

nSTAT-python Validation Report (All Examples)

Generated: 2026-03-04 21:38:37

Repository: /home/runner/work/nSTAT-python/nSTAT-python

Commit: 1e4c57b

Notebook group: all

Examples included: 30

MATLAB helpfiles root: /tmp/upstream-nstat/helpfiles

Parity mode: gate (gate-status (equivalence audit + output spec))

Command checks

- Skipped by --skip-command-tests

Example Coverage Summary

Total examples: 30

Executed: 30

Exec failures: 0

Py fig topics: 23

MATLAB refs available: 23

Parity gate pass: 30/30

Unique-py topics: 23

Topics with py duplicates: 10

Image dedupe: instances=174 unique=155 cross-topic=3 repeated=19

Numeric drift pass: 30/30

Exec	Parity	Topic	PyT	PyU	MAT	Score	Run	Sec	Status
PASS	PASS	AnalysisExamples	5	5	5	-	smoke	3.08	validated
PASS	PASS	ConfigCollExamples	0	0	0	-	full	2.20	validated
PASS	PASS	CovCollExamples	3	3	3	-	full	2.36	validated
PASS	PASS	CovariateExamples	3	3	3	-	smoke	2.49	validated
PASS	PASS	DecodingExample	7	6	7	-	smoke	2.97	validated
PASS	PASS	DecodingExampleWithHist	3	3	3	-	smoke	3.43	validated
PASS	PASS	EventsExamples	5	2	5	-	full	2.25	validated
PASS	PASS	ExplicitStimulusWhiskerData	10	10	10	-	full	2.65	validated
PASS	PASS	FitResSummaryExamples	0	0	0	-	full	2.23	matlab_doc_onl
PASS	PASS	FitResultExamples	0	0	0	-	full	2.25	matlab_doc_onl
PASS	PASS	HippocampalPlaceCellExample	12	10	12	-	full	3.43	validated
PASS	PASS	HistoryExamples	5	5	5	-	full	2.42	validated
PASS	PASS	NetworkTutorial	8	7	8	-	full	2.75	validated
PASS	PASS	PPSimExample	6	6	6	-	smoke	2.56	validated
PASS	PASS	PPTinning	5	4	5	-	full	2.38	validated
PASS	PASS	PSTHEstimation	3	3	3	-	full	2.49	validated
PASS	PASS	SignalObjExamples	21	18	21	-	smoke	2.76	validated
PASS	PASS	StimulusDecode2D	7	6	7	-	full	2.48	validated
PASS	PASS	TrialConfigExamples	0	0	0	-	full	2.15	validated
PASS	PASS	TrialExamples	7	7	7	-	smoke	2.74	validated
PASS	PASS	ValidationDataSet	13	11	13	-	full	2.71	validated
PASS	PASS	mEPSCAnalysis	6	5	6	-	full	2.57	validated
PASS	PASS	nSTATPaperExamples	26	26	26	-	smoke	6.26	validated
PASS	PASS	nSpikeTrainExamples	6	5	6	-	smoke	2.39	validated
PASS	PASS	nstCollExamples	4	4	4	-	full	2.34	validated
PASS	PASS	AnalysisExamples2	6	6	6	-	full	2.78	validated
PASS	PASS	DocumentationSetup2025b	0	0	0	-	full	2.26	matlab_doc_onl
PASS	PASS	FitResultReference	0	0	0	-	full	2.32	matlab_doc_onl
PASS	PASS	HybridFilterExample	3	3	3	-	full	3.20	validated
PASS	PASS	publish_all_helpfiles	0	0	0	-	full	2.49	validated

Example 1/30: AnalysisExamples

Notebook: /home/runner/work/nSTAT-python/nSTAT-python/notebooks/helpfiles/AnalysisExamples.ipynb

Run group: smoke

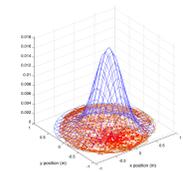
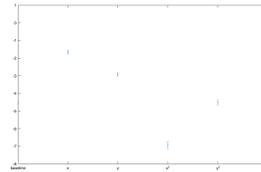
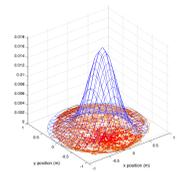
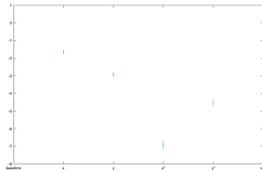
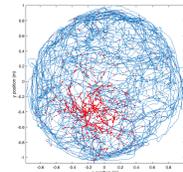
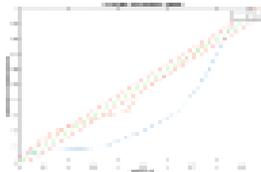
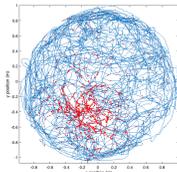
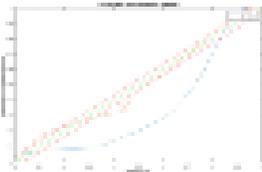
Execution: PASS | Parity: PASS | Similarity: - | Runtime: 3.08s

Equivalence status: validated

Python figs (total/unique/duplicate): 5/5/0 | MATLAB refs: 5

Python output gallery (unique figures)

MATLAB reference gallery



Python unique figures shown: 4 / 5

MATLAB refs shown: 4 / 5

Output snippet

Running notebook topic: AnalysisExamples (family=analysis) Example data directory:
/home/runner/work/nSTAT-python/nSTAT-python/data_cache/nstat_data

Numeric drift metric detail (worst ratios)

- rate_max_abs_error: value=1.427e-06, threshold=0.35, ratio=0.000, PASS
- intercept_abs_error: value=1.867e-07, threshold=0.35, ratio=0.000, PASS
- rmse_abs_error: value=4.013e-08, threshold=0.25, ratio=0.000, PASS

MATLAB vs Python key metrics threshold=0.35, ratio=0.000, PASS

Metric	Value
MATLAB code lines	59
Python code lines	179
Python/MATLAB line ratio	3.034
Python image instances	5
Python unique images	5
Python duplicate images	0
MATLAB reference images	5
Python validation images	1
Checkpoint assertions	3
Contains plotting logic	Yes
Has topic checkpoint	Yes
Numeric drift pass	Yes
Numeric metrics checked	4
Numeric metrics failed	0
Worst ratio to threshold	0.000
First failed numeric metric	-

Example 2/30: ConfigCollExamples

Notebook: /home/runner/work/nSTAT-python/nSTAT-python/notebooks/helpfiles/ConfigCollExamples.ipynb

Run group: full

Execution: PASS | Parity: PASS | Similarity: - | Runtime: 2.20s

Equivalence status: validated

Python figs (total/unique/duplicate): 0/0/0 | MATLAB refs: 0

Python output gallery (unique figures)

No images available.

MATLAB reference gallery

No images available.

Python unique figures shown: 0 / 0

MATLAB refs shown: 0 / 0

Output snippet

Running notebook topic: ConfigCollExamples (family=signal) Example data directory:
/home/runner/work/nSTAT-python/nSTAT-python/data_cache/nstat_data Loaded 3 MATLAB executable anchors
for ConfigCollExamples.

Numeric drift metric detail (worst ratios)

- alignment_status_mismatch: value=0, threshold=0, ratio=0.000, PASS
- assertion_count_missing_error: value=0, threshold=0, ratio=0.000, PASS
- matlab_code_lines_abs_error: value=0, threshold=0, ratio=0.000, PASS

MATLAB vs Python key metrics: value=0, threshold=0, ratio=0.000, PASS

Metric	Value
MATLAB code lines	3
Python code lines	79
Python/MATLAB line ratio	26.333
Python image instances	0
Python unique images	0
Python duplicate images	0
MATLAB reference images	0
Python validation images	1
Checkpoint assertions	4
Contains plotting logic	Yes
Has topic checkpoint	Yes
Numeric drift pass	Yes
Numeric metrics checked	8
Numeric metrics failed	0
Worst ratio to threshold	0.000
First failed numeric metric	-

Example 3/30: CovCollExamples

Notebook: /home/runner/work/nSTAT-python/nSTAT-python/notebooks/helpfiles/CovCollExamples.ipynb

Run group: full

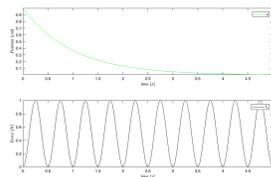
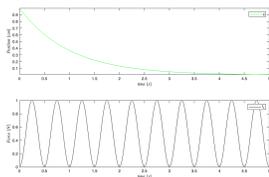
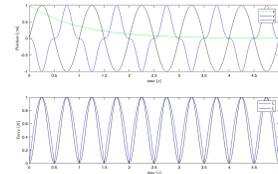
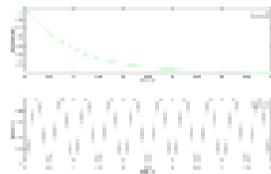
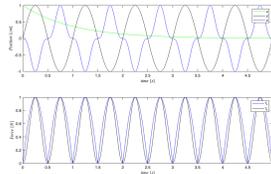
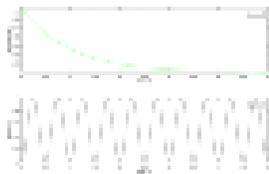
Execution: PASS | Parity: PASS | Similarity: - | Runtime: 2.36s

Equivalence status: validated

Python figs (total/unique/duplicate): 3/3/0 | MATLAB refs: 3

Python output gallery (unique figures)

MATLAB reference gallery



Python unique figures shown: 3 / 3

MATLAB refs shown: 3 / 3

Output snippet

Running notebook topic: CovCollExamples (family=signal) Example data directory:
 /home/runner/work/nSTAT-python/nSTAT-python/data_cache/nstat_data Loaded 10 MATLAB executable anchors
 for CovCollExamples.

Numeric drift metric detail (worst ratios)

- ctx_max_abs_error: value=0, threshold=1e-12, ratio=0.000, PASS
- design_max_abs_error: value=0, threshold=1e-12, ratio=0.000, PASS
- stim_max_abs_error: value=0, threshold=1e-12, ratio=0.000, PASS

MATLAB vs Python key metrics

Metric	Value
MATLAB code lines	10
Python code lines	118
Python/MATLAB line ratio	11.800
Python image instances	3
Python unique images	3
Python duplicate images	0
MATLAB reference images	3
Python validation images	1
Checkpoint assertions	3
Contains plotting logic	Yes
Has topic checkpoint	Yes
Numeric drift pass	Yes
Numeric metrics checked	3
Numeric metrics failed	0
Worst ratio to threshold	0.000
First failed numeric metric	-

Example 4/30: CovariateExamples

Notebook: /home/runner/work/nSTAT-python/nSTAT-python/notebooks/helpfiles/CovariateExamples.ipynb

Run group: smoke

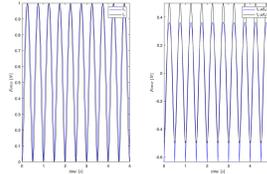
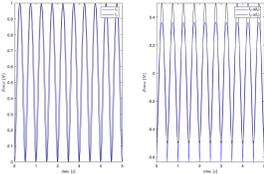
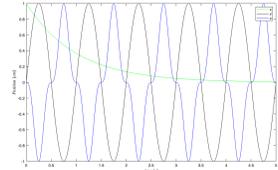
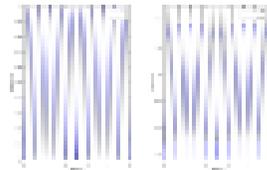
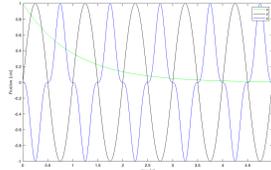
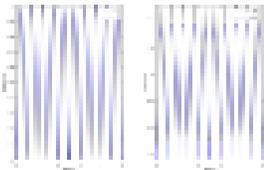
Execution: PASS | Parity: PASS | Similarity: - | Runtime: 2.49s

Equivalence status: validated

Python figs (total/unique/duplicate): 3/3/0 | MATLAB refs: 3

Python output gallery (unique figures)

MATLAB reference gallery



Python unique figures shown: 3 / 3

MATLAB refs shown: 3 / 3

Output snippet

Running notebook topic: CovariateExamples (family=signal) Example data directory: /home/runner/work/nSTAT-python/nSTAT-python/data_cache/nstat_data

Numeric drift metric detail (worst ratios)

- alignment_status_mismatch: value=0, threshold=0, ratio=0.000, PASS
- assertion_count_missing_error: value=0, threshold=0, ratio=0.000, PASS
- matlab_code_lines_abs_error: value=0, threshold=0, ratio=0.000, PASS

MATLAB vs Python key metrics: value=0, threshold=0, ratio=0.000, PASS

Metric	Value
MATLAB code lines	19
Python code lines	83
Python/MATLAB line ratio	4.368
Python image instances	3
Python unique images	3
Python duplicate images	0
MATLAB reference images	3
Python validation images	2
Checkpoint assertions	4
Contains plotting logic	Yes
Has topic checkpoint	Yes
Numeric drift pass	Yes
Numeric metrics checked	8
Numeric metrics failed	0
Worst ratio to threshold	0.000
First failed numeric metric	-

Example 5/30: DecodingExample

Notebook: /home/runner/work/nSTAT-python/nSTAT-python/notebooks/helpfiles/DecodingExample.ipynb

Run group: smoke

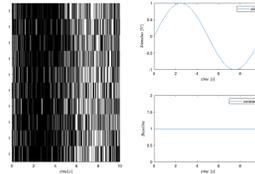
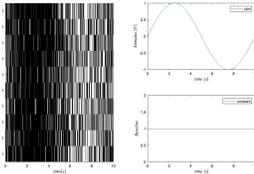
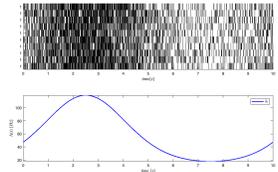
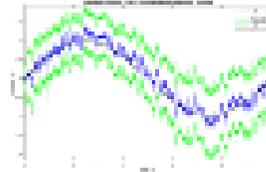
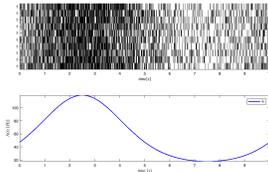
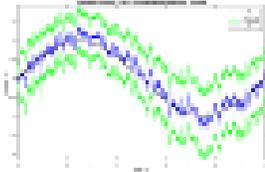
Execution: PASS | Parity: PASS | Similarity: - | Runtime: 2.97s

Equivalence status: validated

Python figs (total/unique/duplicate): 7/6/1 | MATLAB refs: 7

Python output gallery (unique figures)

MATLAB reference gallery



Python unique figures shown: 4 / 6

Duplicate Python figures collapsed for display: 1

MATLAB refs shown: 4 / 7

Output snippet

Running notebook topic: DecodingExample (family=decoding_1d) Example data directory: /home/runner/work/nSTAT-python/nSTAT-python/data_cache/nstat_data

Numeric drift metric detail (worst ratios)

- posterior_max_abs_error: value=2.253e-10, threshold=1e-08, ratio=0.023, PASS
- decoded_mismatch_count: value=0, threshold=0, ratio=0.000, PASS
- rmse_abs_error: value=0, threshold=1e-08, ratio=0.000, PASS

MATLAB vs Python key metrics

Metric	Value
MATLAB code lines	57
Python code lines	191
Python/MATLAB line ratio	3.351
Python image instances	7
Python unique images	6
Python duplicate images	1
MATLAB reference images	7
Python validation images	1
Checkpoint assertions	3
Contains plotting logic	Yes
Has topic checkpoint	Yes
Numeric drift pass	Yes
Numeric metrics checked	3
Numeric metrics failed	0
Worst ratio to threshold	0.023
First failed numeric metric	-

Example 6/30: DecodingExampleWithHist

Notebook: /home/runner/work/nSTAT-python/nSTAT-python/notebooks/helpfiles/DecodingExampleWithHist.ipynb

Run group: smoke

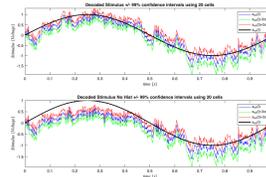
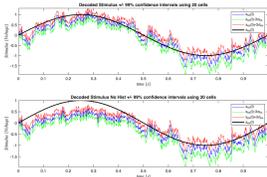
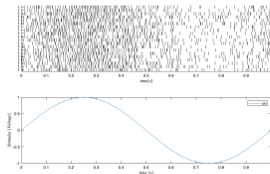
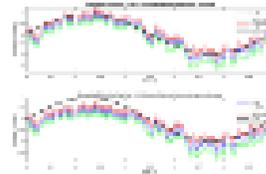
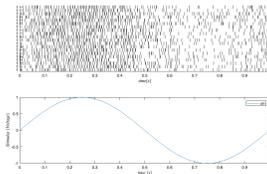
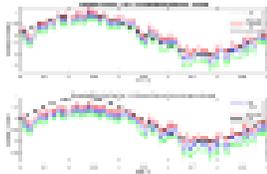
Execution: PASS | Parity: PASS | Similarity: - | Runtime: 3.43s

Equivalence status: validated

Python figs (total/unique/duplicate): 3/3/0 | MATLAB refs: 3

Python output gallery (unique figures)

MATLAB reference gallery



Python unique figures shown: 3 / 3

MATLAB refs shown: 3 / 3

Output snippet

Running notebook topic: DecodingExampleWithHist (family=decoding_1d) Example data directory: /home/runner/work/nSTAT-python/nSTAT-python/data_cache/nstat_data

Numeric drift metric detail (worst ratios)

- posterior_max_abs_error: value=4.167e-10, threshold=1e-08, ratio=0.042, PASS
- decoded_mismatch_count: value=0, threshold=0, ratio=0.000, PASS

MATLAB vs Python key metrics

Metric	Value
MATLAB code lines	55
Python code lines	143
Python/MATLAB line ratio	2.600
Python image instances	3
Python unique images	3
Python duplicate images	0
MATLAB reference images	3
Python validation images	1
Checkpoint assertions	3
Contains plotting logic	Yes
Has topic checkpoint	Yes
Numeric drift pass	Yes
Numeric metrics checked	2
Numeric metrics failed	0
Worst ratio to threshold	0.042
First failed numeric metric	-

Example 7/30: EventsExamples

Notebook: /home/runner/work/nSTAT-python/nSTAT-python/notebooks/helpfiles/EventsExamples.ipynb

Run group: full

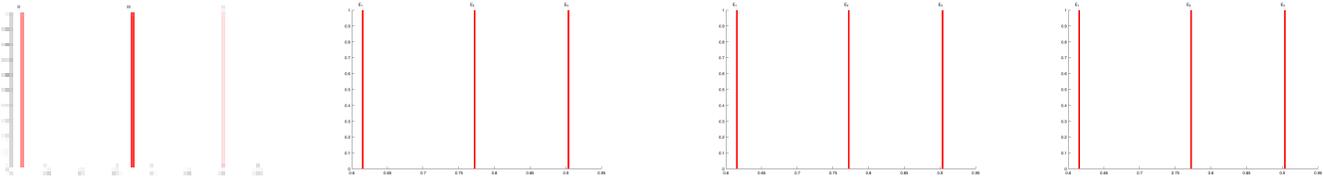
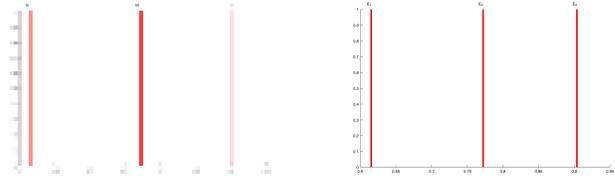
Execution: PASS | Parity: PASS | Similarity: - | Runtime: 2.25s

Equivalence status: validated

Python figs (total/unique/duplicate): 5/2/3 | MATLAB refs: 5

Python output gallery (unique figures)

MATLAB reference gallery



Python unique figures shown: 2 / 2

Duplicate Python figures collapsed for display: 3

MATLAB refs shown: 4 / 5

Output snippet

Running notebook topic: EventsExamples (family=signal) Example data directory:
/home/runner/work/nSTAT-python/nSTAT-python/data_cache/nstat_data

Numeric drift metric detail (worst ratios)

- subset_max_abs_error: value=0, threshold=1e-12, ratio=0.000, PASS

MATLAB vs Python key metrics

Metric	Value
MATLAB code lines	8
Python code lines	67
Python/MATLAB line ratio	8.375
Python image instances	5
Python unique images	2
Python duplicate images	3
MATLAB reference images	5
Python validation images	4
Checkpoint assertions	2
Contains plotting logic	Yes
Has topic checkpoint	Yes
Numeric drift pass	Yes
Numeric metrics checked	1
Numeric metrics failed	0
Worst ratio to threshold	0.000
First failed numeric metric	-

Example 8/30: ExplicitStimulusWhiskerData

Notebook: /home/runner/work/nSTAT-python/nSTAT-python/notebooks/helpfiles/ExplicitStimulusWhiskerData.ipynb

Run group: full

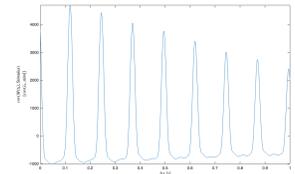
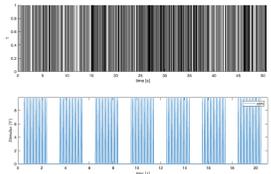
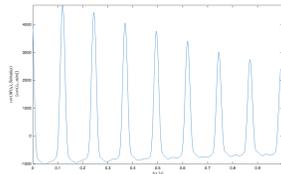
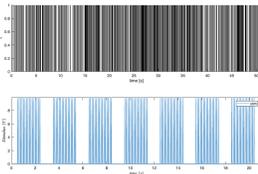
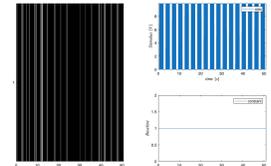
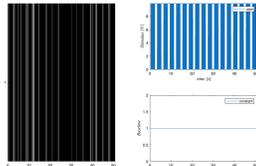
Execution: PASS | Parity: PASS | Similarity: - | Runtime: 2.65s

Equivalence status: validated

Python figs (total/unique/duplicate): 10/10/0 | MATLAB refs: 10

Python output gallery (unique figures)

MATLAB reference gallery



Python unique figures shown: 4 / 10

MATLAB refs shown: 4 / 10

Output snippet

Running notebook topic: ExplicitStimulusWhiskerData (family=data) Example data directory: /home/runner/work/nSTAT-python/nSTAT-python/data_cache/nstat_data

Numeric drift metric detail (worst ratios)

- intercept_abs_error: value=2.062e-10, threshold=0.2, ratio=0.000, PASS
- coeff_abs_error: value=1.448e-10, threshold=0.2, ratio=0.000, PASS
- prob_max_abs_error: value=2.374e-11, threshold=0.1, ratio=0.000, PASS

MATLAB vs Python key metrics

Metric	Value
MATLAB code lines	115
Python code lines	248
Python/MATLAB line ratio	2.157
Python image instances	10
Python unique images	10
Python duplicate images	0
MATLAB reference images	10
Python validation images	1
Checkpoint assertions	4
Contains plotting logic	Yes
Has topic checkpoint	Yes
Numeric drift pass	Yes
Numeric metrics checked	4
Numeric metrics failed	0
Worst ratio to threshold	0.000
First failed numeric metric	-

Example 9/30: FitResSummaryExamples

Notebook: /home/runner/work/nSTAT-python/nSTAT-python/notebooks/helpfiles/FitResSummaryExamples.ipynb

Run group: full

Execution: PASS | Parity: PASS | Similarity: - | Runtime: 2.23s

Equivalence status: matlab_doc_only

Python figs (total/unique/duplicate): 0/0/0 | MATLAB refs: 0

Python output gallery (unique figures)

No images available.

MATLAB reference gallery

No images available.

Python unique figures shown: 0 / 0

MATLAB refs shown: 0 / 0

Output snippet

Running notebook topic: FitResSummaryExamples (family=analysis) Example data directory: /home/runner/work/nSTAT-python/nSTAT-python/data_cache/nstat_data

Numeric drift metric detail (worst ratios)

- alignment_status_mismatch: value=0, threshold=0, ratio=0.000, PASS
- assertion_count_missing_error: value=0, threshold=0, ratio=0.000, PASS
- matlab_code_lines_abs_error: value=0, threshold=0, ratio=0.000, PASS

MATLAB vs Python key metrics: value=0, threshold=0, ratio=0.000, PASS

Metric	Value
MATLAB code lines	0
Python code lines	102
Python/MATLAB line ratio	-
Python image instances	0
Python unique images	0
Python duplicate images	0
MATLAB reference images	0
Python validation images	1
Checkpoint assertions	3
Contains plotting logic	Yes
Has topic checkpoint	Yes
Numeric drift pass	Yes
Numeric metrics checked	8
Numeric metrics failed	0
Worst ratio to threshold	0.000
First failed numeric metric	-

Example 10/30: FitResultExamples

Notebook: /home/runner/work/nSTAT-python/nSTAT-python/notebooks/helpfiles/FitResultExamples.ipynb

Run group: full

Execution: PASS | Parity: PASS | Similarity: - | Runtime: 2.25s

Equivalence status: matlab_doc_only

Python figs (total/unique/duplicate): 0/0/0 | MATLAB refs: 0

Python output gallery (unique figures)

No images available.

MATLAB reference gallery

No images available.

Python unique figures shown: 0 / 0

MATLAB refs shown: 0 / 0

Output snippet

Running notebook topic: FitResultExamples (family=analysis) Example data directory:
/home/runner/work/nSTAT-python/nSTAT-python/data_cache/nstat_data

Numeric drift metric detail (worst ratios)

- alignment_status_mismatch: value=0, threshold=0, ratio=0.000, PASS
- assertion_count_missing_error: value=0, threshold=0, ratio=0.000, PASS
- matlab_code_lines_abs_error: value=0, threshold=0, ratio=0.000, PASS

MATLAB vs Python key metrics: value=0, threshold=0, ratio=0.000, PASS

Metric	Value
MATLAB code lines	0
Python code lines	102
Python/MATLAB line ratio	-
Python image instances	0
Python unique images	0
Python duplicate images	0
MATLAB reference images	0
Python validation images	1
Checkpoint assertions	3
Contains plotting logic	Yes
Has topic checkpoint	Yes
Numeric drift pass	Yes
Numeric metrics checked	8
Numeric metrics failed	0
Worst ratio to threshold	0.000
First failed numeric metric	-

Example 11/30: HippocampalPlaceCellExample

Notebook: /home/runner/work/nSTAT-python/nSTAT-python/notebooks/helpfiles/HippocampalPlaceCellExample.ipynb

Run group: full

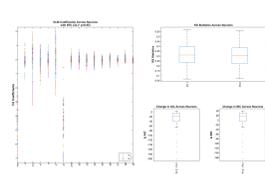
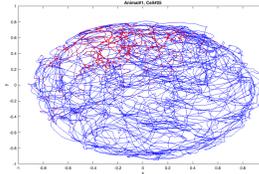
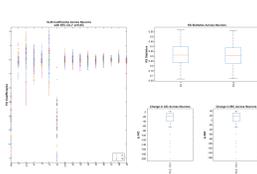
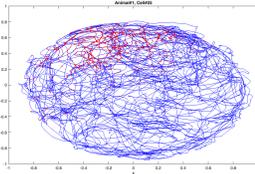
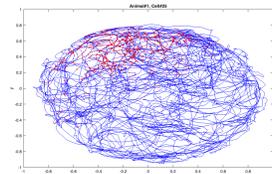
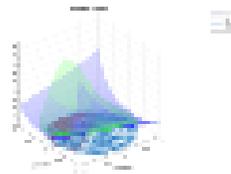
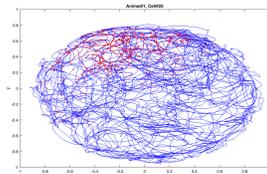
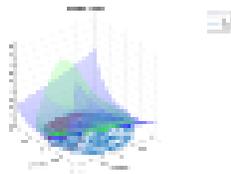
Execution: PASS | Parity: PASS | Similarity: - | Runtime: 3.43s

Equivalence status: validated

Python figs (total/unique/duplicate): 12/10/2 | MATLAB refs: 12

Python output gallery (unique figures)

MATLAB reference gallery



Python unique figures shown: 4 / 10

Duplicate Python figures collapsed for display: 2

MATLAB refs shown: 4 / 12

Output snippet

Running notebook topic: HippocampalPlaceCellExample (family=decoding_2d) Example data directory: /home/runner/work/nSTAT-python/nSTAT-python/data_cache/nstat_data

Numeric drift metric detail (worst ratios)

- weighted_center_max_abs_error: value=1.421e-14, threshold=1e-08, ratio=0.000, PASS

MATLAB vs Python key metrics

Metric	Value
MATLAB code lines	155
Python code lines	521
Python/MATLAB line ratio	3.361
Python image instances	12
Python unique images	10
Python duplicate images	2
MATLAB reference images	12
Python validation images	1
Checkpoint assertions	5
Contains plotting logic	Yes
Has topic checkpoint	Yes
Numeric drift pass	Yes
Numeric metrics checked	1
Numeric metrics failed	0
Worst ratio to threshold	0.000
First failed numeric metric	-

Example 12/30: HistoryExamples

Notebook: /home/runner/work/nSTAT-python/nSTAT-python/notebooks/helpfiles/HistoryExamples.ipynb

Run group: full

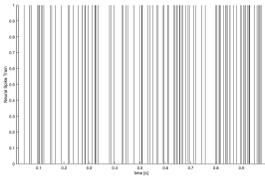
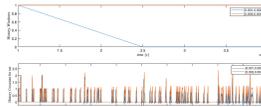
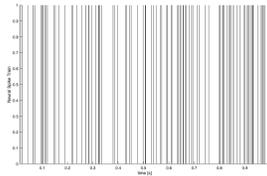
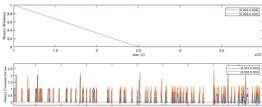
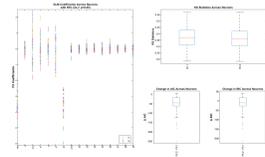
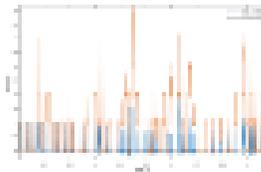
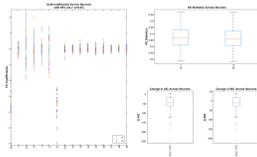
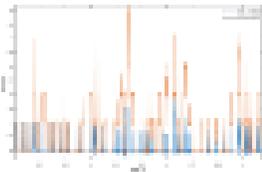
Execution: PASS | Parity: PASS | Similarity: - | Runtime: 2.42s

Equivalence status: validated

Python figs (total/unique/duplicate): 5/5/0 | MATLAB refs: 5

Python output gallery (unique figures)

MATLAB reference gallery



Python unique figures shown: 4 / 5

MATLAB refs shown: 4 / 5

Output snippet

Running notebook topic: HistoryExamples (family=signal) Example data directory:
/home/runner/work/nSTAT-python/nSTAT-python/data_cache/nstat_data

Numeric drift metric detail (worst ratios)

- history_bins_abs_error: value=0, threshold=0, ratio=0.000, PASS
- history_filter_max_abs_error: value=0, threshold=0, ratio=0.000, PASS
- history_matrix_max_abs_error: value=0, threshold=0, ratio=0.000, PASS

MATLAB vs Python key metrics

Metric	Value
MATLAB code lines	18
Python code lines	101
Python/MATLAB line ratio	5.611
Python image instances	5
Python unique images	5
Python duplicate images	0
MATLAB reference images	5
Python validation images	1
Checkpoint assertions	5
Contains plotting logic	Yes
Has topic checkpoint	Yes
Numeric drift pass	Yes
Numeric metrics checked	3
Numeric metrics failed	0
Worst ratio to threshold	0.000
First failed numeric metric	-

Example 13/30: NetworkTutorial

Notebook: /home/runner/work/nSTAT-python/nSTAT-python/notebooks/helpfiles/NetworkTutorial.ipynb

Run group: full

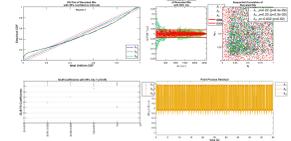
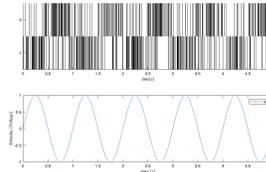
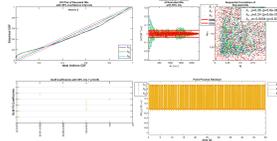
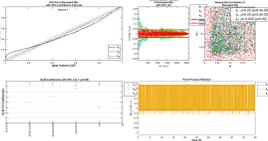
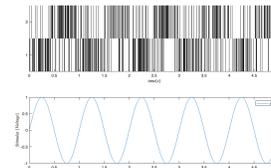
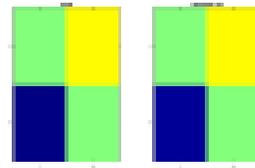
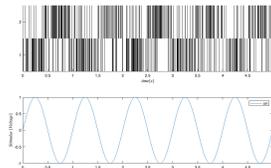
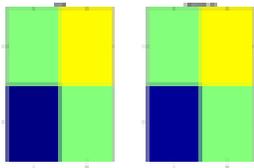
Execution: PASS | Parity: PASS | Similarity: - | Runtime: 2.75s

Equivalence status: validated

Python figs (total/unique/duplicate): 8/7/1 | MATLAB refs: 8

Python output gallery (unique figures)

MATLAB reference gallery



Python unique figures shown: 4 / 7

Duplicate Python figures collapsed for display: 1

MATLAB refs shown: 4 / 8

Output snippet

Running notebook topic: NetworkTutorial (family=network) Example data directory:
/home/runner/work/nSTAT-python/nSTAT-python/data_cache/nstat_data

Numeric drift metric detail (worst ratios)

- xc_max_abs_error: value=5.031e-16, threshold=1e-12, ratio=0.001, PASS
- rates_max_abs_error: value=0, threshold=1e-12, ratio=0.000, PASS
- shape_mismatch_count: value=0, threshold=0, ratio=0.000, PASS

MATLAB vs Python key metrics

Metric	Value
MATLAB code lines	88
Python code lines	243
Python/MATLAB line ratio	2.761
Python image instances	8
Python unique images	7
Python duplicate images	1
MATLAB reference images	8
Python validation images	5
Checkpoint assertions	9
Contains plotting logic	Yes
Has topic checkpoint	Yes
Numeric drift pass	Yes
Numeric metrics checked	3
Numeric metrics failed	0
Worst ratio to threshold	0.001
First failed numeric metric	-

Example 14/30: PPSimExample

Notebook: /home/runner/work/nSTAT-python/nSTAT-python/notebooks/helpfiles/PPSimExample.ipynb

Run group: smoke

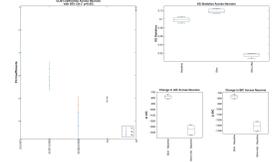
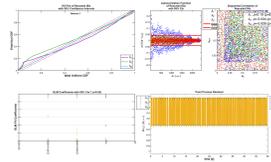
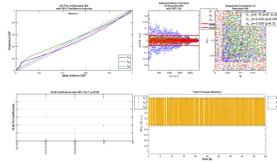
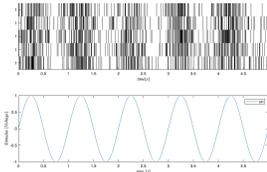
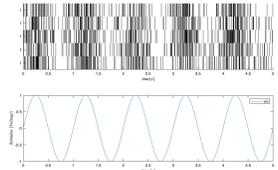
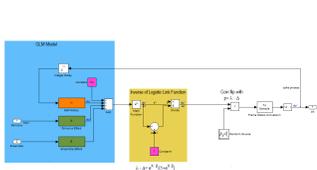
Execution: PASS | Parity: PASS | Similarity: - | Runtime: 2.56s

Equivalence status: validated

Python figs (total/unique/duplicate): 6/6/0 | MATLAB refs: 6

Python output gallery (unique figures)

MATLAB reference gallery



Python unique figures shown: 4 / 6

MATLAB refs shown: 4 / 6

Output snippet

Running notebook topic: PPSimExample (family=network) Example data directory: /home/runner/work/nSTAT-python/nSTAT-python/data_cache/nstat_data

Numeric drift metric detail (worst ratios)

- mean_relative_rate_error: value=5.523e-07, threshold=0.25, ratio=0.000, PASS

MATLAB vs Python key metrics

Metric	Value
MATLAB code lines	41
Python code lines	176
Python/MATLAB line ratio	4.293
Python image instances	6
Python unique images	6
Python duplicate images	0
MATLAB reference images	6
Python validation images	3
Checkpoint assertions	2
Contains plotting logic	Yes
Has topic checkpoint	Yes
Numeric drift pass	Yes
Numeric metrics checked	1
Numeric metrics failed	0
Worst ratio to threshold	0.000
First failed numeric metric	-

Example 15/30: PPTThinning

Notebook: /home/runner/work/nSTAT-python/nSTAT-python/notebooks/helpfiles/PPTThinning.ipynb

Run group: full

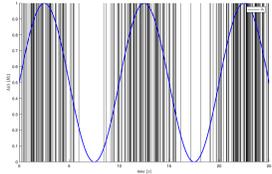
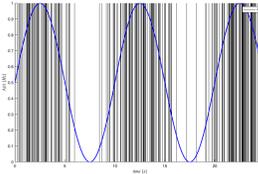
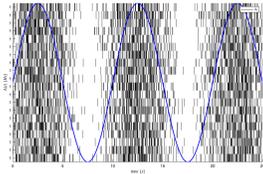
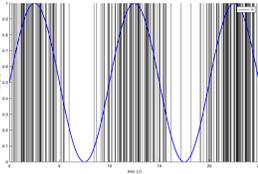
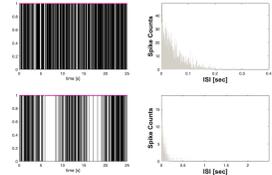
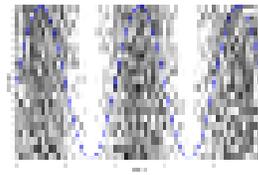
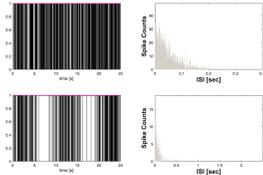
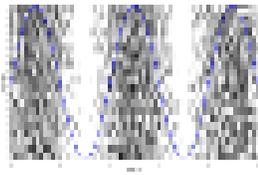
Execution: PASS | Parity: PASS | Similarity: - | Runtime: 2.38s

Equivalence status: validated

Python figs (total/unique/duplicate): 5/4/1 | MATLAB refs: 5

Python output gallery (unique figures)

MATLAB reference gallery



Python unique figures shown: 4 / 4

Duplicate Python figures collapsed for display: 1

MATLAB refs shown: 4 / 5

Output snippet

Running notebook topic: PPTThinning (family=network) Example data directory: /home/runner/work/nSTAT-python/nSTAT-python/data_cache/nstat_data

Numeric drift metric detail (worst ratios)

- accept_ratio_abs_error: value=0, threshold=0, ratio=0.000, PASS
- accepted_count_mismatch: value=0, threshold=0, ratio=0.000, PASS
- accepted_spike_max_abs_error: value=0, threshold=0, ratio=0.000, PASS

MATLAB vs Python key metrics

Metric	Value
MATLAB code lines	40
Python code lines	124
Python/MATLAB line ratio	3.100
Python image instances	5
Python unique images	4
Python duplicate images	1
MATLAB reference images	5
Python validation images	4
Checkpoint assertions	5
Contains plotting logic	Yes
Has topic checkpoint	Yes
Numeric drift pass	Yes
Numeric metrics checked	3
Numeric metrics failed	0
Worst ratio to threshold	0.000
First failed numeric metric	-

Example 16/30: PSTHEstimation

Notebook: /home/runner/work/nSTAT-python/nSTAT-python/notebooks/helpfiles/PSTHEstimation.ipynb

Run group: full

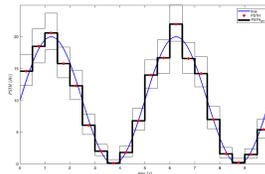
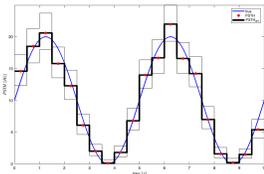
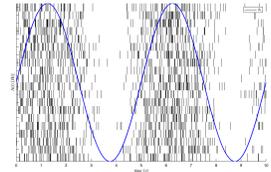
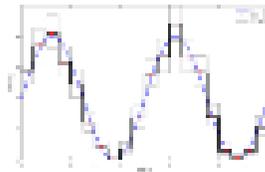
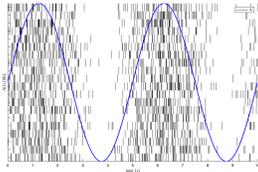
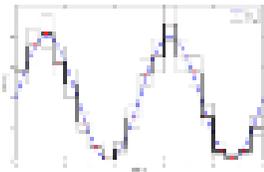
Execution: PASS | Parity: PASS | Similarity: - | Runtime: 2.49s

Equivalence status: validated

Python figs (total/unique/duplicate): 3/3/0 | MATLAB refs: 3

Python output gallery (unique figures)

MATLAB reference gallery



Python unique figures shown: 3 / 3

MATLAB refs shown: 3 / 3

Output snippet

Running notebook topic: PSTHEstimation (family=data) Example data directory: /home/runner/work/nSTAT-python/nSTAT-python/data_cache/nstat_data

Numeric drift metric detail (worst ratios)

- prob_max_abs_error: value=2.22e-16, threshold=1e-10, ratio=0.000, PASS
- rate_max_abs_error: value=0, threshold=1e-10, ratio=0.000, PASS
- sig_mismatch_count: value=0, threshold=0, ratio=0.000, PASS

MATLAB vs Python key metrics

Metric	Value
MATLAB code lines	28
Python code lines	110
Python/MATLAB line ratio	3.929
Python image instances	3
Python unique images	3
Python duplicate images	0
MATLAB reference images	3
Python validation images	1
Checkpoint assertions	3
Contains plotting logic	Yes
Has topic checkpoint	Yes
Numeric drift pass	Yes
Numeric metrics checked	3
Numeric metrics failed	0
Worst ratio to threshold	0.000
First failed numeric metric	-

Example 17/30: SignalObjExamples

Notebook: /home/runner/work/nSTAT-python/nSTAT-python/notebooks/helpfiles/SignalObjExamples.ipynb

Run group: smoke

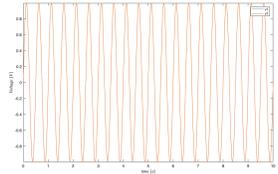
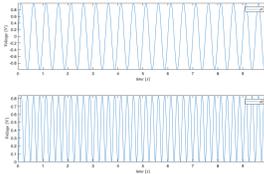
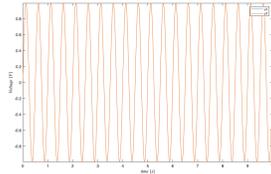
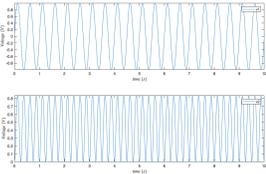
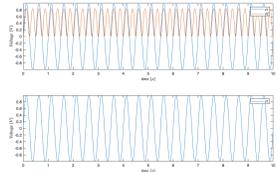
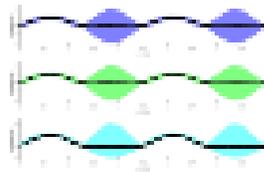
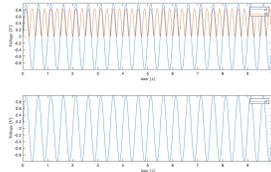
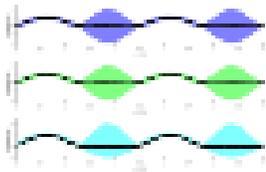
Execution: PASS | Parity: PASS | Similarity: - | Runtime: 2.76s

Equivalence status: validated

Python figs (total/unique/duplicate): 21/18/3 | MATLAB refs: 21

Python output gallery (unique figures)

MATLAB reference gallery



Python unique figures shown: 4 / 18

Duplicate Python figures collapsed for display: 3

MATLAB refs shown: 4 / 21

Output snippet

Running notebook topic: SignalObjExamples (family=signal) Example data directory:
/home/runner/work/nSTAT-python/nSTAT-python/data_cache/nstat_data

Numeric drift metric detail (worst ratios)

- masked_cols_abs_error: value=0, threshold=0, ratio=0.000, PASS
- periodogram_peak_idx_abs_error: value=0, threshold=0, ratio=0.000, PASS
- resampled_count_abs_error: value=0, threshold=0, ratio=0.000, PASS
- MATLAB vs Python key metrics: value=0, threshold=0, ratio=0.000, PASS

Metric	Value
MATLAB code lines	81
Python code lines	313
Python/MATLAB line ratio	3.864
Python image instances	21
Python unique images	18
Python duplicate images	3
MATLAB reference images	21
Python validation images	6
Checkpoint assertions	10
Contains plotting logic	Yes
Has topic checkpoint	Yes
Numeric drift pass	Yes
Numeric metrics checked	4
Numeric metrics failed	0
Worst ratio to threshold	0.000
First failed numeric metric	-

Example 18/30: StimulusDecode2D

Notebook: /home/runner/work/nSTAT-python/nSTAT-python/notebooks/helpfiles/StimulusDecode2D.ipynb

Run group: full

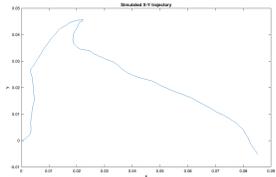
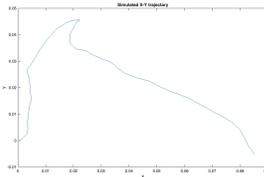
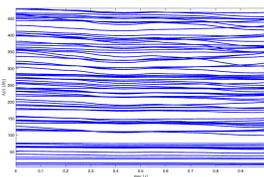
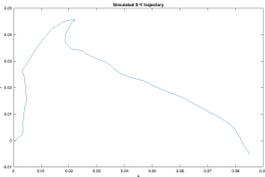
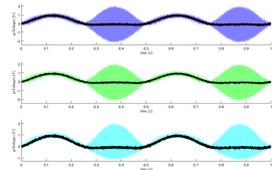
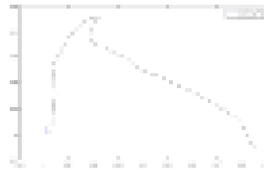
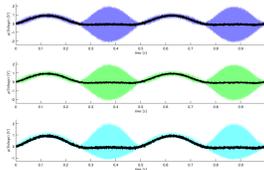
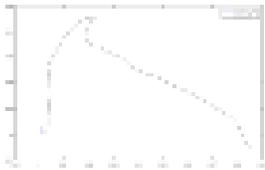
Execution: PASS | Parity: PASS | Similarity: - | Runtime: 2.48s

Equivalence status: validated

Python figs (total/unique/duplicate): 7/6/1 | MATLAB refs: 7

Python output gallery (unique figures)

MATLAB reference gallery



Python unique figures shown: 4 / 6

Duplicate Python figures collapsed for display: 1

MATLAB refs shown: 4 / 7

Output snippet

Running notebook topic: StimulusDecode2D (family=decoding_2d) Example data directory: /home/runner/work/nSTAT-python/nSTAT-python/data_cache/nstat_data

Numeric drift metric detail (worst ratios)

- decoded_center_max_abs_error: value=8.527e-14, threshold=1e-08, ratio=0.000, PASS
- decoded_mismatch_count: value=0, threshold=0, ratio=0.000, PASS
- rmse_abs_error: value=0, threshold=1e-10, ratio=0.000, PASS

MATLAB vs Python key metrics

Metric	Value
MATLAB code lines	92
Python code lines	178
Python/MATLAB line ratio	1.935
Python image instances	7
Python unique images	6
Python duplicate images	1
MATLAB reference images	7
Python validation images	1
Checkpoint assertions	2
Contains plotting logic	Yes
Has topic checkpoint	Yes
Numeric drift pass	Yes
Numeric metrics checked	3
Numeric metrics failed	0
Worst ratio to threshold	0.000
First failed numeric metric	-

Example 19/30: TrialConfigExamples

Notebook: /home/runner/work/nSTAT-python/nSTAT-python/notebooks/helpfiles/TrialConfigExamples.ipynb

Run group: full

Execution: PASS | Parity: PASS | Similarity: - | Runtime: 2.15s

Equivalence status: validated

Python figs (total/unique/duplicate): 0/0/0 | MATLAB refs: 0

Python output gallery (unique figures)

No images available.

MATLAB reference gallery

No images available.

Python unique figures shown: 0 / 0

MATLAB refs shown: 0 / 0

Output snippet

Running notebook topic: TrialConfigExamples (family=signal) Example data directory:
/home/runner/work/nSTAT-python/nSTAT-python/data_cache/nstat_data Loaded 3 MATLAB executable anchors
for TrialConfigExamples.

Numeric drift metric detail (worst ratios)

- alignment_status_mismatch: value=0, threshold=0, ratio=0.000, PASS
- assertion_count_missing_error: value=0, threshold=0, ratio=0.000, PASS
- matlab_code_lines_abs_error: value=0, threshold=0, ratio=0.000, PASS

MATLAB vs Python key metrics: value=0, threshold=0, ratio=0.000, PASS

Metric	Value
MATLAB code lines	3
Python code lines	79
Python/MATLAB line ratio	26.333
Python image instances	0
Python unique images	0
Python duplicate images	0
MATLAB reference images	0
Python validation images	1
Checkpoint assertions	4
Contains plotting logic	Yes
Has topic checkpoint	Yes
Numeric drift pass	Yes
Numeric metrics checked	8
Numeric metrics failed	0
Worst ratio to threshold	0.000
First failed numeric metric	-

Example 20/30: TrialExamples

Notebook: /home/runner/work/nSTAT-python/nSTAT-python/notebooks/helpfiles/TrialExamples.ipynb

Run group: smoke

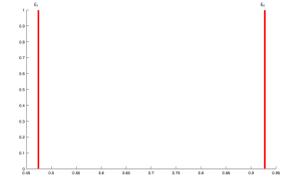
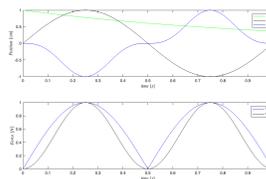
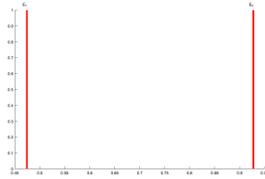
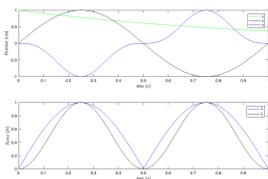
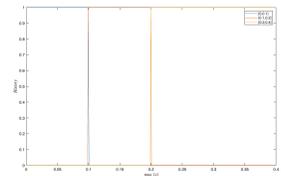
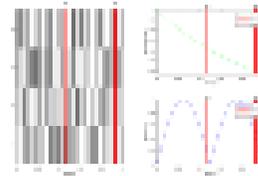
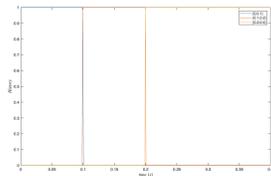
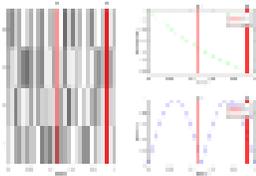
Execution: PASS | Parity: PASS | Similarity: - | Runtime: 2.74s

Equivalence status: validated

Python figs (total/unique/duplicate): 7/7/0 | MATLAB refs: 7

Python output gallery (unique figures)

MATLAB reference gallery



Python unique figures shown: 4 / 7

MATLAB refs shown: 4 / 7

Output snippet

Running notebook topic: TrialExamples (family=signal) Example data directory: /home/runner/work/nSTAT-python/nSTAT-python/data_cache/nstat_data

Numeric drift metric detail (worst ratios)

- t_bins_max_abs_error: value=1.11e-16, threshold=1e-12, ratio=0.000, PASS
- X_max_abs_error: value=0, threshold=1e-12, ratio=0.000, PASS
- y_max_abs_error: value=0, threshold=1e-12, ratio=0.000, PASS

MATLAB vs Python key metrics

Metric	Value
MATLAB code lines	25
Python code lines	133
Python/MATLAB line ratio	5.320
Python image instances	7
Python unique images	7
Python duplicate images	0
MATLAB reference images	7
Python validation images	1
Checkpoint assertions	5
Contains plotting logic	Yes
Has topic checkpoint	Yes
Numeric drift pass	Yes
Numeric metrics checked	3
Numeric metrics failed	0
Worst ratio to threshold	0.000
First failed numeric metric	-

Example 21/30: ValidationDataSet

Notebook: /home/runner/work/nSTAT-python/nSTAT-python/notebooks/helpfiles/ValidationDataSet.ipynb

Run group: full

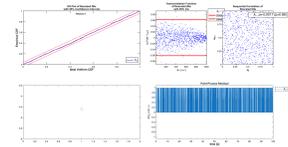
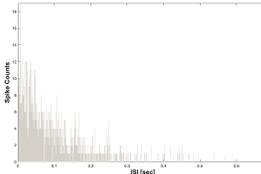
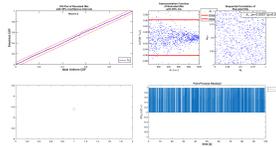
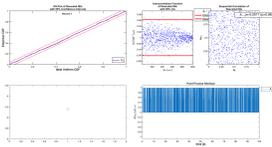
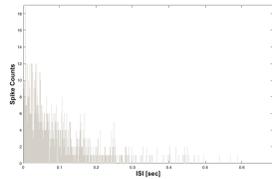
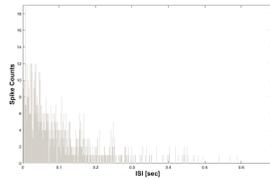
Execution: PASS | Parity: PASS | Similarity: - | Runtime: 2.71s

Equivalence status: validated

Python figs (total/unique/duplicate): 13/11/2 | MATLAB refs: 13

Python output gallery (unique figures)

MATLAB reference gallery



Python unique figures shown: 4 / 11

MATLAB refs shown: 4 / 13

Duplicate Python figures collapsed for display: 2

Output snippet

Running notebook topic: ValidationDataSet (family=data) Example data directory:
/home/runner/work/nSTAT-python/nSTAT-python/data_cache/nstat_data

Numeric drift metric detail (worst ratios)

- prob_max_abs_error: value=2.22e-16, threshold=1e-10, ratio=0.000, PASS
- rate_max_abs_error: value=0, threshold=1e-10, ratio=0.000, PASS
- sig_mismatch_count: value=0, threshold=0, ratio=0.000, PASS

MATLAB vs Python key metrics

Metric	Value
MATLAB code lines	77
Python code lines	221
Python/MATLAB line ratio	2.870
Python image instances	13
Python unique images	11
Python duplicate images	2
MATLAB reference images	13
Python validation images	1
Checkpoint assertions	2
Contains plotting logic	Yes
Has topic checkpoint	Yes
Numeric drift pass	Yes
Numeric metrics checked	3
Numeric metrics failed	0
Worst ratio to threshold	0.000
First failed numeric metric	-

Example 22/30: mEPSCAnalysis

Notebook: /home/runner/work/nSTAT-python/nSTAT-python/notebooks/helpfiles/mEPSCAnalysis.ipynb

Run group: full

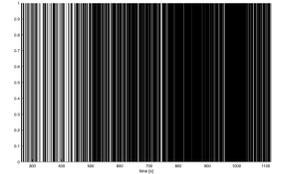
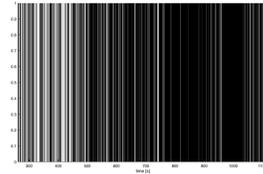
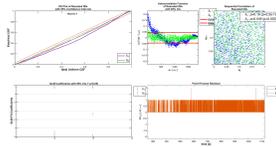
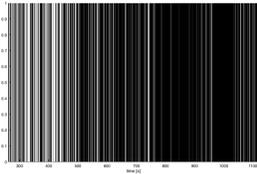
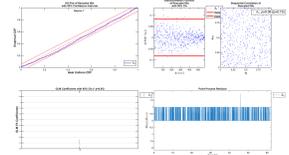
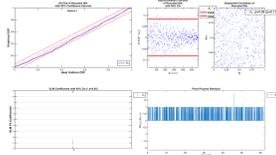
Execution: PASS | Parity: PASS | Similarity: - | Runtime: 2.57s

Equivalence status: validated

Python figs (total/unique/duplicate): 6/5/1 | MATLAB refs: 6

Python output gallery (unique figures)

MATLAB reference gallery



Python unique figures shown: 4 / 5

Duplicate Python figures collapsed for display: 1

MATLAB refs shown: 4 / 6

Output snippet

Running notebook topic: mEPSCAnalysis (family=data) Example data directory: /home/runner/work/nSTAT-python/nSTAT-python/data_cache/nstat_data

Numeric drift metric detail (worst ratios)

- mean_amp_abs_error: value=5.551e-17, threshold=1e-09, ratio=0.000, PASS
- detected_amp_max_abs_error: value=0, threshold=1e-09, ratio=0.000, PASS
- detected_time_max_abs_error: value=0, threshold=0.001, ratio=0.000, PASS

MATLAB vs Python key metrics

Metric	Value
MATLAB code lines	48
Python code lines	177
Python/MATLAB line ratio	3.688
Python image instances	6
Python unique images	5
Python duplicate images	1
MATLAB reference images	6
Python validation images	1
Checkpoint assertions	3
Contains plotting logic	Yes
Has topic checkpoint	Yes
Numeric drift pass	Yes
Numeric metrics checked	4
Numeric metrics failed	0
Worst ratio to threshold	0.000
First failed numeric metric	-

Example 23/30: nSTATPaperExamples

Notebook: /home/runner/work/nSTAT-python/nSTAT-python/notebooks/helpfiles/nSTATPaperExamples.ipynb

Run group: smoke

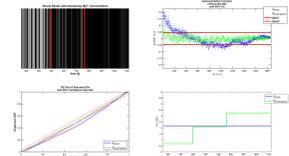
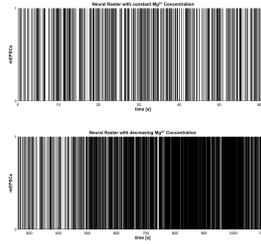
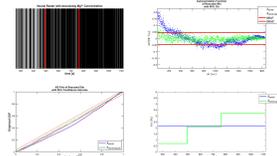
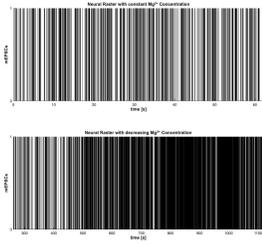
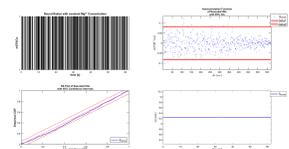
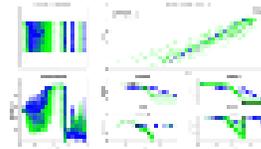
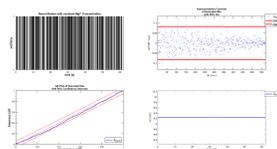
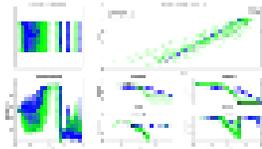
Execution: PASS | Parity: PASS | Similarity: - | Runtime: 6.26s

Equivalence status: validated

Python figs (total/unique/duplicate): 26/26/0 | MATLAB refs: 26

Python output gallery (unique figures)

MATLAB reference gallery



Python unique figures shown: 4 / 26

MATLAB refs shown: 4 / 26

Output snippet

Running notebook topic: nSTATPaperExamples (family=decoding_1d) Example data directory: /home/runner/work/nSTAT-python/nSTAT-python/data_cache/nstat_data

Numeric drift metric detail (worst ratios)

- alignment_status_mismatch: value=0, threshold=0, ratio=0.000, PASS
- assertion_count_missing_error: value=0, threshold=0, ratio=0.000, PASS
- matlab_code_lines_abs_error: value=0, threshold=0, ratio=0.000, PASS
- MATLAB vs Python key metrics: value=0, threshold=0, ratio=0.000, PASS

Metric	Value
MATLAB code lines	1576
Python code lines	2073
Python/MATLAB line ratio	1.315
Python image instances	26
Python unique images	26
Python duplicate images	0
MATLAB reference images	26
Python validation images	1
Checkpoint assertions	15
Contains plotting logic	Yes
Has topic checkpoint	Yes
Numeric drift pass	Yes
Numeric metrics checked	8
Numeric metrics failed	0
Worst ratio to threshold	0.000
First failed numeric metric	-

Example 24/30: nSpikeTrainExamples

Notebook: /home/runner/work/nSTAT-python/nSTAT-python/notebooks/helpfiles/nSpikeTrainExamples.ipynb

Run group: smoke

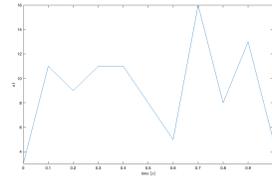
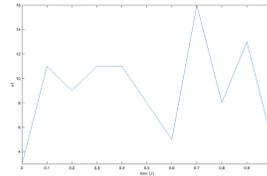
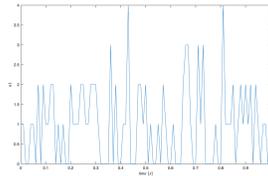
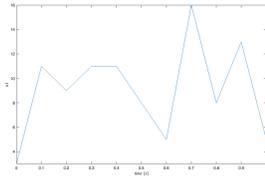
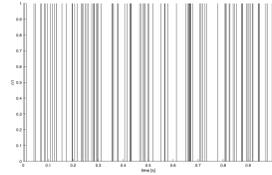
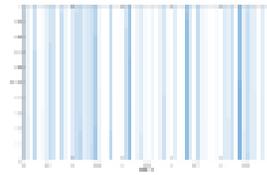
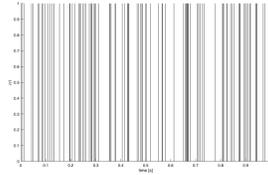
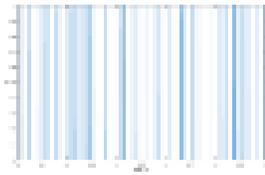
Execution: PASS | Parity: PASS | Similarity: - | Runtime: 2.39s

Equivalence status: validated

Python figs (total/unique/duplicate): 6/5/1 | MATLAB refs: 6

Python output gallery (unique figures)

MATLAB reference gallery



Python unique figures shown: 4 / 5

Duplicate Python figures collapsed for display: 1

MATLAB refs shown: 4 / 6

Output snippet

Running notebook topic: nSpikeTrainExamples (family=signal) Example data directory:
/home/runner/work/nSTAT-python/nSTAT-python/data_cache/nstat_data

Numeric drift metric detail (worst ratios)

- alignment_status_mismatch: value=0, threshold=0, ratio=0.000, PASS
- assertion_count_missing_error: value=0, threshold=0, ratio=0.000, PASS
- matlab_code_lines_abs_error: value=0, threshold=0, ratio=0.000, PASS

MATLAB vs Python key metrics (all metrics passed): value=0, threshold=0, ratio=0.000, PASS

Metric	Value
MATLAB code lines	10
Python code lines	86
Python/MATLAB line ratio	8.600
Python image instances	6
Python unique images	5
Python duplicate images	1
MATLAB reference images	6
Python validation images	1
Checkpoint assertions	4
Contains plotting logic	Yes
Has topic checkpoint	Yes
Numeric drift pass	Yes
Numeric metrics checked	8
Numeric metrics failed	0
Worst ratio to threshold	0.000
First failed numeric metric	-

Example 25/30: nstCollExamples

Notebook: /home/runner/work/nSTAT-python/nSTAT-python/notebooks/helpfiles/nstCollExamples.ipynb

Run group: full

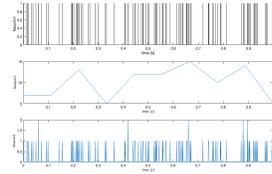
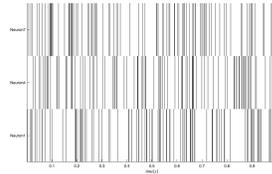
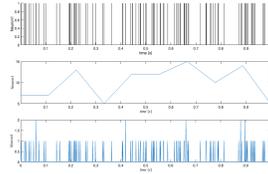
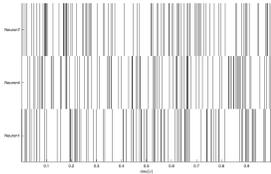
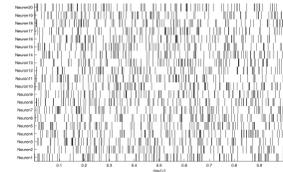
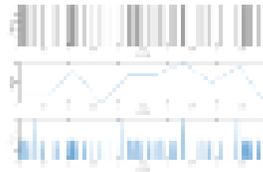
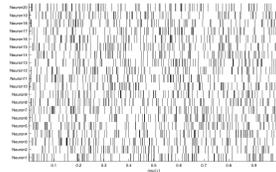
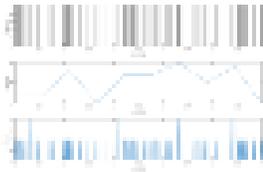
Execution: PASS | Parity: PASS | Similarity: - | Runtime: 2.34s

Equivalence status: validated

Python figs (total/unique/duplicate): 4/4/0 | MATLAB refs: 4

Python output gallery (unique figures)

MATLAB reference gallery



Python unique figures shown: 4 / 4

MATLAB refs shown: 4 / 4

Output snippet

Running notebook topic: nstCollExamples (family=signal) Example data directory:
/home/runner/work/nSTAT-python/nSTAT-python/data_cache/nstat_data

Numeric drift metric detail (worst ratios)

- center_max_abs_error: value=2.22e-16, threshold=1e-12, ratio=0.000, PASS
- binary_mismatch_count: value=0, threshold=0, ratio=0.000, PASS
- count_matrix_max_abs_error: value=0, threshold=1e-12, ratio=0.000, PASS

MATLAB vs Python: key metrics

Metric	Value
MATLAB code lines	16
Python code lines	89
Python/MATLAB line ratio	5.562
Python image instances	4
Python unique images	4
Python duplicate images	0
MATLAB reference images	4
Python validation images	1
Checkpoint assertions	4
Contains plotting logic	Yes
Has topic checkpoint	Yes
Numeric drift pass	Yes
Numeric metrics checked	4
Numeric metrics failed	0
Worst ratio to threshold	0.000
First failed numeric metric	-

Example 26/30: AnalysisExamples2

Notebook: /home/runner/work/nSTAT-python/nSTAT-python/notebooks/helpfiles/AnalysisExamples2.ipynb

Run group: full

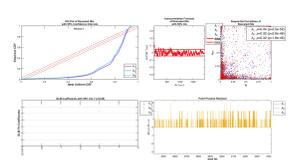
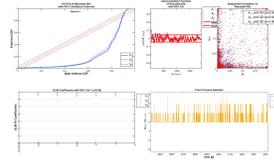
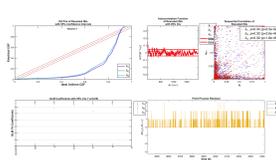
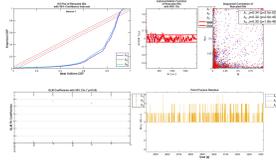
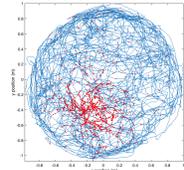
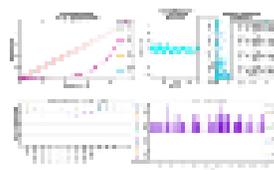
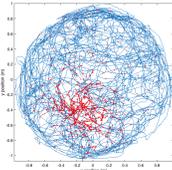
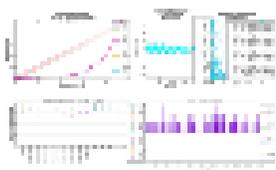
Execution: PASS | Parity: PASS | Similarity: - | Runtime: 2.78s

Equivalence status: validated

Python figs (total/unique/duplicate): 6/6/0 | MATLAB refs: 6

Python output gallery (unique figures)

MATLAB reference gallery



Python unique figures shown: 4 / 6

MATLAB refs shown: 4 / 6

Output snippet

Running notebook topic: AnalysisExamples2 (family=analysis) Example data directory: /home/runner/work/nSTAT-python/nSTAT-python/data_cache/nstat_data

Numeric drift metric detail (worst ratios)

- alignment_status_mismatch: value=0, threshold=0, ratio=0.000, PASS
- assertion_count_missing_error: value=0, threshold=0, ratio=0.000, PASS
- matlab_code_lines_abs_error: value=0, threshold=0, ratio=0.000, PASS

MATLAB vs Python key metrics: value=0, threshold=0, ratio=0.000, PASS

Metric	Value
MATLAB code lines	61
Python code lines	187
Python/MATLAB line ratio	3.066
Python image instances	6
Python unique images	6
Python duplicate images	0
MATLAB reference images	6
Python validation images	1
Checkpoint assertions	2
Contains plotting logic	Yes
Has topic checkpoint	Yes
Numeric drift pass	Yes
Numeric metrics checked	8
Numeric metrics failed	0
Worst ratio to threshold	0.000
First failed numeric metric	-

Example 27/30: DocumentationSetup2025b

Notebook: /home/runner/work/nSTAT-python/nSTAT-python/notebooks/helpfiles/DocumentationSetup2025b.ipynb

Run group: full

Execution: PASS | Parity: PASS | Similarity: - | Runtime: 2.26s

Equivalence status: matlab_doc_only

Python figs (total/unique/duplicate): 0/0/0 | MATLAB refs: 0

Python output gallery (unique figures)

No images available.

MATLAB reference gallery

No images available.

Python unique figures shown: 0 / 0

MATLAB refs shown: 0 / 0

Output snippet

Running notebook topic: DocumentationSetup2025b (family=data) Example data directory:
/home/runner/work/nSTAT-python/nSTAT-python/data_cache/nstat_data

Numeric drift metric detail (worst ratios)

- alignment_status_mismatch: value=0, threshold=0, ratio=0.000, PASS
- assertion_count_missing_error: value=0, threshold=0, ratio=0.000, PASS
- matlab_code_lines_abs_error: value=0, threshold=0, ratio=0.000, PASS

MATLAB vs Python key metrics: value=0, threshold=0, ratio=0.000, PASS

Metric	Value
MATLAB code lines	0
Python code lines	71
Python/MATLAB line ratio	-
Python image instances	0
Python unique images	0
Python duplicate images	0
MATLAB reference images	0
Python validation images	1
Checkpoint assertions	3
Contains plotting logic	Yes
Has topic checkpoint	Yes
Numeric drift pass	Yes
Numeric metrics checked	8
Numeric metrics failed	0
Worst ratio to threshold	0.000
First failed numeric metric	-

Example 28/30: FitResultReference

Notebook: /home/runner/work/nSTAT-python/nSTAT-python/notebooks/helpfiles/FitResultReference.ipynb

Run group: full

Execution: PASS | Parity: PASS | Similarity: - | Runtime: 2.32s

Equivalence status: matlab_doc_only

Python figs (total/unique/duplicate): 0/0/0 | MATLAB refs: 0

Python output gallery (unique figures)

No images available.

MATLAB reference gallery

No images available.

Python unique figures shown: 0 / 0

MATLAB refs shown: 0 / 0

Output snippet

Running notebook topic: FitResultReference (family=analysis) Example data directory:
/home/runner/work/nSTAT-python/nSTAT-python/data_cache/nstat_data

Numeric drift metric detail (worst ratios)

- alignment_status_mismatch: value=0, threshold=0, ratio=0.000, PASS
- assertion_count_missing_error: value=0, threshold=0, ratio=0.000, PASS
- matlab_code_lines_abs_error: value=0, threshold=0, ratio=0.000, PASS

MATLAB vs Python key metrics: value=0, threshold=0, ratio=0.000, PASS

Metric	Value
MATLAB code lines	0
Python code lines	94
Python/MATLAB line ratio	-
Python image instances	0
Python unique images	0
Python duplicate images	0
MATLAB reference images	0
Python validation images	1
Checkpoint assertions	3
Contains plotting logic	Yes
Has topic checkpoint	Yes
Numeric drift pass	Yes
Numeric metrics checked	8
Numeric metrics failed	0
Worst ratio to threshold	0.000
First failed numeric metric	-

Example 29/30: HybridFilterExample

Notebook: /home/runner/work/nSTAT-python/nSTAT-python/notebooks/helpfiles/HybridFilterExample.ipynb

Run group: full

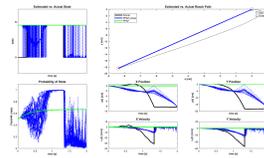
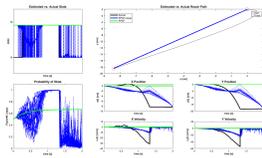
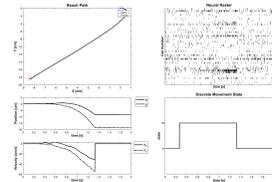
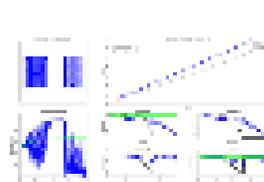
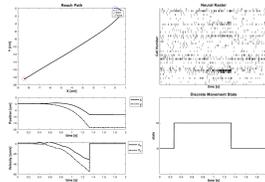
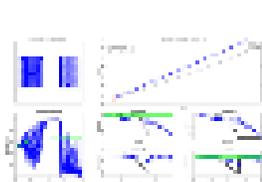
Execution: PASS | Parity: PASS | Similarity: - | Runtime: 3.20s

Equivalence status: validated

Python figs (total/unique/duplicate): 3/3/0 | MATLAB refs: 3

Python output gallery (unique figures)

MATLAB reference gallery



Python unique figures shown: 3 / 3

MATLAB refs shown: 3 / 3

Output snippet

Running notebook topic: HybridFilterExample (family=network) Example data directory: /home/runner/work/nSTAT-python/nSTAT-python/data_cache/nstat_data

Numeric drift metric detail (worst ratios)

- rmse_notransition_abs_error: value=6.939e-18, threshold=1e-10, ratio=0.000, PASS
- rmse_abs_error: value=0, threshold=1e-10, ratio=0.000, PASS
- state_length_mismatch: value=0, threshold=0, ratio=0.000, PASS

MATLAB vs Python key metrics

Metric	Value
MATLAB code lines	288
Python code lines	413
Python/MATLAB line ratio	1.434
Python image instances	3
Python unique images	3
Python duplicate images	0
MATLAB reference images	3
Python validation images	2
Checkpoint assertions	5
Contains plotting logic	Yes
Has topic checkpoint	Yes
Numeric drift pass	Yes
Numeric metrics checked	3
Numeric metrics failed	0
Worst ratio to threshold	0.000
First failed numeric metric	-

Example 30/30: publish_all_helpfiles

Notebook: /home/runner/work/nSTAT-python/nSTAT-python/notebooks/helpfiles/publish_all_helpfiles.ipynb

Run group: full

Execution: PASS | Parity: PASS | Similarity: - | Runtime: 2.49s

Equivalence status: validated

Python figs (total/unique/duplicate): 0/0/0 | MATLAB refs: 0

Python output gallery (unique figures)

No images available.

MATLAB reference gallery

No images available.

Python unique figures shown: 0 / 0

MATLAB refs shown: 0 / 0

Output snippet

Running notebook topic: publish_all_helpfiles (family=data) Example data directory: /home/runner/work/nSTAT-python/nSTAT-python/data_cache/nstat_data Loaded 64 MATLAB executable anchors for publish_all_helpfiles. Generated help pages, TOC, and mapping artifacts.

Numeric drift metric detail (worst ratios)

- alignment_status_mismatch: value=0, threshold=0, ratio=0.000, PASS
- assertion_count_missing_error: value=0, threshold=0, ratio=0.000, PASS
- matlab_code_lines_abs_error: value=0, threshold=0, ratio=0.000, PASS
- matlab_vs_python_key_metrics: value=0, threshold=0, ratio=0.000, PASS

Metric	Value
MATLAB code lines	126
Python code lines	292
Python/MATLAB line ratio	2.317
Python image instances	0
Python unique images	0
Python duplicate images	0
MATLAB reference images	0
Python validation images	1
Checkpoint assertions	14
Contains plotting logic	Yes
Has topic checkpoint	Yes
Numeric drift pass	Yes
Numeric metrics checked	8
Numeric metrics failed	0
Worst ratio to threshold	0.000
First failed numeric metric	-