic_collection::sinh

8.31.3.17 CONTINUOUS statistic_collection::inv_M_E2_1_response (CONTINUOUS *cumulation*, CONTINUOUS *lambda*, CONTINUOUS *mu_exp*) const

Definition at line 321 of file statistic.cc.

References CONTINUOUS, and M_E2_1_response().

Here is the call graph for this function:


statistic_collection::inv_M_E2_1_response
statistic_collection::M_E2_1_response
statistic_collection::cosh
statistic_collection::sinh

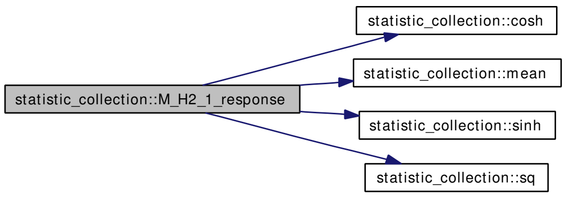
8.31.3.18 CONTINUOUS statistic_collection::M_H2_1_response (CONTINUOUS *X*, CONTINUOUS *lambda*, CONTINUOUS *mu1*, CONTINUOUS *mu2*, CONTINUOUS *p*) const

Definition at line 359 of file statistic.cc.

References CONTINUOUS, cosh(), mean(), sinh(), and sq().

Referenced by inv_M_H2_1_response().

Here is the call graph for this function:

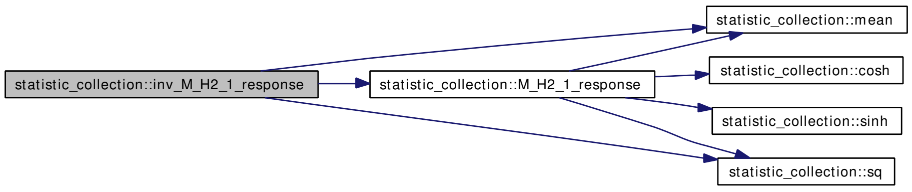

statistic_collection::M_H2_1_response
statistic_collection::cosh
statistic_collection::mean
statistic_collection::sinh
statistic_collection::sq

8.31.3.19 CONTINUOUS statistic_collection::inv_M_H2_1_response (CONTINUOUS *cumulation*, CONTINUOUS *lambda*, CONTINUOUS *mu1*, CONTINUOUS *mu2*, CONTINUOUS *p*) const

Definition at line 382 of file statistic.cc.

References CONTINUOUS, M_H2_1_response(), mean(), and sq().

Here is the call graph for this function:


statistic_collection::inv_M_H2_1_response
statistic_collection::M_H2_1_response
statistic_collection::mean
statistic_collection::cosh
statistic_collection::sinh
statistic_collection::sq

8.31.3.20 CONTINUOUS statistic_collection::sinh (CONTINUOUS *x*) const

Definition at line 427 of file statistic.cc.

Referenced by M_E2_1_response(), and M_H2_1_response().

8.31.3.21 CONTINUOUS statistic_collection::cosh (CONTINUOUS *x*) const

Definition at line 431 of file statistic.cc.

Referenced by M_E2_1_response(), and M_H2_1_response().

8.31.3.22 CONTINUOUS statistic_collection::tanh (CONTINUOUS *x*) const

Definition at line 435 of file statistic.cc.

References CONTINUOUS.

8.31.3.23 CONTINUOUS statistic_collection::coth (CONTINUOUS *x*) const

Definition at line 440 of file statistic.cc.

References CONTINUOUS.

8.31.3.24 CONTINUOUS statistic_collection::asinh (CONTINUOUS *x*) const

Definition at line 445 of file statistic.cc.

8.31.3.25 CONTINUOUS statistic_collection::acosh (CONTINUOUS *x*) const

Definition at line 449 of file statistic.cc.

8.31.3.26 CONTINUOUS statistic_collection::atanh (CONTINUOUS *x*) const

Definition at line 453 of file statistic.cc.

8.31.3.27 CONTINUOUS statistic_collection::acoth (CONTINUOUS *x*) const

Definition at line 457 of file statistic.cc.

8.31.3.28 CONTINUOUS statistic_collection::sq (CONTINUOUS *x*) const `[inline]`

Definition at line 90 of file statistic.h.

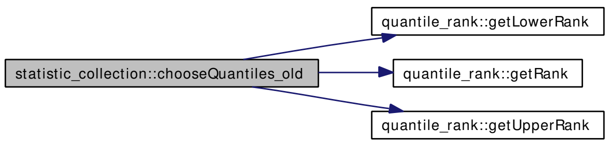
Referenced by inv_M_H2_1_response(), and M_H2_1_response().

8.31.3.29 void statistic_collection::chooseQuantiles_old (const INDEX *sampleSize*, std::set< quantile_rank > & *result*) const

Definition at line 461 of file statistic.cc.

References DISCRETE, quantile_rank::getLowerRank(), quantile_rank::getRank(), quantile_-rank::getUpperRank(), and INDEX.

Here is the call graph for this function:


statistic_collection::chooseQuantiles_old
quantile_rank::getLowerRank
quantile_rank::getRank
quantile_rank::getUpperRank

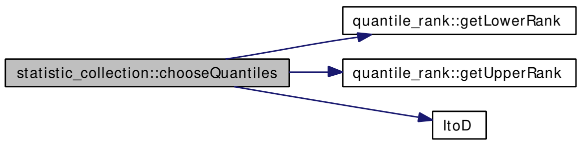
8.31.3.30 void statistic_collection::chooseQuantiles (const INDEX *sampleSize*, std::set< quantile_rank > & *result*, const CONTINUOUS *alpha*) const

Definition at line 520 of file statistic.cc.

References CONTINUOUS, DISCRETE, quantile_rank::getLowerRank(), quantile_rank::getUpperRank(), INDEX, and ItoD().

Referenced by pooling_QE::checkQuantiles(), and evolution::evolution().

Here is the call graph for this function:

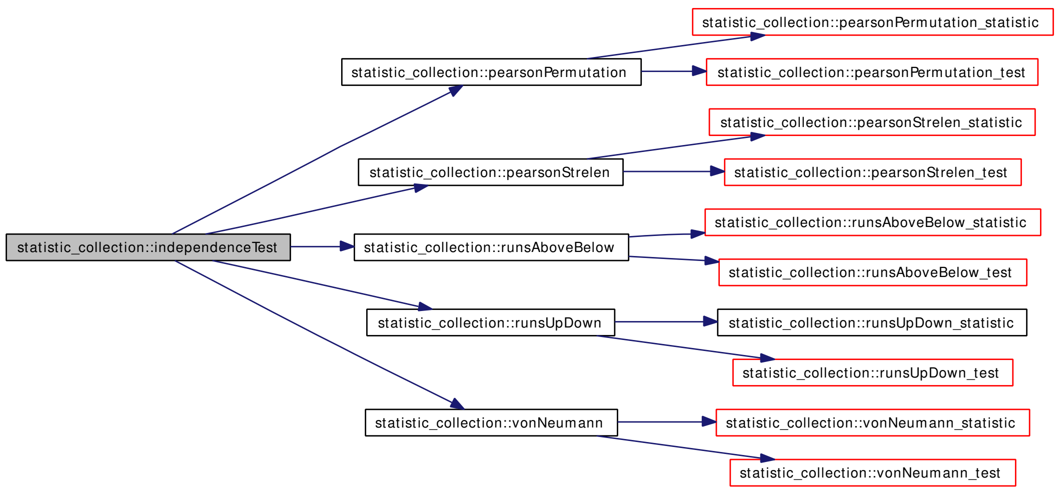

statistic_collection::chooseQuantiles
quantile_rank::getLowerRank
quantile_rank::getUpperRank
ItoD

8.31.3.31 bool statistic_collection::independenceTest (const CONTINUOUS *alpha*, const std::list< CONTINUOUS > & *data*, const TypeOfIndependenceTest *whichTest*) const

Definition at line 591 of file statistic.cc.

References pearsonPermutation(), PearsonPermutation, pearsonStrelen(), PearsonStrelen, runsAboveBelow(), RunsAboveBelow, runsUpDown(), RunsUpDown, VonNeuman, and vonNeumann().

Here is the call graph for this function:


statistic_collection::independenceTest
statistic_collection::pearsonPermutation
statistic_collection::pearsonPermutation_statistic
statistic_collection::pearsonPermutation_test
statistic_collection::pearsonStrelen
statistic_collection::pearsonStrelen_statistic
statistic_collection::pearsonStrelen_test
statistic_collection::runsAboveBelow
statistic_collection::runsAboveBelow_statistic
statistic_collection::runsAboveBelow_test
statistic_collection::runsUpDown
statistic_collection::runsUpDown_statistic
statistic_collection::runsUpDown_test
statistic_collection::vonNeumann
statistic_collection::vonNeumann_statistic
statistic_collection::vonNeumann_test

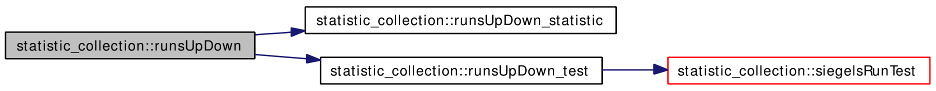
8.31.3.32 bool statistic_collection::runsUpDown (const CONTINUOUS *alpha*, const std::list< CONTINUOUS > & *data*) const

Definition at line 606 of file statistic.cc.

References INDEX, runsUpDown_statistic(), and runsUpDown_test().

Referenced by independenceTest().

Here is the call graph for this function:


statistic_collection::runsUpDown
statistic_collection::runsUpDown_statistic
statistic_collection::runsUpDown_test
statistic_collection::siegelsRunTest

8.31.3.33 void statistic_collection::runsUpDown_statistic (const std::list< CONTINUOUS > & *data*, INDEX & *pos*, INDEX & *neg*, INDEX & *run*) const

Definition at line 613 of file statistic.cc.

Referenced by runsUpDown(), and batching::testBatchStatistic().

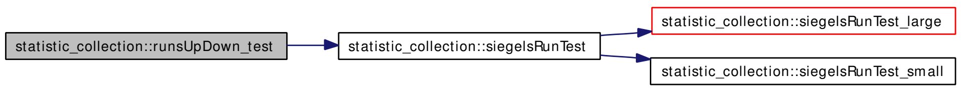
8.31.3.34 bool statistic_collection::runsUpDown_test (const CONTINUOUS *alpha*, const INDEX *pos*, const INDEX *neg*, const INDEX *run*) const

Definition at line 645 of file statistic.cc.

References siegelsRunTest().

Referenced by runsUpDown(), and batching::testBatchStatistic().

Here is the call graph for this function:


statistic_collection::runsUpDown_test
statistic_collection::siegelsRunTest
statistic_collection::siegelsRunTest_large
statistic_collection::siegelsRunTest_small

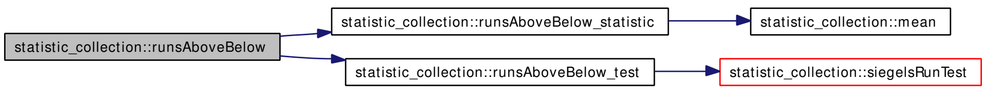
8.31.3.35 bool statistic_collection::runsAboveBelow (const CONTINUOUS *alpha*, const std::list< CONTINUOUS > & *data*) const

Definition at line 656 of file statistic.cc.

References INDEX, runsAboveBelow_statistic(), and runsAboveBelow_test().

Referenced by independenceTest().

Here is the call graph for this function:


statistic_collection::runsAboveBelow
statistic_collection::runsAboveBelow_statistic
statistic_collection::mean
statistic_collection::runsAboveBelow_test
statistic_collection::siegelsRunTest

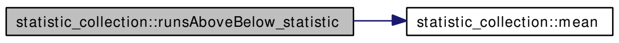
8.31.3.36 void statistic_collection::runsAboveBelow_statistic (const std::list< CONTINUOUS > & *data*, INDEX & *pos*, INDEX & *neg*, INDEX & *run*) const

Definition at line 663 of file statistic.cc.

References mean().

Referenced by runsAboveBelow(), and batching::testBatchStatistic().

Here is the call graph for this function:


statistic_collection::runsAboveBelow_statistic
statistic_collection::mean

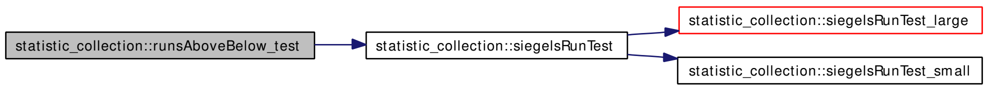
8.31.3.37 bool statistic_collection::runsAboveBelow_test (const CONTINUOUS *alpha*, const INDEX *pos*, const INDEX *neg*, const INDEX *run*) const

Definition at line 690 of file statistic.cc.

References siegelsRunTest().

Referenced by runsAboveBelow(), and batching::testBatchStatistic().

Here is the call graph for this function:


statistic_collection::runsAboveBelow_test
statistic_collection::siegelsRunTest
statistic_collection::siegelsRunTest_large
statistic_collection::siegelsRunTest_small

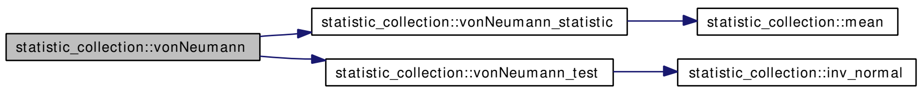
8.31.3.38 bool statistic_collection::vonNeumann (const CONTINUOUS *alpha*, const std::list< CONTINUOUS > & *data*) const

Definition at line 700 of file statistic.cc.

References CONTINUOUS, vonNeumann_statistic(), and vonNeumann_test().

Referenced by independenceTest().

Here is the call graph for this function:


statistic_collection::vonNeumann
statistic_collection::vonNeumann_statistic
statistic_collection::vonNeumann_test
statistic_collection::mean
statistic_collection::inv_normal

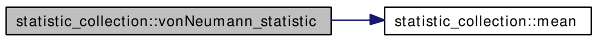
8.31.3.39 void statistic_collection::vonNeumann_statistic (const std::list< CONTINUOUS > & *data*, CONTINUOUS & *statistic*) const

Definition at line 707 of file statistic.cc.

References CONTINUOUS, INDEX, and mean().

Referenced by batching::testBatchStatistic(), and vonNeumann().

Here is the call graph for this function:


statistic_collection::vonNeumann_statistic
statistic_collection::mean

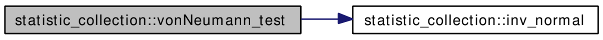
8.31.3.40 bool statistic_collection::vonNeumann_test (const CONTINUOUS *alpha*, const CONTINUOUS *statistic*, CONTINUOUS & *criticalValue*) const

Definition at line 745 of file statistic.cc.

References inv_normal().

Referenced by batching::testBatchStatistic(), and vonNeumann().

Here is the call graph for this function:


statistic_collection::vonNeumann_test
statistic_collection::inv_normal

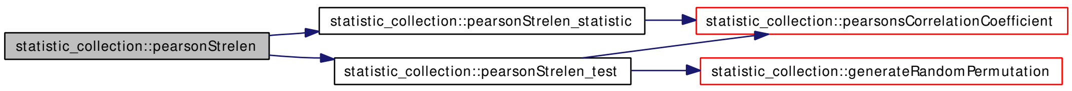
8.31.3.41 bool statistic_collection::pearsonStrelen (const CONTINUOUS *alpha*, const std::list< CONTINUOUS > & *data*) const

Definition at line 753 of file statistic.cc.

References CONTINUOUS, pearsonStrelen_statistic(), and pearsonStrelen_test().

Referenced by independenceTest().

Here is the call graph for this function:


statistic_collection::pearsonStrelen
statistic_collection::pearsonStrelen_statistic
statistic_collection::pearsonStrelen_test
statistic_collection::pearsonsCorrelationCoefficient
statistic_collection::generateRandomPermutation

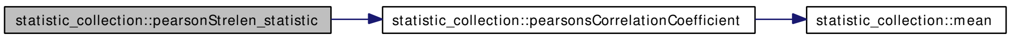
8.31.3.42 void statistic_collection::pearsonStrelen_statistic (const std::list< CONTINUOUS > & *data*, CONTINUOUS & *statistic*) const

Definition at line 760 of file statistic.cc.

References pearsonsCorrelationCoefficient().

Referenced by pearsonStrelen(), and batching::testBatchStatistic().

Here is the call graph for this function:


statistic_collection::pearsonStrelen_statistic
statistic_collection::pearsonsCorrelationCoefficient
statistic_collection::mean

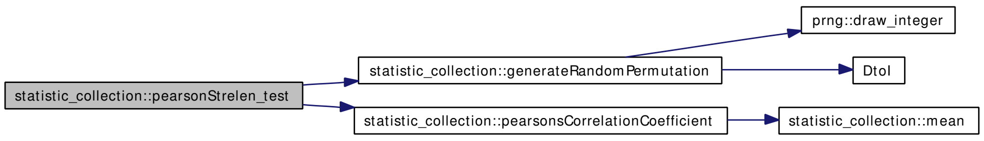
8.31.3.43 bool statistic_collection::pearsonStrelen_test (const CONTINUOUS *alpha*, const std::list< CONTINUOUS > & *data*, const CONTINUOUS *statistic*, CONTINUOUS & *criticalValue*) const

Definition at line 771 of file statistic.cc.

References CONTINUOUS, generateRandomPermutation(), INDEX, and pearsonsCorrelationCoefficient().

Referenced by pearsonStrelen(), and batching::testBatchStatistic().

Here is the call graph for this function:


prng::draw_integer
statistic_collection::generateRandomPermutation
DtoI
statistic_collection::pearsonStrelen_test
statistic_collection::pearsonsCorrelationCoefficient
statistic_collection::mean

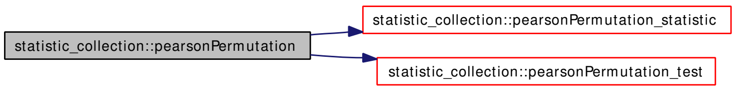
8.31.3.44 bool statistic_collection::pearsonPermutation (const CONTINUOUS *alpha*, const std::list< CONTINUOUS > & *data*) const

Definition at line 799 of file statistic.cc.

References CONTINUOUS, pearsonPermutation_statistic(), and pearsonPermutation_test().

Referenced by independenceTest().

Here is the call graph for this function:


statistic_collection::pearsonPermutation_statistic
statistic_collection::pearsonPermutation
statistic_collection::pearsonPermutation_test

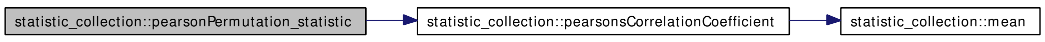
8.31.3.45 void statistic_collection::pearsonPermutation_statistic (const std::list< CONTINUOUS > & *data*, CONTINUOUS & *statistic*) const

Definition at line 806 of file statistic.cc.

References pearsonsCorrelationCoefficient().

Referenced by pearsonPermutation(), and batching::testBatchStatistic().

Here is the call graph for this function:


statistic_collection::pearsonPermutation_statistic
statistic_collection::pearsonsCorrelationCoefficient
statistic_collection::mean

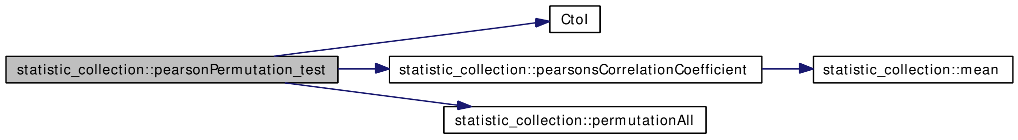
8.31.3.46 bool statistic_collection::pearsonPermutation_test (const CONTINUOUS *alpha*, const std::list< CONTINUOUS > & *data*, const CONTINUOUS *statistic*, CONTINUOUS & *criticalValueLow*, CONTINUOUS & *criticalValueHigh*) const

Definition at line 817 of file statistic.cc.

References CONTINUOUS, CtoI(), INDEX, pearsonsCorrelationCoefficient(), and permutationAll().

Referenced by pearsonPermutation(), and batching::testBatchStatistic().

Here is the call graph for this function:


CtoI
statistic_collection::pearsonPermutation_test
statistic_collection::pearsonsCorrelationCoefficient
statistic_collection::mean
statistic_collection::permutationAll

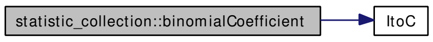
8.31.3.47 CONTINUOUS statistic_collection::binomialCoefficient (const INDEX *n*, const INDEX *k*) const

Definition at line 856 of file statistic.cc.

References CONTINUOUS, INDEX, and ItoC().

Referenced by finiteSumCorrelationCoefficients_MM1().

Here is the call graph for this function:

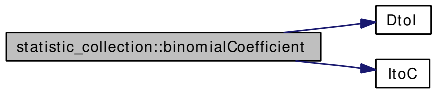


8.31.3.48 CONTINUOUS statistic_collection::binomialCoefficient (const CONTINUOUS *n*, const DISCRETE *k*) const

Definition at line 875 of file statistic.cc.

References CONTINUOUS, DtoI(), INDEX, and ItoC().

Here is the call graph for this function:



8.31.3.49 CONTINUOUS statistic_collection::binomialCoefficient (const CONTINUOUS *n*, const CONTINUOUS *k*) const

Definition at line 891 of file statistic.cc.

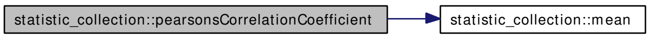
8.31.3.50 CONTINUOUS statistic_collection::pearsonsCorrelationCoefficient (const std::list< CONTINUOUS > &, const std::list< CONTINUOUS > &) const

Definition at line 898 of file statistic.cc.

References CONTINUOUS, INDEX, and mean().

Referenced by pearsonPermutation_statistic(), pearsonPermutation_test(), pearsonStrelen_-statistic(), and pearsonStrelen_test().

Here is the call graph for this function:

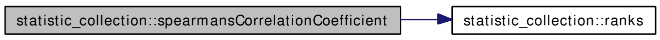

statistic_collection::pearsonsCorrelationCoefficient
statistic_collection::mean

8.31.3.51 CONTINUOUS statistic_collection::spearmansCorrelationCoefficient (const std::list< CONTINUOUS > &, const std::list< CONTINUOUS > &) const

Definition at line 944 of file statistic.cc.

References CONTINUOUS, INDEX, and ranks().

Here is the call graph for this function:

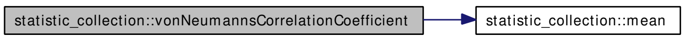

statistic_collection::spearmansCorrelationCoefficient
statistic_collection::ranks

8.31.3.52 CONTINUOUS statistic_collection::vonNeumannsCorrelationCoefficient (const std::list< CONTINUOUS > &) const

Definition at line 976 of file statistic.cc.

References CONTINUOUS, INDEX, and mean().

Here is the call graph for this function:


statistic_collection::vonNeumannsCorrelationCoefficient
statistic_collection::mean

8.31.3.53 CONTINUOUS statistic_collection::mean (const std::list< CONTINUOUS > &) const

Definition at line 1013 of file statistic.cc.

References CONTINUOUS.

Referenced by chooseDistribution(), inv_M_H2_1_response(), inv_M_M_1_response(), M_-H2_1_response(), M_M_1_response(), pearsonsCorrelationCoefficient(), runsAboveBelow_-statistic(), siegelsRunTest_large(), vonNeumann_statistic(), and vonNeumannsCorrelation-Coefficient().

8.31.3.54 void statistic_collection::ranks (const std::list< CONTINUOUS > &, std::list< CONTINUOUS > &) const

Definition at line 1019 of file statistic.cc.

References CONTINUOUS, and INDEX.

Referenced by spearmansCorrelationCoefficient().

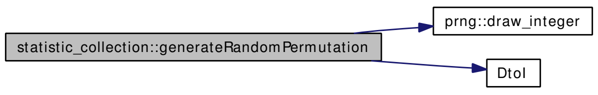
8.31.3.55 void statistic_collection::generateRandomPermutation (const std::list< CONTINUOUS > &, std::list< CONTINUOUS > &) const

Definition at line 1043 of file statistic.cc.

References CONTINUOUS, DISCRETE, prng::draw_integer(), DtoI(), INDEX, and lib_prng.

Referenced by pearsonStrelen_test().

Here is the call graph for this function:



8.31.3.56 void statistic_collection::permutationAll (const std::list< CONTINUOUS > &, std::list< std::list< CONTINUOUS > > &) const

Definition at line 1083 of file statistic.cc.

References CONTINUOUS, and INDEX.

Referenced by pearsonPermutation_test().

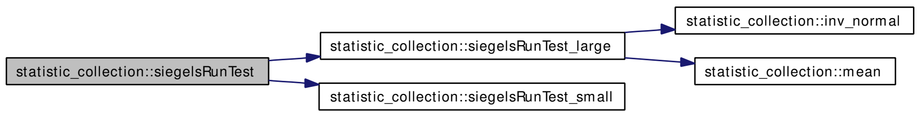
8.31.3.57 bool statistic_collection::siegelsRunTest (const INDEX *n1*, const INDEX *n2*, const INDEX *r*, CONTINUOUS *alpha*, bool & *valid*) const

Definition at line 1112 of file statistic.cc.

References siegelsRunTest_large(), and siegelsRunTest_small().

Referenced by runsAboveBelow_test(), and runsUpDown_test().

Here is the call graph for this function:


statistic_collection::siegelsRunTest
statistic_collection::siegelsRunTest_large
statistic_collection::siegelsRunTest_small
statistic_collection::inv_normal
statistic_collection::mean

8.31.3.58 bool statistic_collection::siegelsRunTest_small (const INDEX *n1*, const INDEX *n2*, const INDEX *r*, CONTINUOUS *alpha*, bool & *valid*) const

Definition at line 1121 of file statistic.cc.

References DISCRETE, and INDEX.

Referenced by siegelsRunTest().

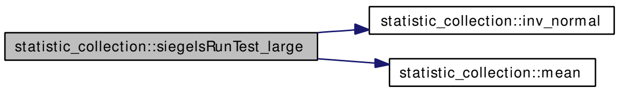
8.31.3.59 bool statistic_collection::siegelsRunTest_large (const INDEX *n1*, const INDEX *n2*, const INDEX *r*, CONTINUOUS *alpha*, bool & *valid*) const

Definition at line 1429 of file statistic.cc.

References CONTINUOUS, inv_normal(), and mean().

Referenced by siegelsRunTest().

Here is the call graph for this function:


statistic_collection::siegelsRunTest_large
statistic_collection::inv_normal
statistic_collection::mean

8.31.3.60 CONTINUOUS statistic_collection::infiniteSumCorrelationCoefficients_MM1 (const CONTINUOUS *interarrivalRate*, const CONTINUOUS *serviceRate*) const

Definition at line 1449 of file statistic.cc.

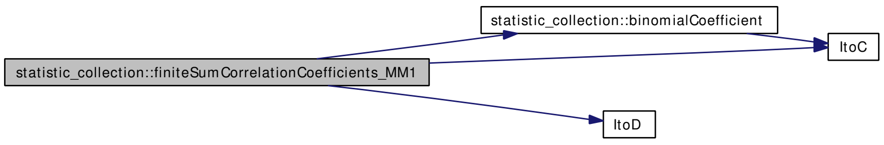
References CONTINUOUS.

8.31.3.61 CONTINUOUS statistic_collection::finiteSumCorrelationCoefficients_-MM1 (const CONTINUOUS *interarrivalRate*, const CONTINUOUS *serviceRate*, const INDEX *n*) const

Definition at line 1475 of file statistic.cc.

References binomialCoefficient(), CONTINUOUS, INDEX, ItoC(), and ItoD().

Here is the call graph for this function:


statistic_collection::finiteSumCorrelationCoefficients_MM1
statistic_collection::binomialCoefficient
ItoC
ItoD

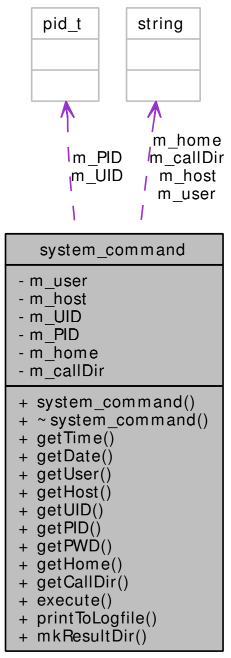
The documentation for this class was generated from the following files:

- **statistic.h**
- **statistic.cc**

8.32 system_command Class Reference

`#include <system_command.h>`

Collaboration diagram for system_command:



Public Member Functions

- **system_command** (void)
- ~**system_command** (void)
- const std::string **getTime** (void)
- const std::string **getDate** (void)
- const std::string **getUser** (void)
- const std::string **getHost** (void)
- const pid_t **getUID** (void)
- const pid_t **getPID** (void)
- const std::string **getPWD** (void)
- const std::string **getHome** (void)
- const std::string **getCallDir** (void)
- void **execute** (const std::string &)
- void **printToLogfile** (void)
- void **mkResultDir** (const std::string &)

Private Attributes

- std::string **m_user**
- std::string **m_host**
- pid_t **m_UID**
- pid_t **m_PID**

- std::string **m_home**
- std::string **m_callDir**

8.32.1 Detailed Description

Definition at line 8 of file system_command.h.

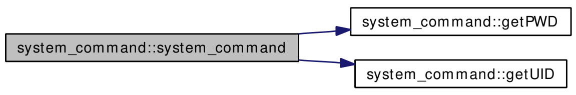
8.32.2 Constructor & Destructor Documentation

8.32.2.1 system_command::system_command (void)

Definition at line 14 of file system_command.cc.

References getPWD(), getUID(), m_callDir, m_home, and m_user.

Here is the call graph for this function:

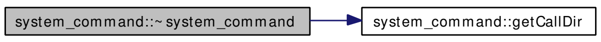


8.32.2.2 system_command::∼system_command (void)

Definition at line 25 of file system_command.cc.

References getCallDir().

Here is the call graph for this function:



8.32.3 Member Function Documentation

8.32.3.1 const std::string system_command::getTime (void)

Definition at line 29 of file system_command.cc.

Referenced by mkResultDir(), resultInfo::print(), and printToLogfile().

8.32.3.2 const std::string system_command::getDate (void)

Definition at line 46 of file system_command.cc.

Referenced by mkResultDir(), resultInfo::print(), and printToLogfile().

8.32.3.3 const std::string system_command::getUser (void)

Definition at line 61 of file system_command.cc.

References m_user.

Referenced by mkResultDir(), and printToLogfile().

8.32.3.4 const std::string system_command::getHost (void)

Definition at line 65 of file system_command.cc.

References m_host.

Referenced by mkResultDir(), printToLogfile(), and prng::prng().

8.32.3.5 const pid_t system_command::getUID (void)

Definition at line 75 of file system_command.cc.

References m_UID.

Referenced by printToLogfile(), and system_command().

8.32.3.6 const pid_t system_command::getPID (void)

Definition at line 81 of file system_command.cc.

References m_PID.

Referenced by mkResultDir(), and printToLogfile().

8.32.3.7 const std::string system_command::getPWD (void)

Definition at line 87 of file system_command.cc.

Referenced by mkResultDir(), and system_command().

8.32.3.8 const std::string system_command::getHome (void)

Definition at line 94 of file system_command.cc.

References m_home.

Referenced by setting::load(), printToLogfile(), and prng::prng().

8.32.3.9 const std::string system_command::getCallDir (void)

Definition at line 98 of file system_command.cc.

References m_callDir.

Referenced by printToLogfile(), and ~system_command().

8.32.3.10 void system_command::execute (const std::string &)

Definition at line 102 of file system_command.cc.

Referenced by SequentialStoppingCriteria_QE::print(), sequential_TPD::printDistribution(), and evolution::printResult().

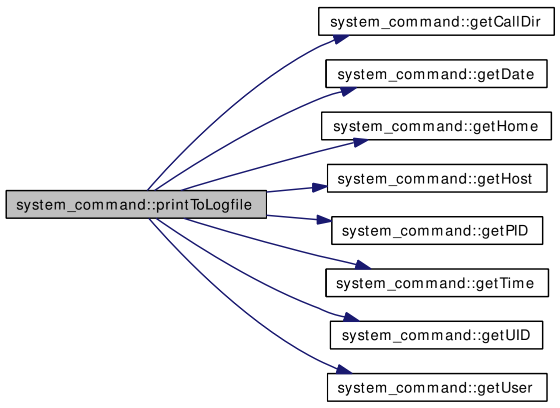
8.32.3.11 void system_command::printToLogfile (void)

Definition at line 119 of file system_command.cc.

References getCallDir(), getDate(), getHome(), getHost(), getPID(), getTime(), getUID(), getUser(), and logfile.

Referenced by main().

Here is the call graph for this function:



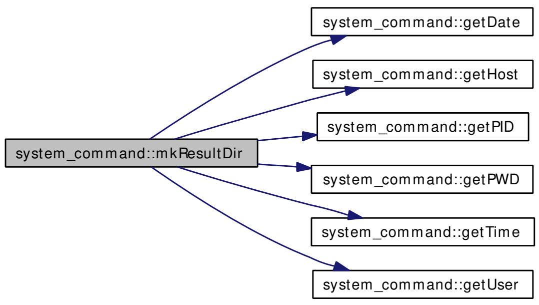
8.32.3.12 void system_command::mkResultDir (const std::string &)

Definition at line 107 of file system_command.cc.

References getDate(), getHost(), getPID(), getPWD(), getTime(), and getUser().

Referenced by main().

Here is the call graph for this function:



8.32.4 Field Documentation

8.32.4.1 std::string system_command::m_user [private]

Definition at line 29 of file system_command.h.

Referenced by getUser(), and system_command().

8.32.4.2 std::string system_command::m_host `[private]`

Definition at line 30 of file system_command.h.

Referenced by getHost().

8.32.4.3 pid_t system_command::m_UID `[private]`

Definition at line 31 of file system_command.h.

Referenced by getUID().

8.32.4.4 pid_t system_command::m_PID `[private]`

Definition at line 32 of file system_command.h.

Referenced by getPID().

8.32.4.5 std::string system_command::m_home `[private]`

Definition at line 34 of file system_command.h.

Referenced by getHome(), and system_command().

8.32.4.6 std::string system_command::m_callDir `[private]`

Definition at line 35 of file system_command.h.

Referenced by getCallDir(), and system_command().

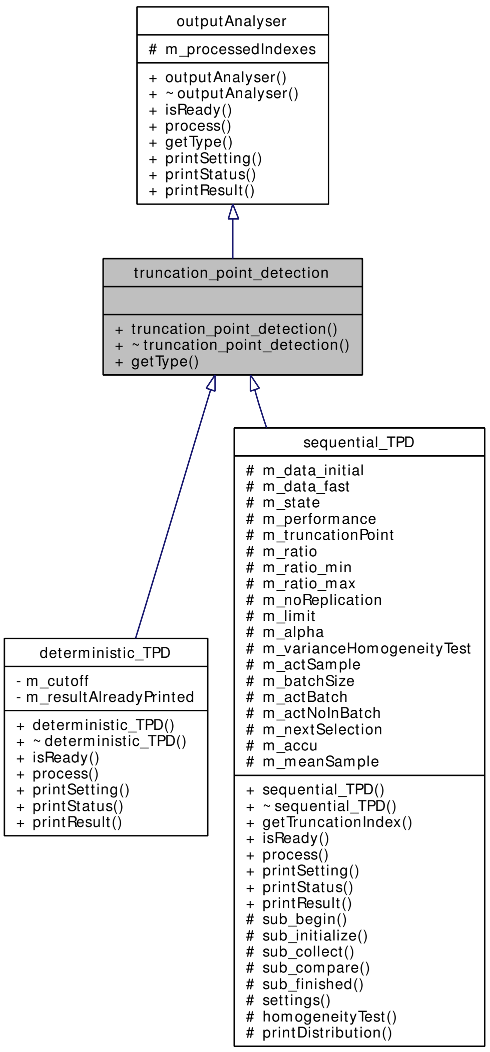
The documentation for this class was generated from the following files:

- **system_command.h**
- **system_command.cc**

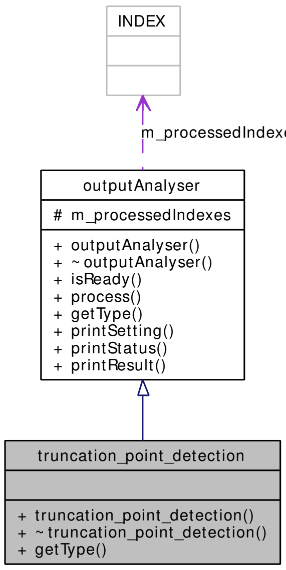
8.33 truncation_point_detection Class Reference

`#include <truncation_point_detection.h>`

Inheritance diagram for truncation_point_detection:



Collaboration diagram for truncation_point_detection:



Public Member Functions

- **truncation_point_detection** (void)
- virtual ~**truncation_point_detection** (void)
- virtual **TypeOfMethod getType** (void) const
- virtual bool **isReady** (void) const
- virtual void **process** (const std::list< CONTINUOUS > &)
- virtual void **printSetting** (void)
- virtual void **printStatus** (void)
- virtual void **printResult** (void)

Protected Attributes

- INDEX **m_processedIndexes**

8.33.1 Detailed Description

Definition at line 6 of file truncation_point_detection.h.

8.33.2 Constructor & Destructor Documentation

8.33.2.1 truncation_point_detection::truncation_point_detection (void)

Definition at line 8 of file truncation_point_detection.cc.

8.33.2.2 truncation_point_detection::~truncation_point_detection (void) `[virtual]`

Definition at line 11 of file truncation_point_detection.cc.

8.33.3 Member Function Documentation

8.33.3.1 TypeOfMethod truncation_point_detection::getType (void) const [virtual]

Reimplemented from **outputAnalyser** (p. 87).

Definition at line 14 of file truncation_point_detection.cc.

References IDENTICAL.

8.33.3.2 bool outputAnalyser::isReady (void) const [virtual, inherited]

Reimplemented in **batching** (p. 40), **pooling_QE** (p. 92), **batch_mean_QE** (p. 31), **spectral_analysis_QE** (p. 153), **evolution** (p. 69), **deterministic_TPD** (p. 61), and **sequential_TPD** (p. 128).

Definition at line 11 of file basic.cc.

8.33.3.3 void outputAnalyser::process (const std::list< CONTINUOUS > &) [virtual, inherited]

Reimplemented in **batching** (p. 40), **pooling_QE** (p. 92), **batch_mean_QE** (p. 32), **spectral_analysis_QE** (p. 153), **evolution** (p. 69), **deterministic_TPD** (p. 61), and **sequential_TPD** (p. 128).

Definition at line 15 of file basic.cc.

References outputAnalyser::m_processedIndexes.

8.33.3.4 void outputAnalyser::printSetting (void) [virtual, inherited]

Reimplemented in **batching** (p. 41), **pooling_QE** (p. 92), **batch_mean_QE** (p. 32), **spectral_analysis_QE** (p. 154), **evolution** (p. 69), **deterministic_TPD** (p. 61), and **sequential_TPD** (p. 129).

Definition at line 23 of file basic.cc.

8.33.3.5 void outputAnalyser::printStatus (void) [virtual, inherited]

Reimplemented in **batching** (p. 41), **pooling_QE** (p. 92), **batch_mean_QE** (p. 32), **spectral_analysis_QE** (p. 154), **evolution** (p. 69), **deterministic_TPD** (p. 62), and **sequential_TPD** (p. 129).

Definition at line 26 of file basic.cc.

8.33.3.6 void outputAnalyser::printResult (void) [virtual, inherited]

Reimplemented in **batching** (p. 41), **pooling_QE** (p. 92), **batch_mean_QE** (p. 32), **spectral_analysis_QE** (p. 154), **evolution** (p. 69), **deterministic_TPD** (p. 62), and **sequential_TPD** (p. 129).

Definition at line 29 of file basic.cc.

8.33.4 Field Documentation

8.33.4.1 INDEX outputAnalyser::m_processedIndexes `[protected, inherited]`

Definition at line 20 of file basic.h.

Referenced by evolution::calculateQuantiles(), spectral_analysis_QE::checkQuantiles(), batch_-mean_QE::checkQuantiles(), pooling_QE::checkQuantiles(), deterministic_TPD::isReady(), evolution::isReady(), sequential_TPD::printResult(), deterministic_TPD::printResult(), spectral_analysis_QE::printResult(), batch_mean_QE::printResult(), pooling_QE::print-Result(), batching::printResult(), sequential_TPD::printStatus(), deterministic_TPD::print-Status(), evolution::printStatus(), spectral_analysis_QE::printStatus(), batch_mean_QE::print-Status(), pooling_QE::printStatus(), batching::printStatus(), sequential_TPD::process(), deterministic_TPD::process(), evolution::process(), spectral_analysis_QE::process(), batch_-mean_QE::process(), pooling_QE::process(), batching::process(), outputAnalyser::process(), sequential_TPD::sub_collect(), sequential_TPD::sub_compare(), and sequential_TPD::sub_-initialize().

The documentation for this class was generated from the following files:

- **truncation_point_detection.h**
- **truncation_point_detection.cc**

Chapter 9

Sequential Quantile Estimation File Documentation

9.1 akaroa_import.cc File Reference

`#include "akaroa_import.h"`

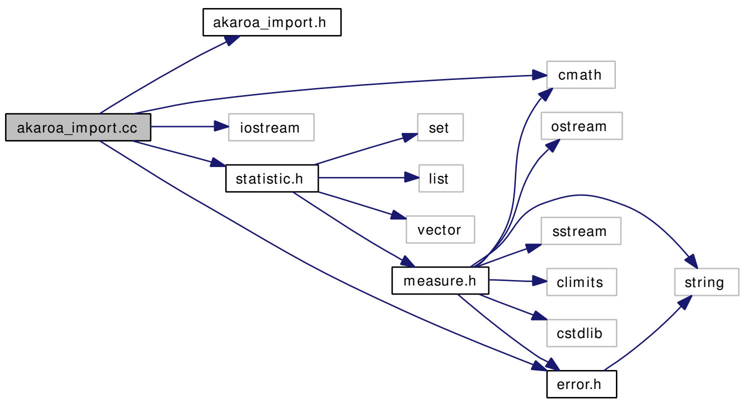
`#include <cmath>`

`#include <iostream>`

`#include "statistic.h"`

`#include "error.h"`

Include dependency graph for akaroa_import.cc:



Data Structures

- struct **K_d_entry**

Variables

- **akaroa_import lib_akaroa**

- static struct **K_d_entry K_d_table** []

9.1.1 Variable Documentation

9.1.1.1 struct K_d_entry K_d_table[] `[static]`

Referenced by akaroa_import::LookUp_K_d().

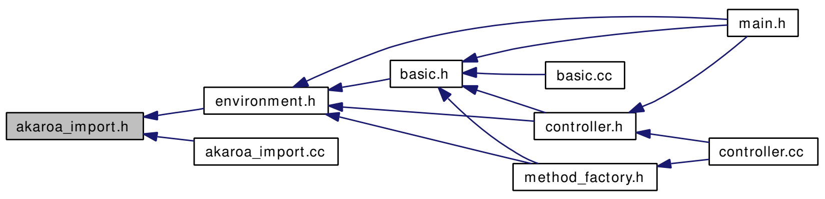
9.1.1.2 akaroa_import lib_akaroa

Definition at line 10 of file akaroa_import.cc.

Referenced by spectral_analysis_QE::checkQuantiles().

9.2 akaroa_import.h File Reference

This graph shows which files directly or indirectly include this file:



Data Structures

- class **akaroa_import**

Variables

- **akaroa_import lib_akaroa**

9.2.1 Variable Documentation

9.2.1.1 akaroa_import lib_akaroa

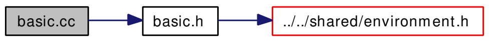
Definition at line 10 of file akaroa_import.cc.

Referenced by spectral_analysis_QE::checkQuantiles().

9.3 basic.cc File Reference

`#include "basic.h"`

Include dependency graph for basic.cc:



Variables

- std::string **s_controller** = "controller"
- std::string **s_deterministic_TPD** = "deterministic_TPD"
- std::string **s_sequential_TPD** = "sequential_TPD"
- std::string **s_sequential_batching** = "sequential_batching"
- std::string **s_evolution** = "evolution"
- std::string **s_pooling_QE** = "pooling_QE"
- std::string **s_batch_mean_QE** = "batch_mean_QE"
- std::string **s_spectral_analysis_QE** = "spectral_analysis_QE"
- std::string **s_deterministic_SSC_QE** = "deterministic_SSC_QE"
- std::string **s_confidenceInterval_SSC_QE** = "confidenceInterval_SSC_QE"
- std::string **s_relativeErrorQuantile_SSC_QE** = "relativeErrorQuantile_SSC_QE"
- std::string **s_relativeErrorRange_SSC_QE** = "relativeErrorRange_SSC_QE"
- std::string **s_execute** = "execute"
- std::string **s_replications** = "replications"
- std::string **s_cutoff** = "cutoff"
- std::string **s_permanent** = "permanent"
- std::string **s_start** = "start"
- std::string **s_stop** = "stop"
- std::string **s_ratio** = "ratio"
- std::string **s_ratio_min** = "ratio_min"
- std::string **s_ratio_max** = "ratio_max"
- std::string **s_alpha** = "alpha"
- std::string **s_performance** = "performance"
- std::string **s_limit** = "limit"
- std::string **s_independence** = "independence"
- std::string **s_statistic** = "statistic"
- std::string **s_batch_max** = "batch_max"
- std::string **s_sort** = "sort"
- std::string **s_quantiles_min** = "quantiles_min"
- std::string **s_critical_value** = "critical_value"
- std::string **s_batches** = "batches"
- std::string **s_yes** = "yes"
- std::string **s_no** = "no"
- std::string **s_auto** = "auto"
- std::string **s_fast** = "fast"
- std::string **s_precise** = "precise"
- std::string **s_exact** = "exact"
- std::string **s_mean** = "mean"
- std::string **s_spacing** = "spacing"

- std::string **s_runsUpDown** = "runsUpDown"
- std::string **s_runsAboveBelow** = "runsAboveBelow"
- std::string **s_vonNeumann** = "vonNeumann"
- std::string **s_pearsonStrelen** = "pearsonStrelen"
- std::string **s_pearsonPermutation** = "pearsonPermutation"

9.3.1 Variable Documentation

9.3.1.1 std::string s_alpha = "alpha"

Definition at line 55 of file basic.cc.

Referenced by evolution::evolution(), sequential_TPD::printSetting(), batching::printSetting(), sequential_TPD::settings(), spectral_analysis_QE::settings(), batch_mean_QE::settings(), pooling_QE::settings(), and batching::settings().

9.3.1.2 std::string s_auto = "auto"

Definition at line 68 of file basic.cc.

Referenced by sequential_TPD::printSetting(), sequential_TPD::settings(), and batching::settings().

9.3.1.3 std::string s_batch_max = "batch_max"

Definition at line 60 of file basic.cc.

Referenced by batching::printSetting(), and batching::settings().

9.3.1.4 std::string s_batch_mean_QE = "batch_mean_QE"

Definition at line 39 of file basic.cc.

Referenced by method_factory::construct(), method_factory::method_factory(), batch_-mean_QE::printResult(), batch_mean_QE::printSetting(), batch_mean_QE::printStatus(), and batch_mean_QE::settings().

9.3.1.5 std::string s_batches = "batches"

Definition at line 64 of file basic.cc.

Referenced by spectral_analysis_QE::printSetting(), batch_mean_QE::printSetting(), spectral_analysis_QE::settings(), and batch_mean_QE::settings().

9.3.1.6 std::string s_confidenceInterval_SSC_QE = "confidenceInterval_SSC_-QE"

Definition at line 42 of file basic.cc.

Referenced by confidenceInterval_SSC_QE::getName(), and quantile_estimation::set_SSC().

9.3.1.7 std::string s_controller = "controller"

Definition at line 33 of file basic.cc.

9.3.1.8 std::string s_critical_value = "critical_value"

Definition at line 63 of file basic.cc.

9.3.1.9 std::string s_cutoff = "cutoff"

Definition at line 48 of file basic.cc.

Referenced by deterministic_TPD::deterministic_TPD(), and deterministic_TPD::print-Setting().

9.3.1.10 std::string s_deterministic_SSC_QE = "deterministic_SSC_QE"

Definition at line 41 of file basic.cc.

Referenced by deterministic_SSC_QE::getName(), and quantile_estimation::set_SSC().

9.3.1.11 std::string s_deterministic_TPD = "deterministic_TPD"

Definition at line 34 of file basic.cc.

Referenced by method_factory::construct(), deterministic_TPD::deterministic_TPD(), method_factory::method_factory(), deterministic_TPD::printResult(), deterministic_-TPD::printSetting(), and deterministic_TPD::printStatus().

9.3.1.12 std::string s_evolution = "evolution"

Definition at line 37 of file basic.cc.

Referenced by method_factory::construct(), evolution::evolution(), method_factory::method_-factory(), evolution::printResult(), evolution::printSetting(), and evolution::printStatus().

9.3.1.13 std::string s_exact = "exact"

Definition at line 71 of file basic.cc.

Referenced by sequential_TPD::printDistribution(), sequential_TPD::printResult(), sequential_-TPD::printSetting(), sequential_TPD::printStatus(), and sequential_TPD::settings().

9.3.1.14 std::string s_execute = "execute"

Definition at line 46 of file basic.cc.

Referenced by method_factory::method_factory(), sequential_TPD::printSetting(), deterministic_TPD::printSetting(), evolution::printSetting(), spectral_analysis_QE::print-Setting(), batch_mean_QE::printSetting(), pooling_QE::printSetting(), batching::printSetting(), and quantile_estimation::set_SSC().

9.3.1.15 std::string s_fast = "fast"

Definition at line 69 of file basic.cc.

Referenced by sequential_TPD::printDistribution(), sequential_TPD::printResult(), sequential_-TPD::printSetting(), and sequential_TPD::printStatus().

9.3.1.16 std::string s_independence = "independence"

Definition at line 58 of file basic.cc.

Referenced by batching::printSetting(), and batching::settings().

9.3.1.17 std::string s_limit = "limit"

Definition at line 57 of file basic.cc.

Referenced by sequential_TPD::printSetting(), and sequential_TPD::settings().

9.3.1.18 std::string s_mean = "mean"

Definition at line 72 of file basic.cc.

Referenced by batching::printSetting(), and batching::settings().

9.3.1.19 std::string s_no = "no"

Definition at line 67 of file basic.cc.

Referenced by evolution::printSetting(), batching::printSetting(), evolution::printStatus(), and batching::settings().

9.3.1.20 std::string s_pearsonPermutation = "pearsonPermutation"

Definition at line 78 of file basic.cc.

Referenced by batching::printSetting(), and batching::settings().

9.3.1.21 std::string s_pearsonStrelen = "pearsonStrelen"

Definition at line 77 of file basic.cc.

Referenced by batching::printSetting(), and batching::settings().

9.3.1.22 std::string s_performance = "performance"

Definition at line 56 of file basic.cc.

Referenced by sequential_TPD::printSetting(), and sequential_TPD::settings().

9.3.1.23 std::string s_permanent = "permanent"

Definition at line 49 of file basic.cc.

Referenced by evolution::printSetting(), and evolution::printStatus().

9.3.1.24 std::string s_pooling_QE = "pooling_QE"

Definition at line 38 of file basic.cc.

Referenced by method_factory::construct(), method_factory::method_factory(), pooling_-QE::printResult(), pooling_QE::printSetting(), pooling_QE::printStatus(), and pooling_-QE::settings().

9.3.1.25 std::string s_precise = "precise"

Definition at line 70 of file basic.cc.

Referenced by sequential_TPD::printDistribution(), sequential_TPD::printResult(), sequential_-TPD::printSetting(), sequential_TPD::printStatus(), and sequential_TPD::settings().

9.3.1.26 std::string s_quantiles_min = "quantiles_min"

Definition at line 62 of file basic.cc.

Referenced by pooling_QE::printSetting(), and pooling_QE::settings().

9.3.1.27 std::string s_ratio = "ratio"

Definition at line 52 of file basic.cc.

Referenced by sequential_TPD::printSetting(), and sequential_TPD::settings().

9.3.1.28 std::string s_ratio_max = "ratio_max"

Definition at line 54 of file basic.cc.

Referenced by sequential_TPD::printSetting(), and sequential_TPD::settings().

9.3.1.29 std::string s_ratio_min = "ratio_min"

Definition at line 53 of file basic.cc.

Referenced by sequential_TPD::printSetting(), and sequential_TPD::settings().

9.3.1.30 std::string s_relativeErrorQuantile_SSC_QE = "relativeErrorQuantile_SSC_QE"

Definition at line 43 of file basic.cc.

Referenced by relativeErrorQuantile_SSC_QE::getName(), and quantile_estimation::set_SSC().

9.3.1.31 std::string s_relativeErrorRange_SSC_QE = "relativeErrorRange_-SSC_QE"

Definition at line 44 of file basic.cc.

Referenced by relativeErrorRange_SSC_QE::getName(), and quantile_estimation::set_SSC().

9.3.1.32 std::string s_replications = "replications"

Definition at line 47 of file basic.cc.

Referenced by evolution::evolution(), main(), sequential_TPD::settings(), spectral_analysis_-QE::settings(), batch_mean_QE::settings(), and batching::settings().

9.3.1.33 std::string s_runsAboveBelow = "runsAboveBelow"

Definition at line 75 of file basic.cc.

Referenced by batching::printSetting(), and batching::settings().

9.3.1.34 std::string s_runsUpDown = "runsUpDown"

Definition at line 74 of file basic.cc.

Referenced by batching::printSetting(), and batching::settings().

9.3.1.35 std::string s_sequential_batching = "sequential_batching"

Definition at line 36 of file basic.cc.

Referenced by method_factory::construct(), method_factory::method_factory(), batching::print-Result(), batching::printSetting(), batching::printStatus(), and batching::settings().

9.3.1.36 std::string s_sequential_TPD = "sequential_TPD"

Definition at line 35 of file basic.cc.

Referenced by method_factory::construct(), method_factory::method_factory(), sequential_-TPD::printDistribution(), sequential_TPD::printResult(), sequential_TPD::printSetting(), sequential_TPD::printStatus(), sequential_TPD::process(), and sequential_TPD::settings().

9.3.1.37 std::string s_sort = "sort"

Definition at line 61 of file basic.cc.

Referenced by batching::printSetting(), and batching::settings().

9.3.1.38 std::string s_spacing = "spacing"

Definition at line 73 of file basic.cc.

Referenced by batching::printSetting(), and batching::settings().

9.3.1.39 std::string s_spectral_analysis_QE = "spectral_analysis_QE"

Definition at line 40 of file basic.cc.

Referenced by method_factory::construct(), method_factory::method_factory(), spectral_-analysis_QE::printResult(), spectral_analysis_QE::printSetting(), spectral_analysis_QE::print-Status(), and spectral_analysis_QE::settings().

9.3.1.40 std::string s_start = "start"

Definition at line 50 of file basic.cc.

Referenced by evolution::evolution(), evolution::printSetting(), and evolution::printStatus().

9.3.1.41 std::string s_statistic = "statistic"

Definition at line 59 of file basic.cc.

Referenced by batching::printSetting(), and batching::settings().

9.3.1.42 std::string s_stop = "stop"

Definition at line 51 of file basic.cc.

Referenced by evolution::evolution(), evolution::printSetting(), and evolution::printStatus().

9.3.1.43 std::string s_vonNeumann = "vonNeumann"

Definition at line 76 of file basic.cc.

Referenced by batching::printSetting(), and batching::settings().

9.3.1.44 std::string s_yes = "yes"

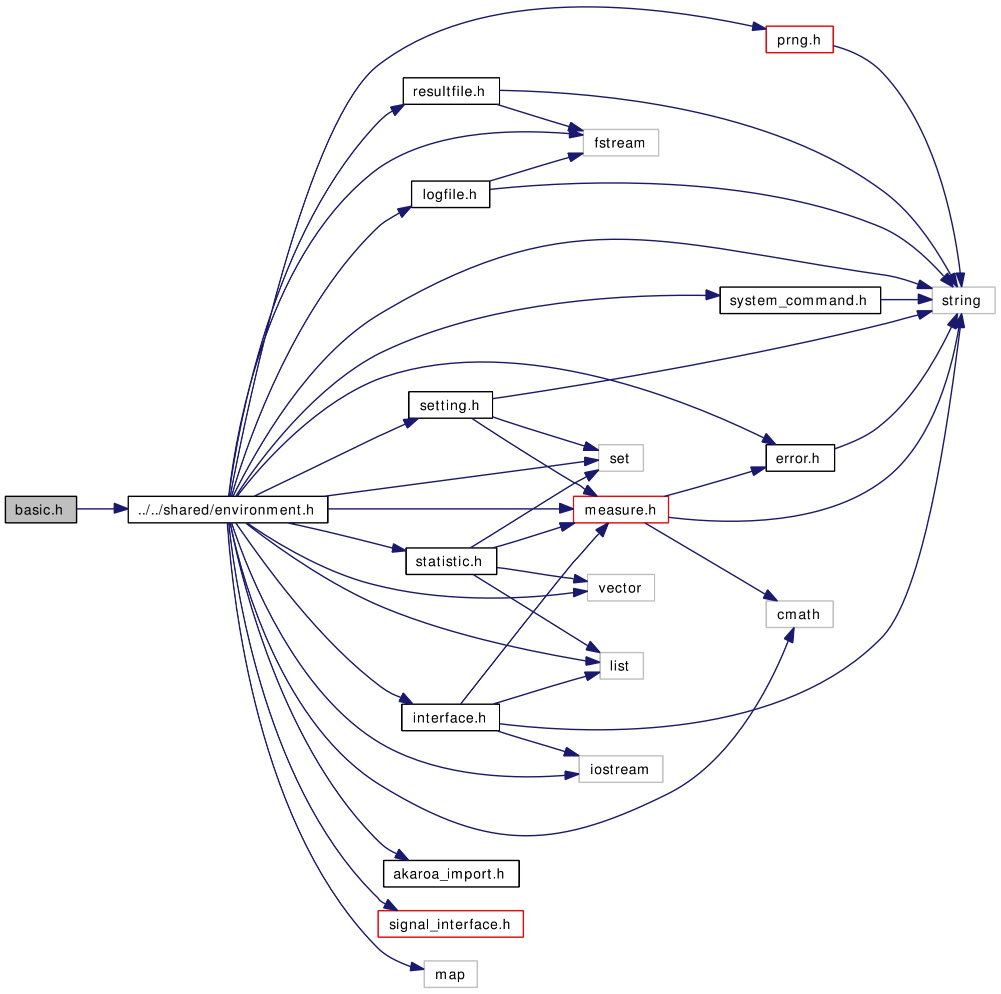
Definition at line 66 of file basic.cc.

Referenced by method_factory::method_factory(), sequential_TPD::printSetting(), deterministic_TPD::printSetting(), evolution::printSetting(), spectral_analysis_QE::print-Setting(), batch_mean_QE::printSetting(), pooling_QE::printSetting(), batching::printSetting(), evolution::printStatus(), quantile_estimation::set_SSC(), and batching::settings().

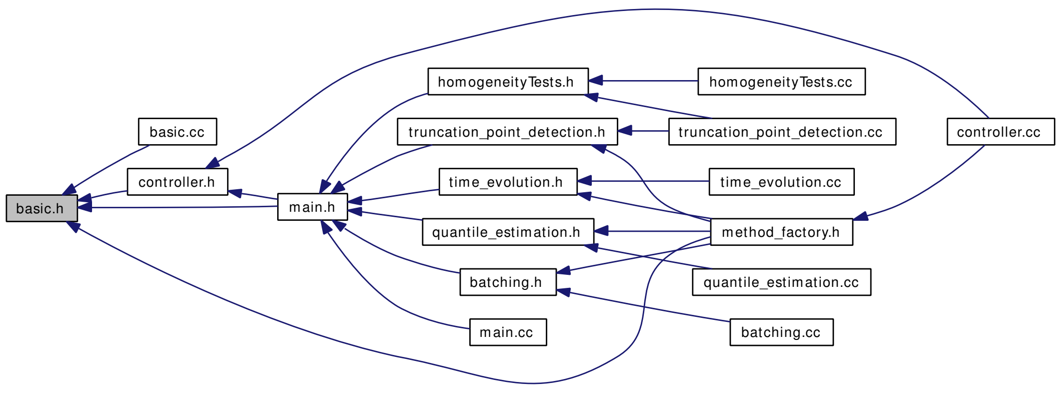
9.4 basic.h File Reference

```
#include "../../shared/environment.h"
```

Include dependency graph for basic.h:



This graph shows which files directly or indirectly include this file:



Data Structures

- class **outputAnalyser**

Enumerations

- enum **TypeOfMethod** { **EVOLUTION**, **IDENTICAL**, **INDEPENDENT**, **ESTIMATOR**, **NON** }

Variables

- std::string **s_controller**
- std::string **s_deterministic_TPD**
- std::string **s_sequential_TPD**
- std::string **s_sequential_batching**
- std::string **s_evolution**
- std::string **s_pooling_QE**
- std::string **s_batch_mean_QE**
- std::string **s_spectral_analysis_QE**
- std::string **s_deterministic_SSC_QE**
- std::string **s_confidenceInterval_SSC_QE**
- std::string **s_relativeErrorQuantile_SSC_QE**
- std::string **s_relativeErrorRange_SSC_QE**
- std::string **s_execute**
- std::string **s_replications**
- std::string **s_cutoff**
- std::string **s_permanent**
- std::string **s_start**
- std::string **s_stop**
- std::string **s_ratio**
- std::string **s_ratio_min**
- std::string **s_ratio_max**
- std::string **s_alpha**

- std::string **s_performance**
- std::string **s_limit**
- std::string **s_independence**
- std::string **s_statistic**
- std::string **s_batch_max**
- std::string **s_sort**
- std::string **s_quantiles_min**
- std::string **s_critical_value**
- std::string **s_batches**
- std::string **s_yes**
- std::string **s_no**
- std::string **s_auto**
- std::string **s_fast**
- std::string **s_precise**
- std::string **s_exact**
- std::string **s_mean**
- std::string **s_spacing**
- std::string **s_runsUpDown**
- std::string **s_runsAboveBelow**
- std::string **s_vonNeumann**
- std::string **s_pearsonStrelen**
- std::string **s_pearsonPermutation**

9.4.1 Enumeration Type Documentation

9.4.1.1 enum TypeOfMethod

Enumerator:

EVOLUTION

IDENTICAL

INDEPENDENT

ESTIMATOR

NON

Definition at line 6 of file basic.h.

9.4.2 Variable Documentation

9.4.2.1 std::string s_alpha

Definition at line 55 of file basic.cc.

Referenced by evolution::evolution(), batching::printSetting(), sequential_TPD::printSetting(), batching::settings(), pooling_QE::settings(), batch_mean_QE::settings(), spectral_analysis_-QE::settings(), and sequential_TPD::settings().

9.4.2.2 std::string s_auto

Definition at line 68 of file basic.cc.

Referenced by sequential_TPD::printSetting(), batching::settings(), and sequential_-TPD::settings().

9.4.2.3 std::string s_batch_max

Definition at line 60 of file basic.cc.

Referenced by batching::printSetting(), and batching::settings().

9.4.2.4 std::string s_batch_mean_QE

Definition at line 39 of file basic.cc.

Referenced by method_factory::construct(), method_factory::method_factory(), batch_-mean_QE::printResult(), batch_mean_QE::printSetting(), batch_mean_QE::printStatus(), and batch_mean_QE::settings().

9.4.2.5 std::string s_batches

Definition at line 64 of file basic.cc.

Referenced by batch_mean_QE::printSetting(), spectral_analysis_QE::printSetting(), batch_-mean_QE::settings(), and spectral_analysis_QE::settings().

9.4.2.6 std::string s_confidenceInterval_SSC_QE

Definition at line 42 of file basic.cc.

Referenced by confidenceInterval_SSC_QE::getName(), and quantile_estimation::set_SSC().

9.4.2.7 std::string s_controller

Definition at line 33 of file basic.cc.

9.4.2.8 std::string s_critical_value

Definition at line 63 of file basic.cc.

9.4.2.9 std::string s_cutoff

Definition at line 48 of file basic.cc.

Referenced by deterministic_TPD::deterministic_TPD(), and deterministic_TPD::print-Setting().

9.4.2.10 std::string s_deterministic_SSC_QE

Definition at line 41 of file basic.cc.

Referenced by deterministic_SSC_QE::getName(), and quantile_estimation::set_SSC().

9.4.2.11 std::string s_deterministic_TPD

Definition at line 34 of file basic.cc.

Referenced by method_factory::construct(), deterministic_TPD::deterministic_TPD(), method_factory::method_factory(), deterministic_TPD::printResult(), deterministic_-TPD::printSetting(), and deterministic_TPD::printStatus().

9.4.2.12 std::string s_evolution

Definition at line 37 of file basic.cc.

Referenced by method_factory::construct(), evolution::evolution(), method_factory::method_-factory(), evolution::printResult(), evolution::printSetting(), and evolution::printStatus().

9.4.2.13 std::string s_exact

Definition at line 71 of file basic.cc.

Referenced by sequential_TPD::printDistribution(), sequential_TPD::printResult(), sequential_-TPD::printSetting(), sequential_TPD::printStatus(), and sequential_TPD::settings().

9.4.2.14 std::string s_execute

Definition at line 46 of file basic.cc.

Referenced by method_factory::method_factory(), batching::printSetting(), pooling_-QE::printSetting(), batch_mean_QE::printSetting(), spectral_analysis_QE::printSetting(), evolution::printSetting(), deterministic_TPD::printSetting(), sequential_TPD::printSetting(), and quantile_estimation::set_SSC().

9.4.2.15 std::string s_fast

Definition at line 69 of file basic.cc.

Referenced by sequential_TPD::printDistribution(), sequential_TPD::printResult(), sequential_-TPD::printSetting(), and sequential_TPD::printStatus().

9.4.2.16 std::string s_independence

Definition at line 58 of file basic.cc.

Referenced by batching::printSetting(), and batching::settings().

9.4.2.17 std::string s_limit

Definition at line 57 of file basic.cc.

Referenced by sequential_TPD::printSetting(), and sequential_TPD::settings().

9.4.2.18 std::string s_mean

Definition at line 72 of file basic.cc.

Referenced by batching::printSetting(), and batching::settings().

9.4.2.19 std::string s_no

Definition at line 67 of file basic.cc.

Referenced by batching::printSetting(), evolution::printSetting(), evolution::printStatus(), and batching::settings().

9.4.2.20 std::string s_pearsonPermutation

Definition at line 78 of file basic.cc.

Referenced by batching::printSetting(), and batching::settings().

9.4.2.21 std::string s_pearsonStrelen

Definition at line 77 of file basic.cc.

Referenced by batching::printSetting(), and batching::settings().

9.4.2.22 std::string s_performance

Definition at line 56 of file basic.cc.

Referenced by sequential_TPD::printSetting(), and sequential_TPD::settings().

9.4.2.23 std::string s_permanent

Definition at line 49 of file basic.cc.

Referenced by evolution::printSetting(), and evolution::printStatus().

9.4.2.24 std::string s_pooling_QE

Definition at line 38 of file basic.cc.

Referenced by method_factory::construct(), method_factory::method_factory(), pooling_-QE::printResult(), pooling_QE::printSetting(), pooling_QE::printStatus(), and pooling_-QE::settings().

9.4.2.25 std::string s_precise

Definition at line 70 of file basic.cc.

Referenced by sequential_TPD::printDistribution(), sequential_TPD::printResult(), sequential_-TPD::printSetting(), sequential_TPD::printStatus(), and sequential_TPD::settings().

9.4.2.26 std::string s_quantiles_min

Definition at line 62 of file basic.cc.

Referenced by pooling_QE::printSetting(), and pooling_QE::settings().

9.4.2.27 std::string s_ratio

Definition at line 52 of file basic.cc.

Referenced by sequential_TPD::printSetting(), and sequential_TPD::settings().

9.4.2.28 std::string s_ratio_max

Definition at line 54 of file basic.cc.

Referenced by sequential_TPD::printSetting(), and sequential_TPD::settings().

9.4.2.29 std::string s_ratio_min

Definition at line 53 of file basic.cc.

Referenced by sequential_TPD::printSetting(), and sequential_TPD::settings().

9.4.2.30 std::string s_relativeErrorQuantile_SSC_QE

Definition at line 43 of file basic.cc.

Referenced by relativeErrorQuantile_SSC_QE::getName(), and quantile_estimation::set_SSC().

9.4.2.31 std::string s_relativeErrorRange_SSC_QE

Definition at line 44 of file basic.cc.

Referenced by relativeErrorRange_SSC_QE::getName(), and quantile_estimation::set_SSC().

9.4.2.32 std::string s_replications

Definition at line 47 of file basic.cc.

Referenced by evolution::evolution(), main(), batching::settings(), batch_mean_QE::settings(), spectral_analysis_QE::settings(), and sequential_TPD::settings().

9.4.2.33 std::string s_runsAboveBelow

Definition at line 75 of file basic.cc.

Referenced by batching::printSetting(), and batching::settings().

9.4.2.34 std::string s_runsUpDown

Definition at line 74 of file basic.cc.

Referenced by batching::printSetting(), and batching::settings().

9.4.2.35 std::string s_sequential_batching

Definition at line 36 of file basic.cc.

Referenced by method_factory::construct(), method_factory::method_factory(), batching::printResult(), batching::printSetting(), batching::printStatus(), and batching::settings().

9.4.2.36 std::string s_sequential_TPD

Definition at line 35 of file basic.cc.

Referenced by method_factory::construct(), method_factory::method_factory(), sequential_TPD::printDistribution(), sequential_TPD::printResult(), sequential_TPD::printSetting(), sequential_TPD::printStatus(), sequential_TPD::process(), and sequential_TPD::settings().

9.4.2.37 std::string s_sort

Definition at line 61 of file basic.cc.

Referenced by batching::printSetting(), and batching::settings().

9.4.2.38 std::string s_spacing

Definition at line 73 of file basic.cc.

Referenced by batching::printSetting(), and batching::settings().

9.4.2.39 std::string s_spectral_analysis_QE

Definition at line 40 of file basic.cc.

Referenced by method_factory::construct(), method_factory::method_factory(), spectral_analysis_QE::printResult(), spectral_analysis_QE::printSetting(), spectral_analysis_QE::printStatus(), and spectral_analysis_QE::settings().

9.4.2.40 std::string s_start

Definition at line 50 of file basic.cc.

Referenced by evolution::evolution(), evolution::printSetting(), and evolution::printStatus().

9.4.2.41 std::string s_statistic

Definition at line 59 of file basic.cc.

Referenced by batching::printSetting(), and batching::settings().

9.4.2.42 std::string s_stop

Definition at line 51 of file basic.cc.

Referenced by evolution::evolution(), evolution::printSetting(), and evolution::printStatus().

9.4.2.43 std::string s_vonNeumann

Definition at line 76 of file basic.cc.

Referenced by batching::printSetting(), and batching::settings().

9.4.2.44 std::string s_yes

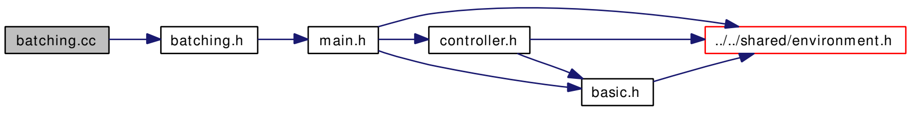
Definition at line 66 of file basic.cc.

Referenced by method_factory::method_factory(), batching::printSetting(), pooling_-QE::printSetting(), batch_mean_QE::printSetting(), spectral_analysis_QE::printSetting(), evolution::printSetting(), deterministic_TPD::printSetting(), sequential_TPD::printSetting(), evolution::printStatus(), quantile_estimation::set_SSC(), and batching::settings().

9.5 batching.cc File Reference

```
#include "batching.h"
```

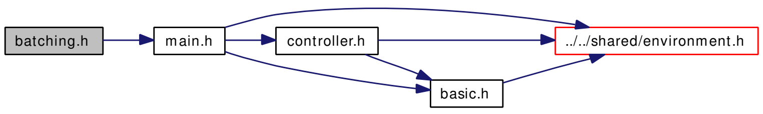
Include dependency graph for batching.cc:



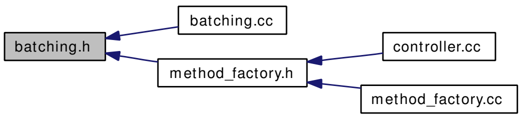
9.6 batching.h File Reference

```
#include "main.h"
```

Include dependency graph for batching.h:



This graph shows which files directly or indirectly include this file:



Data Structures

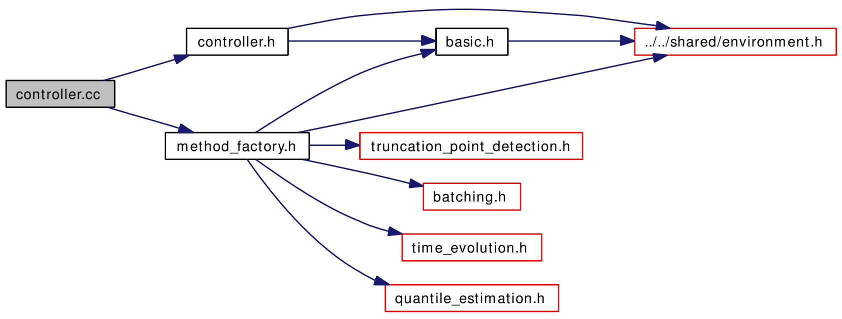
- class **batching**

9.7 controller.cc File Reference

`#include "controller.h"`

`#include "method_factory.h"`

Include dependency graph for controller.cc:



Variables

- **controller lib_controller**

9.7.1 Variable Documentation

9.7.1.1 controller lib_controller

Definition at line 6 of file controller.cc.

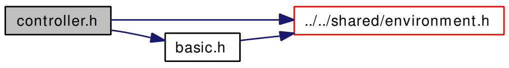
Referenced by main().

9.8 controller.h File Reference

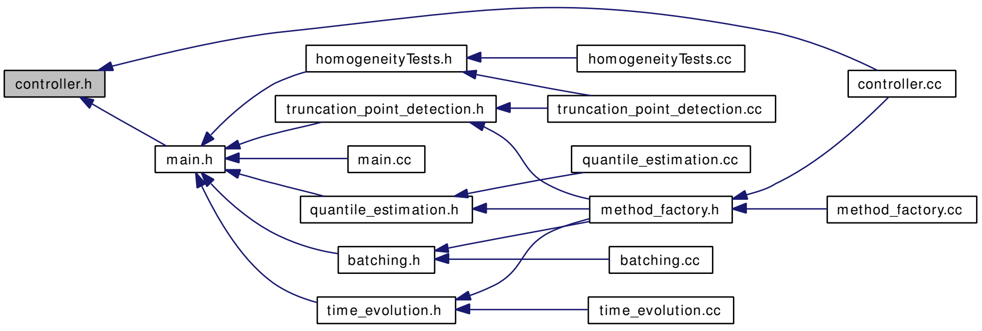
`#include "../../shared/environment.h"`

`#include "basic.h"`

Include dependency graph for controller.h:



This graph shows which files directly or indirectly include this file:



Data Structures

- class **controller**

Variables

- **controller lib_controller**

9.8.1 Variable Documentation

9.8.1.1 controller lib_controller

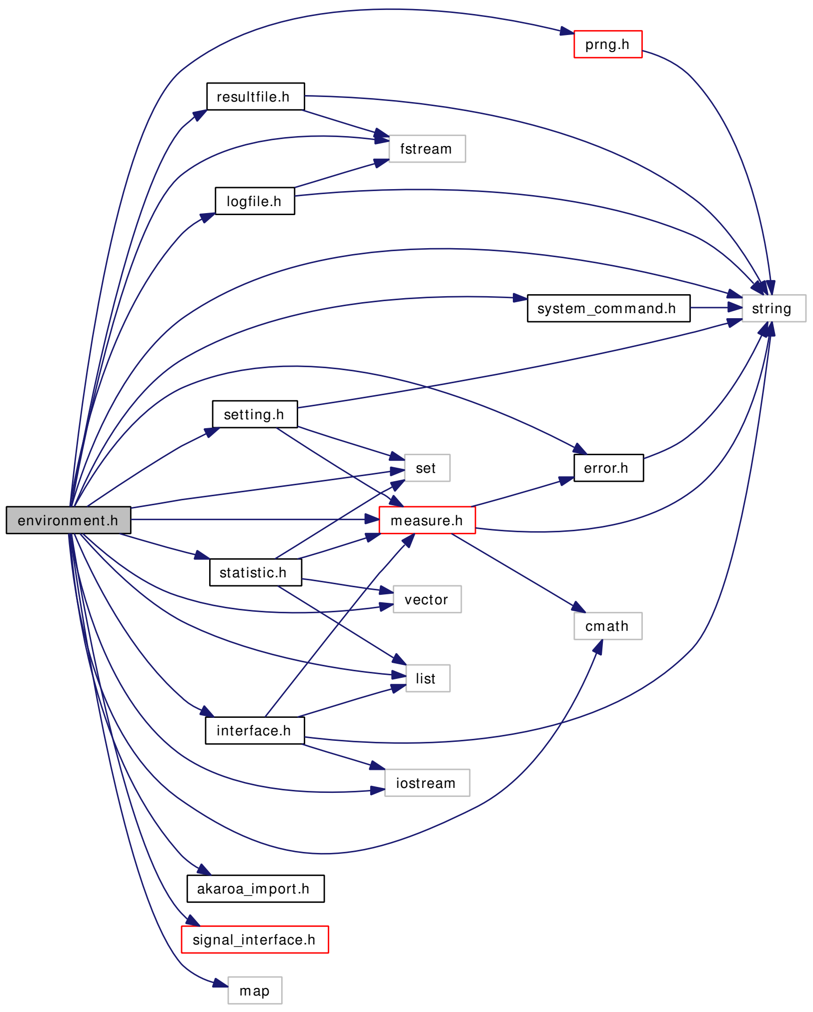
Definition at line 6 of file controller.cc.

Referenced by main().

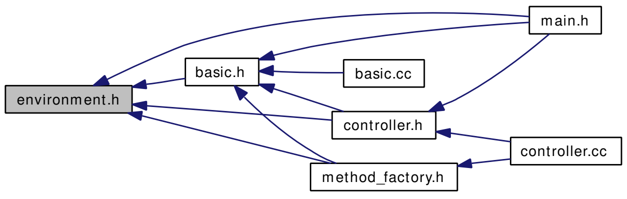
9.9 environment.h File Reference

```
#include "resultfile.h"
#include "akaroa_import.h"
#include "error.h"
#include "system_command.h"
#include "logfile.h"
#include "measure.h"
#include "statistic.h"
#include "interface.h"
#include "setting.h"
#include "signal_interface.h"
#include "prng.h"
#include <list>
#include <vector>
#include <set>
#include <map>
#include <string>
#include <cmath>
#include <iostream>
#include <fstream>
```

Include dependency graph for environment.h:



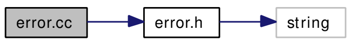
This graph shows which files directly or indirectly include this file:



9.10 error.cc File Reference

```
#include "error.h"
```

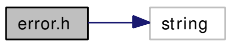
Include dependency graph for error.cc:



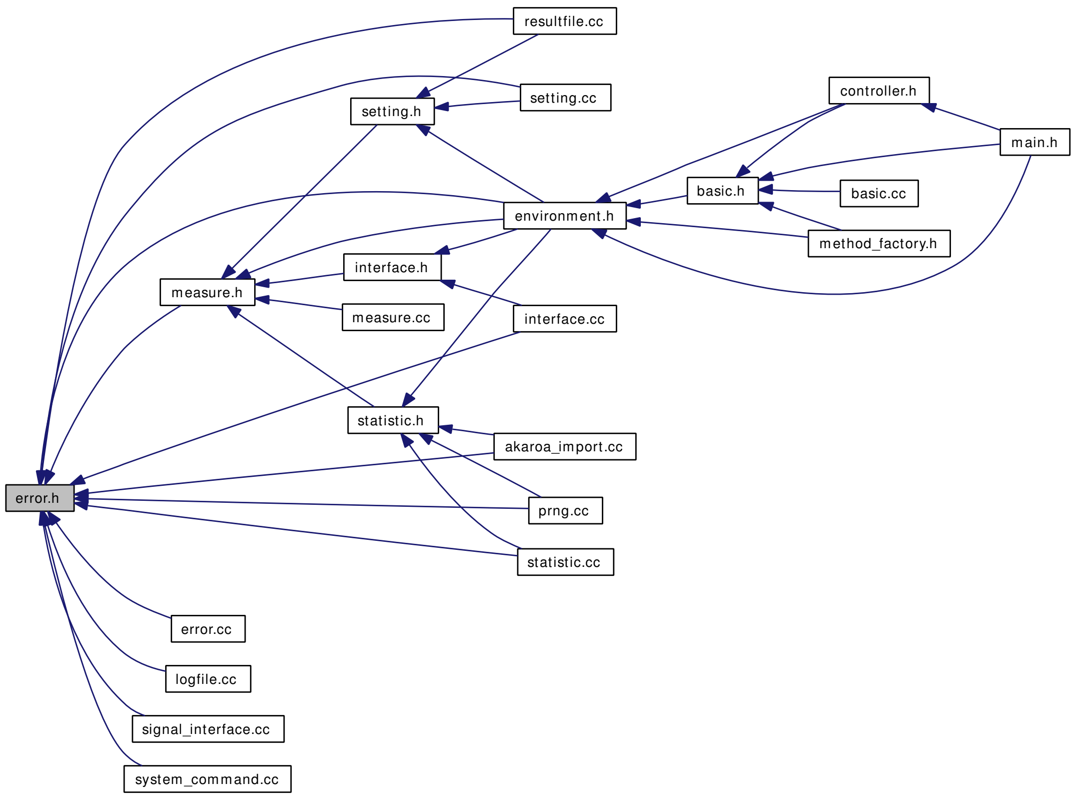
9.11 error.h File Reference

`#include <string>`

Include dependency graph for error.h:



This graph shows which files directly or indirectly include this file:



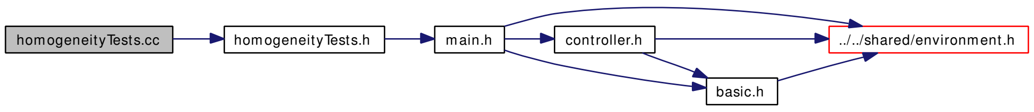
Data Structures

- class **error_in_FCM**

9.12 homogeneityTests.cc File Reference

```
#include "homogeneityTests.h"
```

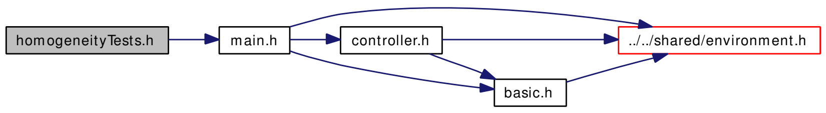
Include dependency graph for homogeneityTests.cc:



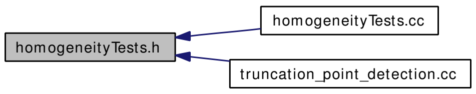
9.13 homogeneityTests.h File Reference

`#include "main.h"`

Include dependency graph for homogeneityTests.h:



This graph shows which files directly or indirectly include this file:



Data Structures

- class **homogeneityTest**
- class **AndersonDarlingKSampleTestEqualECDFSize**
- class **KolmogorovSmirnov2SampleTest**

9.14 interface.cc File Reference

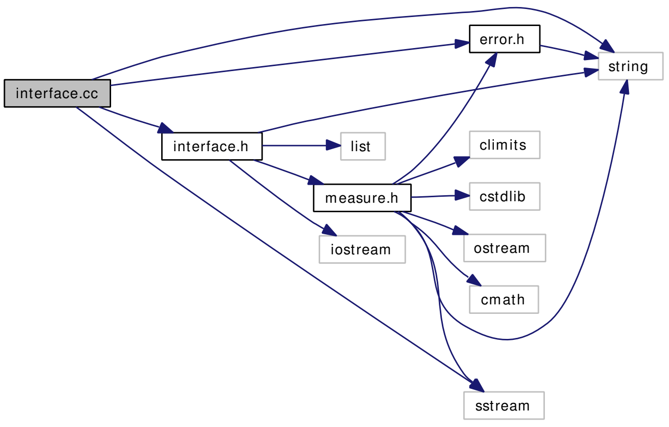
`#include "interface.h"`

`#include <sstream>`

`#include <string>`

`#include "error.h"`

Include dependency graph for interface.cc:



Variables

- **interface_singleRun lib_singleStream**
- **interface_multipleRuns lib_multipleStreams**

9.14.1 Variable Documentation

9.14.1.1 interface_multipleRuns lib_multipleStreams

Definition at line 64 of file interface.cc.

Referenced by main().

9.14.1.2 interface_singleRun lib_singleStream

Definition at line 11 of file interface.cc.

9.15 interface.h File Reference

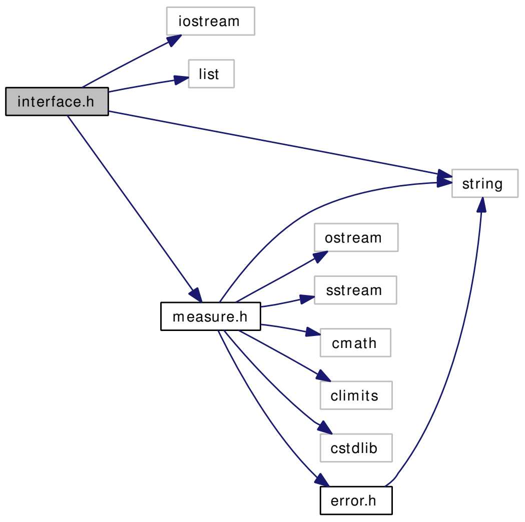
`#include <iostream>`

`#include <list>`

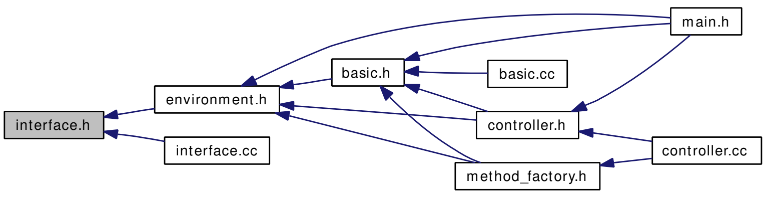
`#include <string>`

`#include "measure.h"`

Include dependency graph for interface.h:



This graph shows which files directly or indirectly include this file:



Data Structures

- class **interface_singleRun**
- class **interface_multipleRuns**

Variables

- **interface_singleRun lib_singleStream**
- **interface_multipleRuns lib_multipleStreams**

9.15.1 Variable Documentation

9.15.1.1 interface_multipleRuns lib_multipleStreams

Definition at line 64 of file interface.cc.

Referenced by main().

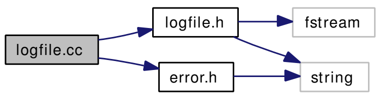
9.15.1.2 interface_singleRun lib_singleStream

Definition at line 11 of file interface.cc.

9.16 logfile.cc File Reference

```
#include "logfile.h"
#include "error.h"
```

Include dependency graph for logfile.cc:



Functions

- void **logInfo::open** (void)
- void **logInfo::close** (void)

Variables

- std::ofstream ∗ **logfile**

9.16.1 Variable Documentation

9.16.1.1 std::ofstream∗ logfile

Definition at line 6 of file logfile.cc.

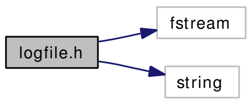
Referenced by logInfo::close(), logInfo::open(), sequential_TPD::printResult(), deterministic_-TPD::printResult(), spectral_analysis_QE::printResult(), batch_mean_QE::printResult(), pooling_QE::printResult(), batching::printResult(), sequential_TPD::printSetting(), deterministic_TPD::printSetting(), evolution::printSetting(), spectral_analysis_QE::print-Setting(), batch_mean_QE::printSetting(), pooling_QE::printSetting(), batching::printSetting(), sequential_TPD::printStatus(), deterministic_TPD::printStatus(), evolution::printStatus(), spectral_analysis_QE::printStatus(), batch_mean_QE::printStatus(), pooling_QE::print-Status(), controller::printStatus(), batching::printStatus(), system_command::printToLogfile(), setting::printToLogfile(), prng::printToLogfile(), sequential_TPD::process(), controller::process(), and batching::testBatchStatistic().

9.17 logfile.h File Reference

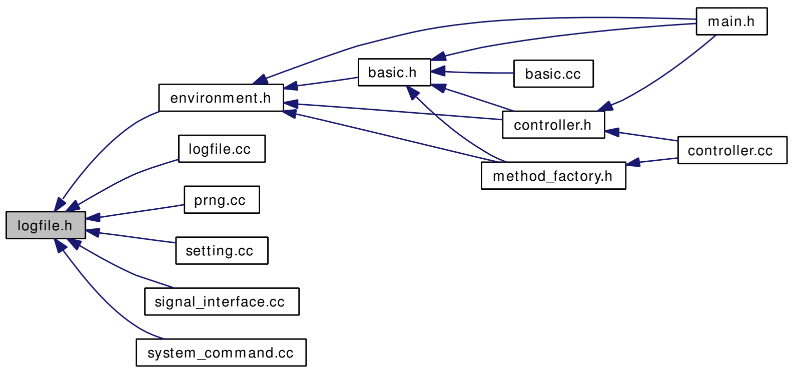
`#include <fstream>`

`#include <string>`

Include dependency graph for logfile.h:



This graph shows which files directly or indirectly include this file:



Namespaces

- namespace **logInfo**

Functions

- void **logInfo::open** (void)
- void **logInfo::close** (void)

Variables

- std::ofstream ∗ **logfile**

9.17.1 Variable Documentation

9.17.1.1 std::ofstream∗ logfile

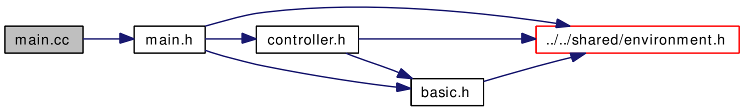
Definition at line 6 of file logfile.cc.

Referenced by logInfo::close(), logInfo::open(), batching::printResult(), pooling_QE::printResult(), batch_mean_QE::printResult(), spectral_analysis_QE::printResult(), deterministic_TPD::printResult(), sequential_TPD::printResult(), batching::printSetting(), pooling_QE::printSetting(), batch_mean_QE::printSetting(), spectral_analysis_QE::printSetting(), evolution::printSetting(), deterministic_TPD::printSetting(), sequential_TPD::printSetting(), batching::printStatus(), controller::printStatus(), pooling_QE::printStatus(), batch_mean_QE::printStatus(), spectral_analysis_QE::printStatus(), evolution::printStatus(), deterministic_TPD::printStatus(), sequential_TPD::printStatus(), prng::printToLogfile(), setting::printToLogfile(), system_command::printToLogfile(), controller::process(), sequential_TPD::process(), and batching::testBatchStatistic().

9.18 main.cc File Reference

`#include "main.h"`

Include dependency graph for main.cc:



Functions

- int **main** (int argc, char ∗argv[ ])

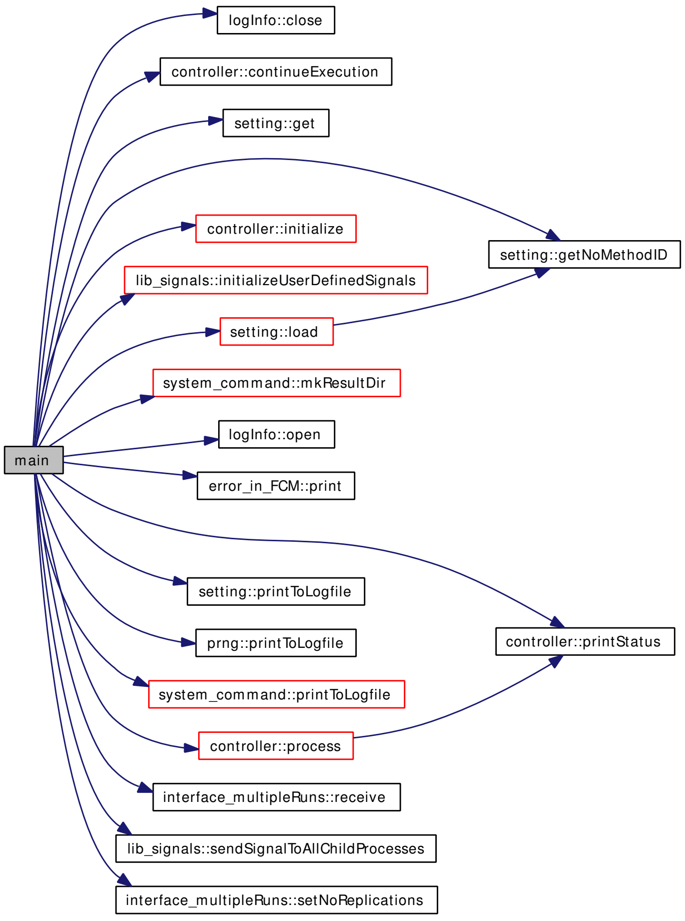
9.18.1 Function Documentation

9.18.1.1 int main (int *argc*, char ∗ *argv*[ ])

Definition at line 4 of file main.cc.

References logInfo::close(), controller::continueExecution(), lib_signals::continueExecution, CONTINUOUS, setting::get(), setting::getNoMethodID(), INDEX, controller::initialize(), lib_signals::initializeUserDefinedSignals(), lib_controller, lib_multipleStreams, lib_prng, lib_setting, lib_system, setting::load(), system_command::mkResultDir(), logInfo::open(), error_in_FCM::print(), controller::printStatus(), setting::printToLogfile(), prng::printToLogfile(), system_command::printToLogfile(), controller::process(), interface_multipleRuns::receive(), s_replications, lib_signals::sendSignalToAllChildProcesses(), and interface_multipleRuns::setNoReplications().

Here is the call graph for this function:


logInfo::close
controller::continueExecution
setting::get
setting::getNoMethodID
controller::initialize
lib_signals::initializeUserDefinedSignals
setting::load
system_command::mkResultDir
main
logInfo::open
error_in_FCM::print
setting::printToLogfile
controller::printStatus
prng::printToLogfile
system_command::printToLogfile
controller::process
interface_multipleRuns::receive
lib_signals::sendSignalToAllChildProcesses
interface_multipleRuns::setNoReplications

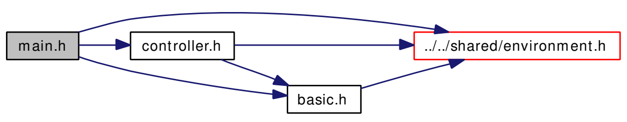
9.19 main.h File Reference

`#include "../../shared/environment.h"`

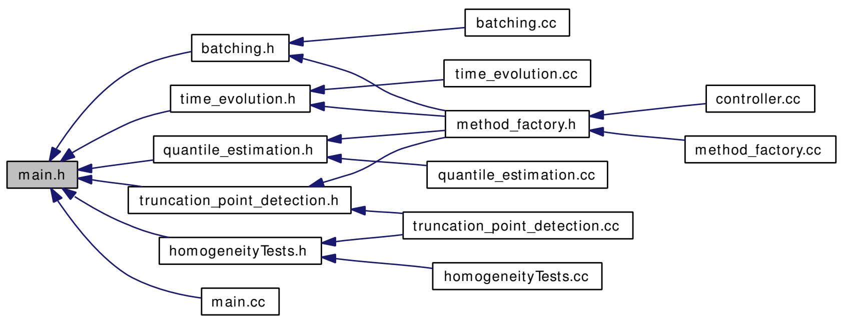
`#include "controller.h"`

`#include "basic.h"`

Include dependency graph for main.h:



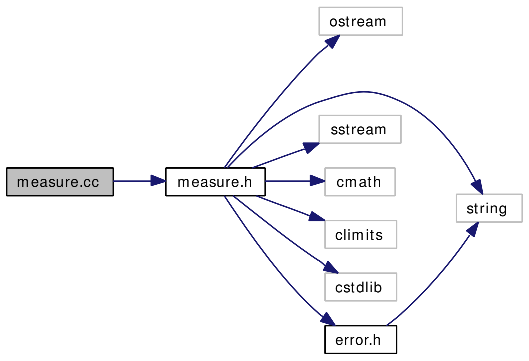
This graph shows which files directly or indirectly include this file:



9.20 measure.cc File Reference

`#include "measure.h"`

Include dependency graph for measure.cc:



9.21 measure.h File Reference

`#include <ostream>`

`#include <string>`

`#include <sstream>`

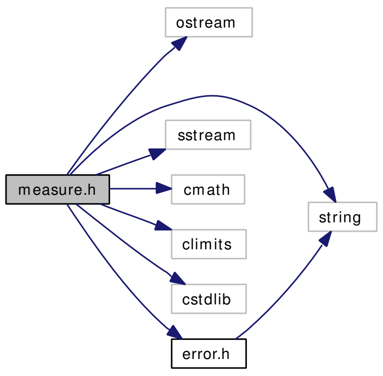
`#include <cmath>`

`#include <climits>`

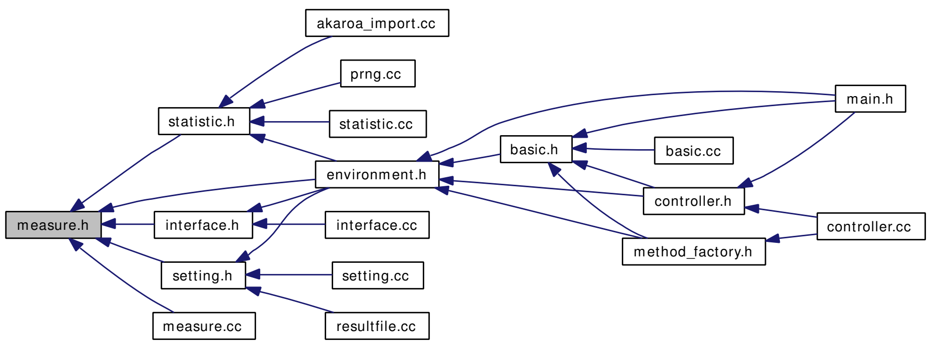
`#include <cstdlib>`

`#include "error.h"`

Include dependency graph for measure.h:



This graph shows which files directly or indirectly include this file:



Defines

- #define **CONTINUOUS** long double
- #define **DISCRETE** long long
- #define **INDEX** unsigned long long

Functions

- CONTINUOUS **DtoC** (const DISCRETE &p)

- CONTINUOUS **ItoC** (const INDEX &p)
- DISCRETE **CtoD** (const CONTINUOUS &p)
- DISCRETE **ItoD** (const INDEX &p)
- INDEX **CtoI** (const CONTINUOUS &p)
- INDEX **DtoI** (const DISCRETE &p)
- std::string **CtoS** (const CONTINUOUS &p)
- std::string **DtoS** (const DISCRETE &p)
- std::string **ItoS** (const INDEX &p)
- CONTINUOUS **StoC** (const std::string &p)
- DISCRETE **StoD** (const std::string &p)
- INDEX **StoI** (const std::string &p)

9.21.1 Define Documentation

9.21.1.1 #define CONTINUOUS long double

Definition at line 15 of file measure.h.

Referenced by statistic_collection::binomial(), statistic_collection::binomialCoefficient(), AndersonDarlingKSampleTestEqualECDFSize::calculateCriticalValue(), AndersonDarling-KSampleTestEqualECDFSize::calculateStatistic(), quantile_rank::calculateUnbiased-Quantile(), spectral_analysis_QE::checkQuantiles(), batch_mean_QE::checkQuantiles(), pooling_QE::checkQuantiles(), statistic_collection::chooseDistribution(), statistic_-collection::chooseQuantiles(), statistic_collection::coth(), DtoC(), statistic_collection::f_-distribution(), statistic_collection::finiteSumCorrelationCoefficients_MM1(), statistic_-collection::generateRandomPermutation(), AndersonDarlingKSampleTestEqualECDFSize::get-Variance(), sequential_TPD::homogeneityTest(), statistic_collection::infiniteSumCorrelation-Coefficients_MM1(), statistic_collection::inv_binomial(), statistic_collection::inv_f_-distribution(), statistic_collection::inv_M_E2_1_response(), statistic_collection::inv_M_-H2_1_response(), statistic_collection::inv_M_M_1_response(), statistic_collection::inv_-normal(), statistic_collection::inv_t_distribution(), relativeErrorQuantile_SSC_QE::is-Fulfilled(), ItoC(), statistic_collection::M_E2_1_response(), statistic_collection::M_H2_-1_response(), statistic_collection::M_M_1_response(), main(), statistic_collection::mean(), statistic_collection::normal(), statistic_collection::pearsonPermutation(), statistic_-collection::pearsonPermutation_test(), statistic_collection::pearsonsCorrelationCoefficient(), statistic_collection::pearsonStrelen(), statistic_collection::pearsonStrelen_test(), statistic_-collection::permutationAll(), SequentialStoppingCriteria_QE::print(), quantile_rank::quantile-CDF(), statistic_collection::ranks(), statistic_collection::siegelsRunTest_large(), statistic_-collection::spearmansCorrelationCoefficient(), statistic_collection::t_distribution(), statistic_-collection::tanh(), batching::testBatchStatistic(), statistic_collection::uniform(), statistic_-collection::vonNeumann(), statistic_collection::vonNeumann_statistic(), and statistic_-collection::vonNeumannsCorrelationCoefficient().

9.21.1.2 #define DISCRETE long long

Definition at line 16 of file measure.h.

Referenced by statistic_collection::chooseQuantiles(), statistic_collection::chooseQuantiles_-old(), CtoD(), statistic_collection::generateRandomPermutation(), ItoD(), and statistic_-collection::siegelsRunTest_small().

9.21.1.3 #define INDEX unsigned long long

Definition at line 17 of file measure.h.

Referenced by batching::batching(), statistic_collection::binomialCoefficient(), batching::calculateBatchStatistic(), quantile_rank::calculateLowerRank(), evolution::calculate-Quantiles(), AndersonDarlingKSampleTestEqualECDFSize::calculateStatistic(), quantile_-rank::calculateUpperRank(), quantile_rank::cdf(), spectral_analysis_QE::checkQuantiles(), batch_mean_QE::checkQuantiles(), pooling_QE::checkQuantiles(), statistic_collection::choose-Distribution(), statistic_collection::chooseQuantiles(), statistic_collection::chooseQuantiles_-old(), spectral_analysis_QE::collapse(), batch_mean_QE::collapse(), batching::collapseBatch-Statistic(), CtoI(), AndersonDarlingKSampleTestEqualECDFSize::debug_VecVec(), DtoI(), statistic_collection::finiteSumCorrelationCoefficients_MM1(), statistic_collection::generate-RandomPermutation(), KolmogorovSmirnov2SampleTest::KolmogorovSmirnov2SampleTest(), main(), method_factory::method_factory(), statistic_collection::pearsonPermutation_-test(), statistic_collection::pearsonsCorrelationCoefficient(), statistic_collection::pearson-Strelen_test(), statistic_collection::permutationAll(), sequential_TPD::printDistribution(), sequential_TPD::process(), spectral_analysis_QE::process(), batch_mean_QE::process(), statistic_collection::ranks(), statistic_collection::runsAboveBelow(), statistic_collection::runs-UpDown(), sequential_TPD::sequential_TPD(), statistic_collection::siegelsRunTest_small(), AndersonDarlingKSampleTestEqualECDFSize::sortVector(), statistic_collection::spearmans-CorrelationCoefficient(), sequential_TPD::sub_begin(), sequential_TPD::sub_collect(), sequential_TPD::sub_compare(), sequential_TPD::sub_initialize(), batching::testBatch-Statistic(), batching::updateBatchStatistic(), statistic_collection::vonNeumann_statistic(), and statistic_collection::vonNeumannsCorrelationCoefficient().

9.21.2 Function Documentation

9.21.2.1 DISCRETE CtoD (const CONTINUOUS & *p*) `[inline]`

Definition at line 28 of file measure.h.

References DISCRETE.

9.21.2.2 INDEX CtoI (const CONTINUOUS & *p*) `[inline]`

Definition at line 39 of file measure.h.

References INDEX.

Referenced by statistic_collection::pearsonPermutation_test(), and batching::testBatch-Statistic().

9.21.2.3 std::string CtoS (const CONTINUOUS & *p*) `[inline]`

Definition at line 50 of file measure.h.

Referenced by SequentialStoppingCriteria_QE::print().

9.21.2.4 CONTINUOUS DtoC (const DISCRETE & *p*) `[inline]`

Definition at line 20 of file measure.h.

References CONTINUOUS.

9.21.2.5 INDEX DtoI (const DISCRETE & *p*) `[inline]`

Definition at line 45 of file measure.h.

References INDEX.

Referenced by statistic_collection::binomialCoefficient(), and statistic_collection::generate-RandomPermutation().

9.21.2.6 std::string DtoS (const DISCRETE & *p*) `[inline]`

Definition at line 56 of file measure.h.

9.21.2.7 CONTINUOUS ItoC (const INDEX & *p*) `[inline]`

Definition at line 24 of file measure.h.

References CONTINUOUS.

Referenced by statistic_collection::binomialCoefficient(), quantile_rank::calculateUnbiased-Quantile(), spectral_analysis_QE::checkQuantiles(), batch_mean_QE::checkQuantiles(), statistic_collection::finiteSumCorrelationCoefficients_MM1(), sequential_TPD::sub_compare(), and batching::testBatchStatistic().

9.21.2.8 DISCRETE ItoD (const INDEX & *p*) `[inline]`

Definition at line 34 of file measure.h.

References DISCRETE.

Referenced by statistic_collection::chooseQuantiles(), and statistic_collection::finiteSum-CorrelationCoefficients_MM1().

9.21.2.9 std::string ItoS (const INDEX & *p*) `[inline]`

Definition at line 62 of file measure.h.

Referenced by SequentialStoppingCriteria_QE::print(), sequential_TPD::printResult(), batching::printResult(), and sequential_TPD::printSetting().

9.21.2.10 CONTINUOUS StoC (const std::string & *p*) `[inline]`

Definition at line 68 of file measure.h.

Referenced by settingEntry::getValueContinuous().

9.21.2.11 DISCRETE StoD (const std::string & *p*) `[inline]`

Definition at line 72 of file measure.h.

Referenced by settingEntry::getValueDiscrete().

9.21.2.12 INDEX StoI (const std::string & *p*) `[inline]`

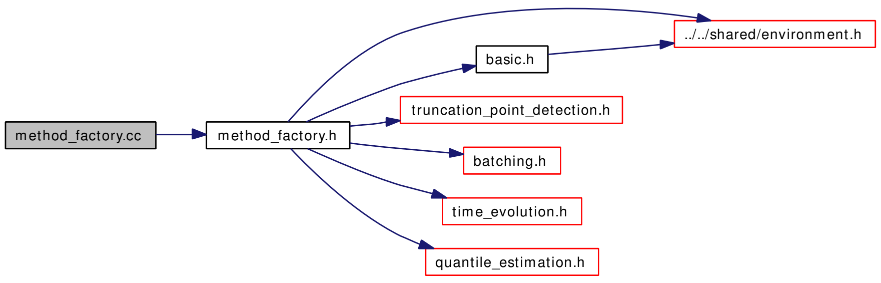
Definition at line 76 of file measure.h.

Referenced by settingEntry::getValueIndex().

9.22 method_factory.cc File Reference

`#include "method_factory.h"`

Include dependency graph for method_factory.cc:



9.23 method_factory.h File Reference

`#include "../../shared/environment.h"`

`#include "basic.h"`

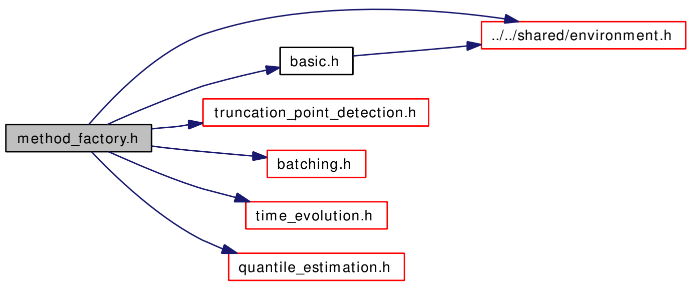
`#include "truncation_point_detection.h"`

`#include "batching.h"`

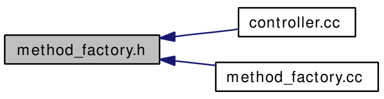
`#include "time_evolution.h"`

`#include "quantile_estimation.h"`

Include dependency graph for method_factory.h:



This graph shows which files directly or indirectly include this file:



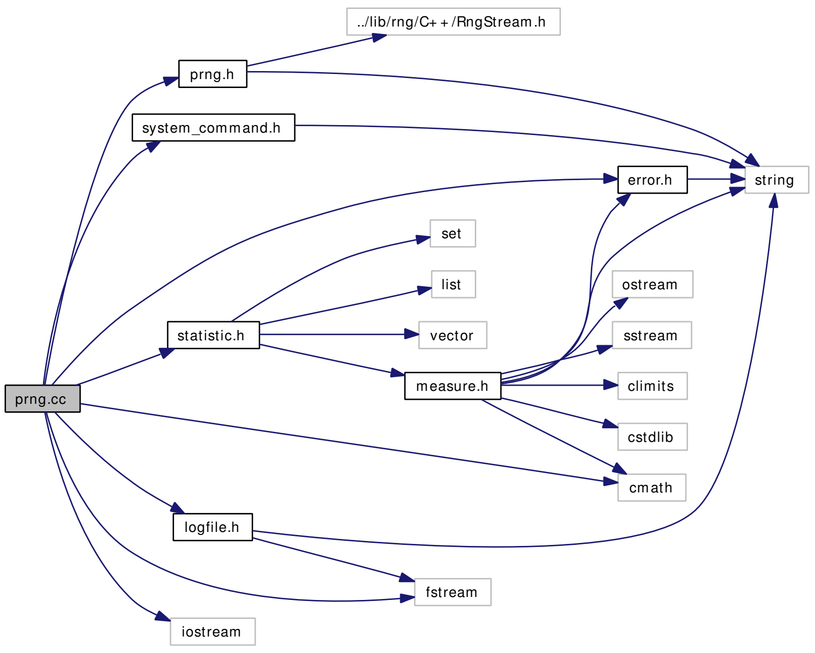
Data Structures

- class **method_factory**

9.24 prng.cc File Reference

```
#include "prng.h"
#include "system_command.h"
#include "error.h"
#include "statistic.h"
#include "logfile.h"
#include <cmath>
#include <fstream>
#include <iostream>
```

Include dependency graph for prng.cc:



Functions

- RngStream **LEcuyer** ("myStream")

Variables

- **prng lib_prng**

9.24.1 Function Documentation

9.24.1.1 RngStream LEcuyer ("myStream")

9.24.2 Variable Documentation

9.24.2.1 prng lib_prng

Definition at line 193 of file prng.cc.

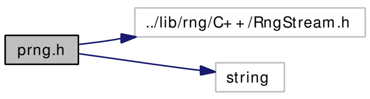
Referenced by statistic_collection::generateRandomPermutation(), main(), and sequential_-TPD::sub_compare().

9.25 prng.h File Reference

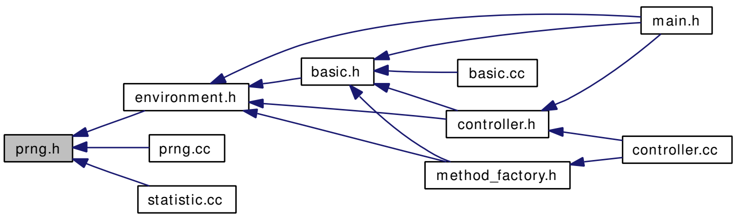
`#include "../lib/rng/C++/RngStream.h"`

`#include <string>`

Include dependency graph for prng.h:



This graph shows which files directly or indirectly include this file:



Data Structures

- class **prng**

Variables

- **prng lib_prng**

9.25.1 Variable Documentation

9.25.1.1 prng lib_prng

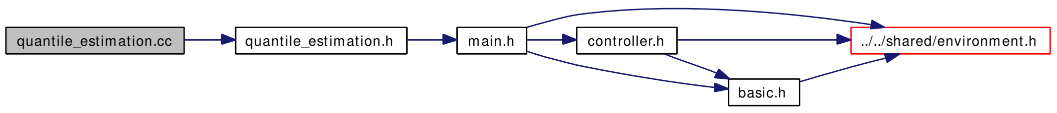
Definition at line 193 of file prng.cc.

Referenced by statistic_collection::generateRandomPermutation(), main(), and sequential_-TPD::sub_compare().

9.26 quantile_estimation.cc File Reference

```
#include "quantile_estimation.h"
```

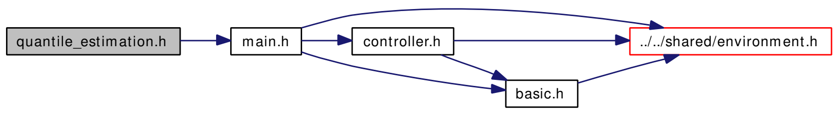
Include dependency graph for quantile_estimation.cc:



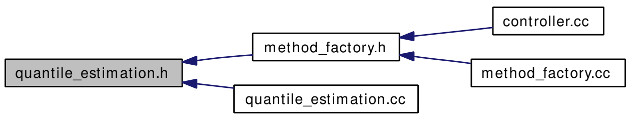
9.27 quantile_estimation.h File Reference

```
#include "main.h"
```

Include dependency graph for quantile_estimation.h:



This graph shows which files directly or indirectly include this file:



Data Structures

- class **quantile_estimation**
- class **pooling_QE**
- class **batch_mean_QE**
- class **spectral_analysis_QE**
- class **SequentialStoppingCriteria_QE**
- struct **SequentialStoppingCriteria_QE::estimate**
- class **deterministic_SSC_QE**
- class **confidenceInterval_SSC_QE**
- class **relativeErrorQuantile_SSC_QE**
- class **relativeErrorRange_SSC_QE**

9.28 resultfile.cc File Reference

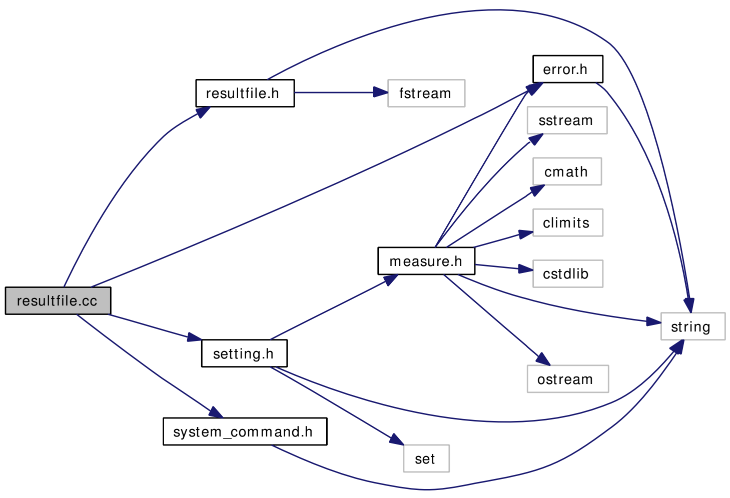
`#include "resultfile.h"`

`#include "error.h"`

`#include "setting.h"`

`#include "system_command.h"`

Include dependency graph for resultfile.cc:



Variables

- **resultInfo resultfile**

9.28.1 Variable Documentation

9.28.1.1 resultInfo resultfile

Definition at line 9 of file resultfile.cc.

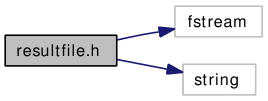
Referenced by SequentialStoppingCriteria_QE::print(), sequential_TPD::printResult(), and batching::printResult().

9.29 resultfile.h File Reference

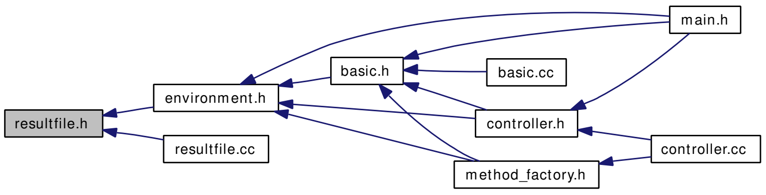
`#include <fstream>`

`#include <string>`

Include dependency graph for resultfile.h:



This graph shows which files directly or indirectly include this file:



Data Structures

- class **resultInfo**

Variables

- **resultInfo resultfile**

9.29.1 Variable Documentation

9.29.1.1 resultInfo resultfile

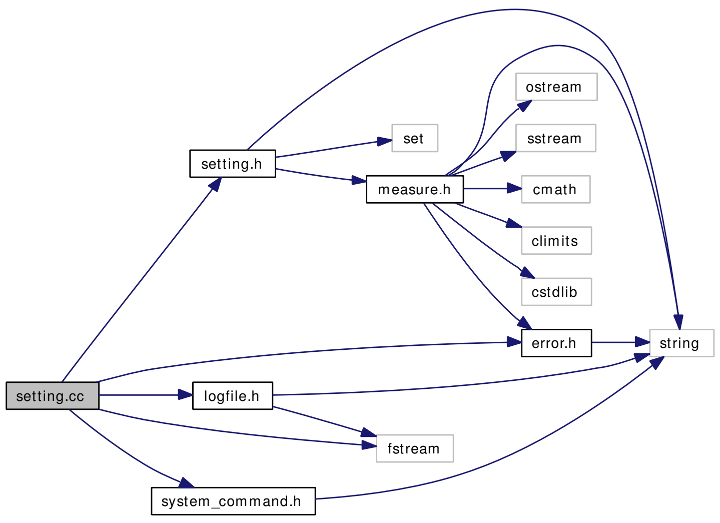
Definition at line 9 of file resultfile.cc.

Referenced by SequentialStoppingCriteria_QE::print(), batching::printResult(), and sequential_-TPD::printResult().

9.30 setting.cc File Reference

```
#include "setting.h"
#include "error.h"
#include "logfile.h"
#include "system_command.h"
#include <fstream>
```

Include dependency graph for setting.cc:



Variables

- **setting lib_setting**

9.30.1 Variable Documentation

9.30.1.1 setting lib_setting

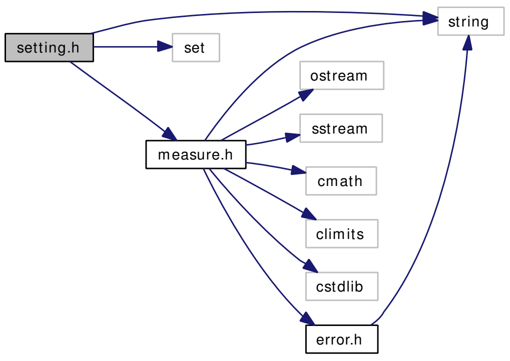
Definition at line 10 of file setting.cc.

Referenced by deterministic_TPD::deterministic_TPD(), evolution::evolution(), main(), method_factory::method_factory(), resultInfo::print(), quantile_estimation::set_SSC(), sequential_TPD::settings(), spectral_analysis_QE::settings(), batch_mean_QE::settings(), pooling_QE::settings(), and batching::settings().

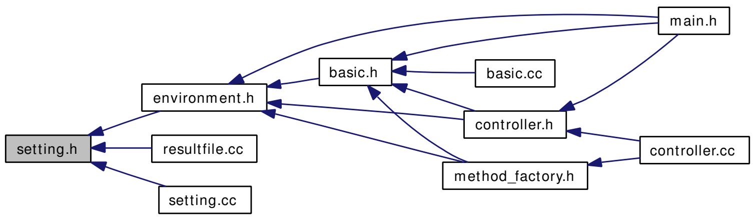
9.31 setting.h File Reference

```
#include <string>
#include <set>
#include "measure.h"
```

Include dependency graph for setting.h:



This graph shows which files directly or indirectly include this file:



Data Structures

- class **settingEntry**
- class **setting**

Variables

- **setting lib_setting**

9.31.1 Variable Documentation

9.31.1.1 setting lib_setting

Definition at line 10 of file setting.cc.

Referenced by deterministic_TPD::deterministic_TPD(), evolution::evolution(), main(), method_factory::method_factory(), resultInfo::print(), quantile_estimation::set_SSC(), batching::settings(), pooling_QE::settings(), batch_mean_QE::settings(), spectral_analysis_-QE::settings(), and sequential_TPD::settings().

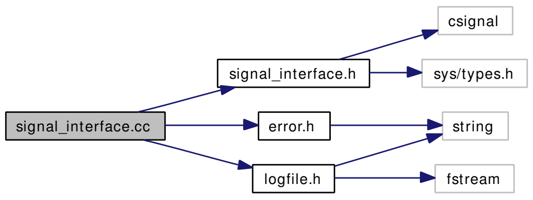
9.32 signal_interface.cc File Reference

`#include "signal_interface.h"`

`#include "error.h"`

`#include "logfile.h"`

Include dependency graph for signal_interface.cc:



Namespaces

- namespace **lib_signals**

Functions

- void **lib_signals::initializeUserDefinedSignals** (void)
- void **lib_signals::signal_stop** (int signr)
- void **lib_signals::signal_ignore** (int signr)
- void **lib_signals::registerChildProcess** (pid_t newProcess)
- void **lib_signals::sendSignalToAllChildProcesses** (int signr)

Variables

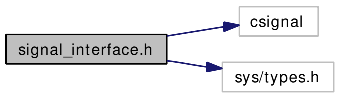
- bool **lib_signals::continueExecution** = true
- unsigned int **lib_signals::actNoChildProcesses** = 0
- const unsigned int **lib_signals::maxNoChildProcesses** = 1024
- pid_t **lib_signals::ChildProcessPIDs** [maxNoChildProcesses]

9.33 signal_interface.h File Reference

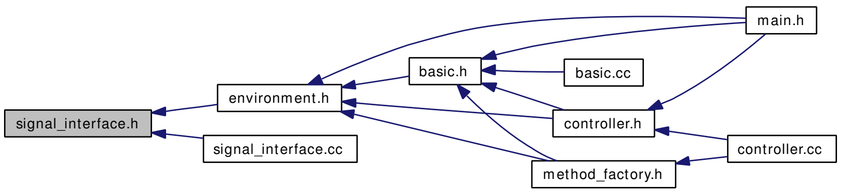
`#include <csignal>`

`#include <sys/types.h>`

Include dependency graph for signal_interface.h:



This graph shows which files directly or indirectly include this file:



Namespaces

- namespace **lib_signals**

Functions

- void **lib_signals::initializeUserDefinedSignals** (void)
- void **lib_signals::signal_stop** (int signr)
- void **lib_signals::signal_ignore** (int signr)
- void **lib_signals::registerChildProcess** (pid_t newProcess)
- void **lib_signals::sendSignalToAllChildProcesses** (int signr)

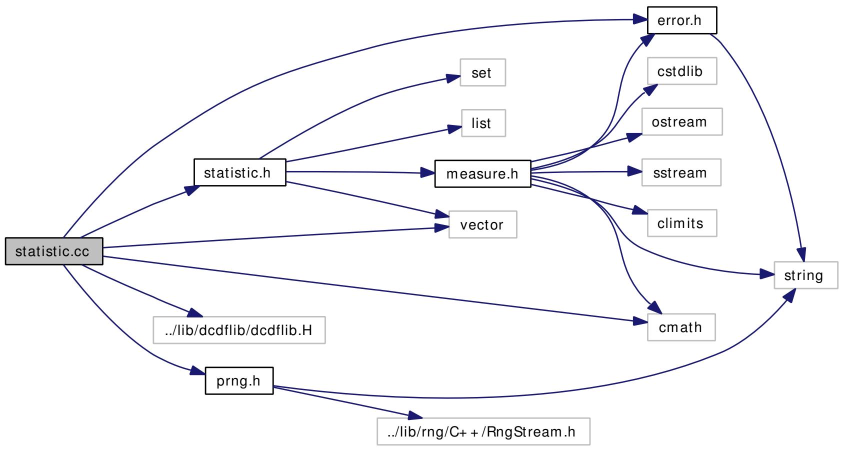
Variables

- bool **lib_signals::continueExecution**
- const unsigned int **lib_signals::maxNoChildProcesses**

9.34 statistic.cc File Reference

```
#include "statistic.h"
#include <cmath>
#include <vector>
#include "../lib/dcdflib/dcdflib.H"
#include "error.h"
#include "prng.h"
```

Include dependency graph for statistic.cc:



Variables

- **statistic_collection lib_statistic**

9.34.1 Variable Documentation

9.34.1.1 statistic_collection lib_statistic

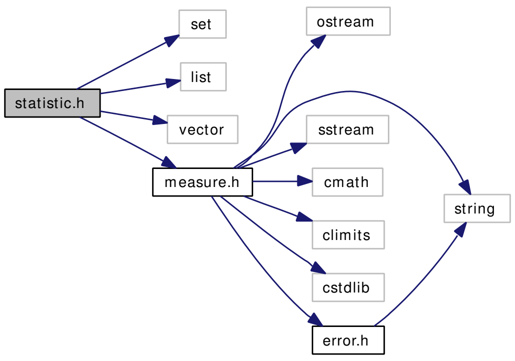
Definition at line 13 of file statistic.cc.

Referenced by spectral_analysis_QE::checkQuantiles(), batch_mean_QE::checkQuantiles(), pooling_QE::checkQuantiles(), prng::draw_normal(), evolution::evolution(), quantile_-rank::quantileCDF(), and batching::testBatchStatistic().

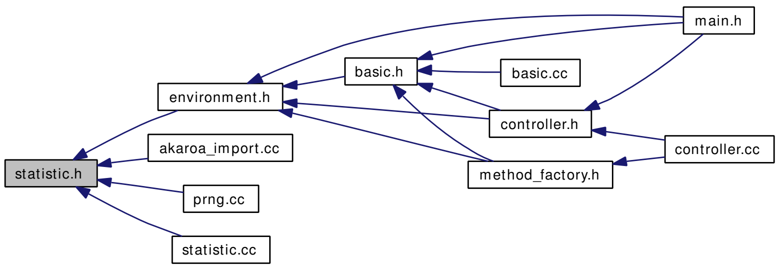
9.35 statistic.h File Reference

```
#include <set>
#include <list>
#include <vector>
#include "measure.h"
```

Include dependency graph for statistic.h:



This graph shows which files directly or indirectly include this file:



Data Structures

- class **statistic_collection**
- class **quantile_rank**

Enumerations

- enum **distribution** { **UNSPECIFIED** = 0, **UNIFORM**, **EXPONENTIAL**, **NORMAL** }

Variables

- **statistic_collection lib_statistic**

9.35.1 Enumeration Type Documentation

9.35.1.1 enum distribution

Enumerator:

- ***UNSPECIFIED***
- ***UNIFORM***
- ***EXPONENTIAL***
- ***NORMAL***

Definition at line 13 of file statistic.h.

9.35.2 Variable Documentation

9.35.2.1 statistic_collection lib_statistic

Definition at line 13 of file statistic.cc.

Referenced by pooling_QE::checkQuantiles(), batch_mean_QE::checkQuantiles(), spectral_-analysis_QE::checkQuantiles(), prng::draw_normal(), evolution::evolution(), quantile_-rank::quantileCDF(), and batching::testBatchStatistic().

9.36 system_command.cc File Reference

`#include "system_command.h"`

`#include "error.h"`

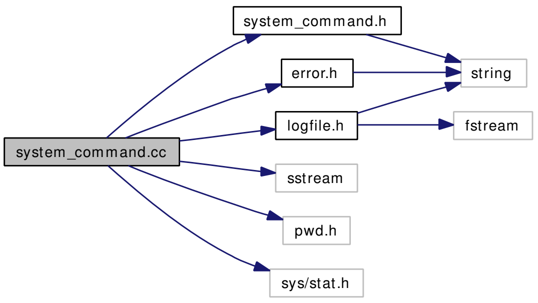
`#include "logfile.h"`

`#include <sstream>`

`#include <pwd.h>`

`#include <sys/stat.h>`

Include dependency graph for system_command.cc:



Variables

- **system_command lib_system**

9.36.1 Variable Documentation

9.36.1.1 system_command lib_system

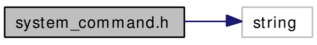
Definition at line 11 of file system_command.cc.

Referenced by setting::load(), main(), resultInfo::print(), SequentialStoppingCriteria_QE::print(), sequential_TPD::printDistribution(), evolution::printResult(), and prng::prng().

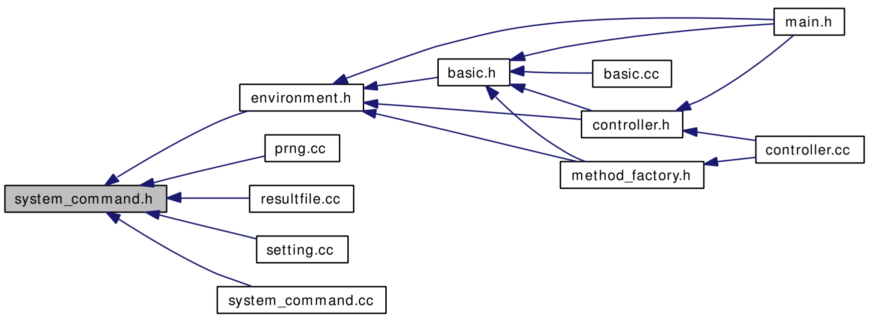
9.37 system_command.h File Reference

`#include <string>`

Include dependency graph for system_command.h:



This graph shows which files directly or indirectly include this file:



Data Structures

- class **system_command**

Variables

- **system_command lib_system**

9.37.1 Variable Documentation

9.37.1.1 system_command lib_system

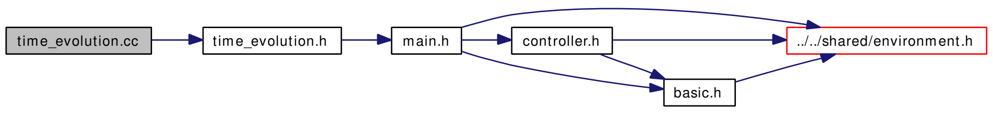
Definition at line 11 of file system_command.cc.

Referenced by setting::load(), main(), SequentialStoppingCriteria_QE::print(), resultInfo::print(), sequential_TPD::printDistribution(), evolution::printResult(), and prng::prng().

9.38 time_evolution.cc File Reference

`#include "time_evolution.h"`

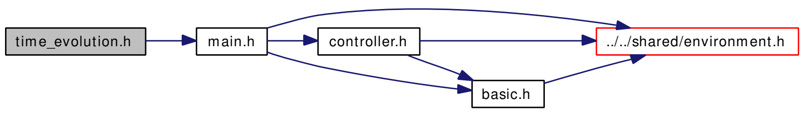
Include dependency graph for time_evolution.cc:



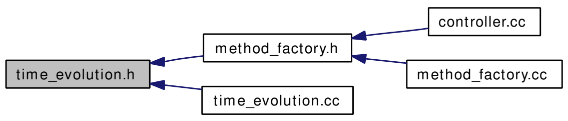
9.39 time_evolution.h File Reference

`#include "main.h"`

Include dependency graph for time_evolution.h:



This graph shows which files directly or indirectly include this file:



Data Structures

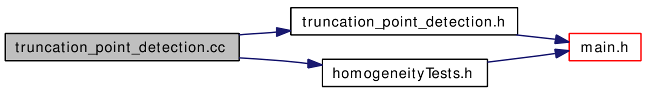
- class **evolution**

9.40 truncation_point_detection.cc File Reference

`#include "truncation_point_detection.h"`

`#include "homogeneityTests.h"`

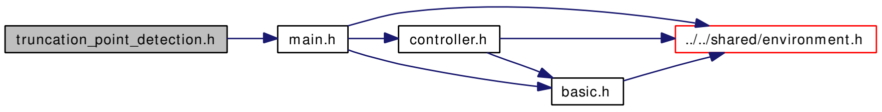
Include dependency graph for truncation_point_detection.cc:



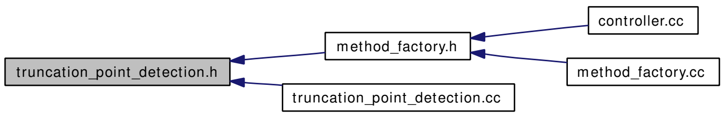
9.41 truncation_point_detection.h File Reference

`#include "main.h"`

Include dependency graph for truncation_point_detection.h:



This graph shows which files directly or indirectly include this file:



Data Structures

- class **truncation_point_detection**
- class **deterministic_TPD**
- class **sequential_TPD**

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