

Sealed Experiment Record

Sealed 2026-10-12 · Signed by the K-Veritas server
Session 9581c869 · Data hash d614...926e

Abstract

This record seals 1 run (echo 'KVERITAS_METRIC name=phi value=0.508411 step=0'; echo 'KVERITAS_METRIC name=phi_bam value=0.531762 step=0'; echo 'KVERITAS_METRIC name=phi_bmq value=0.71156 step=0'; echo 'KVERITAS_METRIC name=phi_boz value=0.395144 step=0'; echo 'KVERITAS_METRIC name=phi_dtm value=0.560063 step=0'; echo 'KVERITAS_METRIC name=phi_ful value=0.536991 step=0'; echo 'KVERITAS_METRIC name=phi_mey value=0.314502 step=0'; echo 'KVERITAS_METRIC name=phi_mku value=0.448062 step=0'; echo 'KVERITAS_METRIC name=phi_kao value=0.877949 step=0'; echo 'KVERITAS_METRIC name=phi_myk value=0.309261 step=0'; echo 'KVERITAS_METRIC name=phi_ses value=0.380018 step=0'; echo 'KVERITAS_METRIC name=phi_spp value=0.378648 step=0'; echo 'KVERITAS_METRIC name=phi_snk value=0.46078 step=0'; echo 'KVERITAS_METRIC name=phi_taq value=0.704609 step=0') executed on Intel(R) Xeon(R) CPU @ 2.20GHz between 2026-10-12 19:05 and 19:05 UTC. Reported results: phi 0.508411, phi_bam 0.531762, phi_bmq 0.71156, phi_boz 0.395144. 1 invocation in total, 0 failed. Produced with K-Veritas [1].

What this record proves

These numbers came from the sealed code at this time, unchanged since. Whether the experiment is sound is for the reader to judge.

Verify: kveritas verify <this file> or kveritas.org/verify

1 Setup

Item	Value
Session	9581c869-9fad-405b-8406-8f1d83df1a4f
Initialized	2026-10-12T13:24:27Z
Machine	debd2e227b0a68ef
Operating system	linux / amd64
CPU	Intel(R) Xeon(R) CPU @ 2.20GHz, 8 cores
Memory	31.3 GB
GPU	NVIDIA L4, 23034 MiB
Environment, run 1	83fee8e8e2fa635d1d6d7af919d4309658cd91d218119f339503f588cad729dc
Disclosure	open
Source code, run 1	0369f9ffe6c86937d21f26c5e10f3a3251e6503242892712f004541680d8cf76

2 Runs

#	Command	Duration	Exit	Anchored
1	sh -c echo 'KVERITAS_METRIC name=phi value=...	0.9 seconds	0	at run end

1 invocation in total: 1 kept in this record, 0 failed, 0 interrupted. Every invocation is recorded by the server, including the ones not kept.

3 Results

Run 1: echo 'KVERITAS_METRIC name=phi value=0.508411 step=0'; echo 'KVERITAS_METRIC name=phi_bam value=0.531762 step=0';

Metric	Final value	Step	Source
phi	0.508411	0	explicit
phi_bam	0.531762	0	explicit
phi_bmq	0.71156	0	explicit
phi_boz	0.395144	0	explicit
phi_dtm	0.560063	0	explicit
phi_ful	0.536991	0	explicit
phi_mey	0.314502	0	explicit
phi_mku	0.448062	0	explicit
phi_kao	0.877949	0	explicit
phi_myk	0.309261	0	explicit
phi_ses	0.380018	0	explicit
phi_spp	0.378648	0	explicit
phi_snk	0.46078	0	explicit
phi_taq	0.704609	0	explicit

4 Execution evidence

Coherence

Not enough telemetry to judge. This says nothing against the run; the seal and anchors still hold.

Telemetry

Run	Samples	CPU time	Peak memory	Peak GPU
1	5	0.0 s	0.00 GB	0%

5 Provenance

Run 1: echo 'KVERITAS_METRIC name=phi value=0.508411 step=0'; echo 'KVERITAS_METRIC name=phi_bam value=0.531762 step=0';

Disclosure open. 28 tracked files, 2 snapshots. Every snapshot is bound into the signature.

#	Snapshot	Time	Root	Changed
0	run_start	19:05:54	206ac96b0dc3c675	28
1	run_end	19:05:54	206ac96b0dc3c675	0

Activity: 28 files read, 0 files written, 0 subprocesses. Full list in Appendix B.

6 Verification

Field	Value
Signer	Signed by the K-Veritas server
Signed at	2026-10-12T19:06:00.434146+00:00
Algorithm	RSA-PSS-SHA256, 4096-bit key
Key fingerprint	eeac81653cf44ac029c4069cf2a06d9f
Data hash	d614230166a544a2dca4b6f2b2116bfebe4d4d3c4cad21012e2d029627c5926e
Code bundle hash	120837266c2eb4685c5f92c7b86225d66025a9a9ffd19ae834ec6daad9f487f1

Run anchors: 1 invocations were anchored at the server when they ended.

Checks a verifier runs

1. The stored canonical data hashes to the data hash above, and the signature verifies over data_hash:nonce:signed_at.
2. The signing key is the K-Veritas server key, not one supplied by the author.
3. Nothing was appended after the seal, and these pages hash to the value bound in the seal.
4. Each run matches the digest the server received when it ended.
5. A supplied code bundle hashes to the code bundle hash above.

References

[1] M. K. Keita and C. Homan. Computer Science Conferences Should Require Nonrepudiable Experimental Results. NeurIPS 2026 Position Paper Track. arXiv:2605.08586.

Appendix

A Full metric series

Run 1: echo 'KVERITAS_METRIC name=phi value=0.508411 step=0'; echo 'KVERITAS_METRIC name=phi_bam value=0.531

Metric	Value	Step	Line	Source
phi	0.508411	0	1	explicit
phi_bam	0.531762	0	2	explicit
phi_bmq	0.71156	0	3	explicit
phi_boz	0.395144	0	4	explicit
phi_dtm	0.560063	0	5	explicit
phi_ful	0.536991	0	6	explicit
phi_mey	0.314502	0	7	explicit
phi_mku	0.448062	0	8	explicit
phi_kao	0.877949	0	9	explicit
phi_myk	0.309261	0	10	explicit
phi_ses	0.380018	0	11	explicit
phi_spp	0.378648	0	12	explicit
phi_snk	0.46078	0	13	explicit
phi_taq	0.704609	0	14	explicit

B Provenance timeline and activity map

Run 1: echo 'KVERITAS_METRIC name=phi value=0.508411 step=0'; echo 'KVERITAS_METRIC name=phi_bam value=0.531

#	Snapshot	Time	Root	Changed
0	run_start	19:05:54	206ac96b0dc3c675	28
1	run_end	19:05:54	206ac96b0dc3c675	0

Event	Path or command	Hash
read	config.yaml	
read	data/resources/bam/ hashes.json	
read	data/resources/bmq/ hashes.json	
read	data/resources/boz/ hashes.json	
read	data/resources/dtm/ hashes.json	
read	data/resources/frozen.json	
read	data/resources/ful/ hashes.json	
read	data/resources/kao/ hashes.json	
read	data/resources/mey/ hashes.json	
read	data/resources/mku/ hashes.json	
read	data/resources/myk/ hashes.json	
read	data/resources/ses/ hashes.json	
read	data/resources/snk/ hashes.json	
read	data/resources/spp/ hashes.json	
read	data/resources/taq/ hashes.json	
read	exp/eval.json	
read	exp/manifest.json	
read	kveritas_report.pdf.provkey.json	
read	models/adapter_config.json	
read	models/checkpoint-50/adapter_config.json	

Event	Path or command	Hash
read	models/checkpoint-50/ref/adapter_config.json	
read	models/checkpoint-50/tokenizer.json	
read	models/checkpoint-50/tokenizer_config.json	
read	models/checkpoint-50/trainer_state.json	
read	models/ref/adapter_config.json	
read	models/safety_snapshot.json	
read	models/tokenizer.json	
read	models/tokenizer_config.json	

C Run history

Invocation 1, OK, 0.9 seconds, 14 output lines, started 2026-10-12T19:05:54

metric_hash 8cae8dff6ec24981fe9a2d05859076306d0b5be2d2d6fcf6cfe38b571549c493
run_digest 277907e7a795bb0067e090e334591f8851600eedee6e392f1e98634d40002868
anchored at run end

D Raw seal fields and hashes

Seal

data_hash d614230166a544a2dca4b6f2b2116bfebe4d4d3c4cad21012e2d029627c5926e
signed_message_hash f44f03a386744c67f2357b9370579ce69f5a915b930b7fd6bc54bd15f69838b0
nonce 20cf7c7b753fe18a698146cecd46ac5d
signed_at 2026-10-12T19:06:00.434146+00:00
sealed_at 2026-10-12T19:06:00.480225569Z
checkout_bundle 120837266c2eb4685c5f92c7b86225d66025a9a9ffd19ae834ec6daad9f487f1

Signature (base64)

fktHoZAC0FV/SV+cHEHU9m/JReUmpJv9Fg1aLSMYtU01Ke6BZbhp842khPWIlwK0ntSAASYa2ABgi2l7BHqX3Qw
KAPig1C6HjLFpV0R8bLDJBwAPX94eFYSwGqVbuGC4psDi0xJdf9E2vVzrOFRwDVdP32I3qnFYTYvYQJ5dKQ0K6kn
vvkUs1aN1JHR+BxpNWzhvyC4k4GPhf4UaiYaoQRnDuyIuj02sTZa9Vmv gum3S4M10Pk9e0oD07dLg4YxI5nSQ6mK
DP8F5bxM9lTtPy43hzaLCWh1GPiV6Vr8rmzo/J/ViEvQhDj l66guRASuEVeAxpzmKu33xCrQ0I7S0k07r+oR6ru
op0HW0g0R302vQIjH0tbvjvGPGjW11a4ssYtx06Q7fSPQrPP0S95ps5UHx2uVvk8iXqSpSZ7JP9jv7VRWhscEGKY
2eduDg4D8l0u/qP2UnkGCCosnu08DLYu8uVwurVtC4g2Hc6oBS+PUEKFEK5VxhBM52XgutwqYVEqCD+BgbWE7QPf
fQUDiX1W0fftIaM1VD2KC0iSEBysBfqBH9oGFC50EEwfqkbUFHFRm/wbvRYCPvt7KpnL6Sg9JCTeFMXe5XQ9cxXh
BSKdMjByaIipjLBrpYSwBZNmHCTJ+Ko7s/wvR9l0gcFJUR58GXeej34GajMiIkM7PmE=

Public key

-----BEGIN PUBLIC KEY-----
MIICIjANBgkqhkiG9w0BAQEFAAOCAg8AMIICCgKCAgEA1QL3YyMgeShx8IhTC7jb
sM0w2BnRXgsBn3+SMXKjtwHATqdekmlPlcjayJxD5fcProPPCqp/LouFz5CUZzRi
6+8FTv70dHuIz5A4Lat4vcgwP+iWscPc3HzpmjpsKbTmOemqgp6RB6GNNpxYa5X
7qU95EfEisX/GfoS9ToXtqPBwCcVWSPBX8efec4TC58m96Fsp4mC8KICeadbIbHN
av0JjdTJ//CM0WZSIbdzE6qvEbNFCqDB5tNU7oHfYvBenLrvPU9TAqdbtozdHQ+D
AhfTRuJNgWEkjdW5lb0Vhi4qlkweSOEMTKT3ye9Il5xEaJn4bku4eKqeS7VSZt3o
XbUcmr2H5mKcKSvt6bXmX6ajAmgi900Cm9QJlaQkJM6z2iITnyvDMgueJtFxQpC9
HNBPgPZ242NH8JgE6CNF7ToL9syasS67u7UMgIcNgeNHNcy9bLgPU5annzP9gN2l
6HEMldkXNdKQRb1rDwyEJf3N/50YHnXXPmuf5sb8R/pxWNqt f04R5UGVV92qd2Mi
1GN7lE3mbQRbPsLL/JAPDXMNzNikaFfBSQK7iKxr7vIaTeZckFZwfThcYNT7Hasg
+eE4bf/olCHBCf1VIDCkDxohehdZ0WRRcgM9iK3I/0zZdaBsgdc8WuJRMb8LPP9v
8Jap/1PWjNcNku5cdw3gHLcCAwEAAQ==
-----END PUBLIC KEY-----

Run 1 outputs

```
stdout 8cae8dff6ec24981fe9a2d05859076306d0b5be2d2d6fcf6cfe38b571549c493
stderr e3b0c44298fc1c149afb4c8996fb92427ae41e4649b934ca495991b7852b855
metrics 8cae8dff6ec24981fe9a2d05859076306d0b5be2d2d6fcf6cfe38b571549c493
digest 277907e7a795bb0067e090e334591f8851600eedee6e392f1e98634d40002868
```

E BibTeX for [1]

```
@misc{keita2026computerscienceconferencesrequire,
  title={Computer Science Conferences Should Require Nonrepudiable Experimental Results},
  author={Mamadou K. Keita and Christopher Homan},
  year={2026},
  eprint={2605.08586},
  archivePrefix={arXiv},
  primaryClass={cs.CR},
  url={https://arxiv.org/abs/2605.08586},
}
```