

Sealed Experiment Record

Sealed 2026-10-11 · Signed by the K-Veritas server
Session 3373ae31 · Data hash f631...ddc0

Abstract

This record seals 1 run (echo 'KVERITAS_METRIC name=phi value=0.804974 step=0'; echo 'KVERITAS_METRIC name=phi_bam value=0.823658 step=0'; echo 'KVERITAS_METRIC name=phi_bmq value=0.695688 step=0'; echo 'KVERITAS_METRIC name=phi_boz value=0.892011 step=0'; echo 'KVERITAS_METRIC name=phi_dtm value=0.758926 step=0'; echo 'KVERITAS_METRIC name=phi_ful value=0.974206 step=0'; echo 'KVERITAS_METRIC name=phi_mey value=0.768726 step=0'; echo 'KVERITAS_METRIC name=phi_mku value=0.884478 step=0'; echo 'KVERITAS_METRIC name=phi_kao value=0.970238 step=0'; echo 'KVERITAS_METRIC name=phi_myk value=0.763677 step=0'; echo 'KVERITAS_METRIC name=phi_ses value=0.806021 step=0'; echo 'KVERITAS_METRIC name=phi_spp value=0.496919 step=0'; echo 'KVERITAS_METRIC name=phi_snk value=0.781673 step=0'; echo 'KVERITAS_METRIC name=phi_taq value=0.84844 step=0') executed on Intel(R) Xeon(R) CPU @ 2.20GHz between 2026-10-11 04:28 and 04:28 UTC. Reported results: phi 0.804974, phi_bam 0.823658, phi_bmq 0.695688, phi_boz 0.892011. 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	3373ae31-9c77-4ac2-8f7d-e3abb5cbf179
Initialized	2026-10-11T03:27:29Z
Machine	937dd175be8ad753
Operating system	linux / amd64
CPU	Intel(R) Xeon(R) CPU @ 2.20GHz, 4 cores
Memory	15.6 GB
GPU	NVIDIA L4, 23034 MiB
Environment, run 1	0c9945f0305d308945205d531d68a5dd1d41bc5e4f0050eb550fda377611bd0d
Disclosure	open
Source code, run 1	387f17c7b88ebda0cda60559e2300e4233e9ae7a522175cd8dfe4447a9cd3ddb

2 Runs

#	Command	Duration	Exit	Anchored
1	sh -c echo 'KVERITAS_METRIC name=phi value=...	0.5 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=0.804974 step=0'; echo 'KVERITAS_METRIC name=phi_bam value=0.823

Metric	Final value	Step	Source
phi	0.804974	0	explicit
phi_bam	0.823658	0	explicit
phi_bmq	0.695688	0	explicit
phi_boz	0.892011	0	explicit
phi_dtm	0.758926	0	explicit
phi_ful	0.974206	0	explicit
phi_mey	0.768726	0	explicit
phi_mku	0.884478	0	explicit
phi_kao	0.970238	0	explicit
phi_myk	0.763677	0	explicit
phi_ses	0.806021	0	explicit
phi_spp	0.496919	0	explicit
phi_snk	0.781673	0	explicit
phi_taq	0.84844	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	3	0.0 s	0.00 GB	0%

5 Provenance

Run 1: echo 'KVERITAS_METRIC name=phi value=0.804974 step=0'; echo 'KVERITAS_METRIC name=phi_bam value=0.823

Disclosure open. 32 tracked files, 2 snapshots. Every snapshot is bound into the signature.

#	Snapshot	Time	Root	Changed
0	run_start	04:28:45	06b2b24dd7064d58	32
1	run_end	04:28:45	06b2b24dd7064d58	0

Activity: 32 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	2026-10-11T04:28:46.321549+00:00
Algorithm	RSA-PSS-SHA256, 4096-bit key
Key fingerprint	eeac81653cf44ac029c4069cf2a06d9f
Data hash	f63156e409a6b4efd4eb75204f6278276d8184d53e244f0bcfd4dfb4136bddc0
Code bundle hash	2ce9e21b046b05de06eb9ca9c5251b38045a1cac188df4a5a7120b9c504c3d16

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=0.804974 step=0'; echo 'KVERITAS_METRIC name=phi_bam value=0.823

Metric	Value	Step	Line	Source
phi	0.804974	0	1	explicit
phi_bam	0.823658	0	2	explicit
phi_bmq	0.695688	0	3	explicit
phi_boz	0.892011	0	4	explicit
phi_dtm	0.758926	0	5	explicit
phi_ful	0.974206	0	6	explicit
phi_mey	0.768726	0	7	explicit
phi_mku	0.884478	0	8	explicit
phi_kao	0.970238	0	9	explicit
phi_myk	0.763677	0	10	explicit
phi_ses	0.806021	0	11	explicit
phi_spp	0.496919	0	12	explicit
phi_snk	0.781673	0	13	explicit
phi_taq	0.84844	0	14	explicit

B Provenance timeline and activity map

Run 1: echo 'KVERITAS_METRIC name=phi value=0.804974 step=0'; echo 'KVERITAS_METRIC name=phi_bam value=0.823

#	Snapshot	Time	Root	Changed
0	run_start	04:28:45	06b2b24dd7064d58	32
1	run_end	04:28:45	06b2b24dd7064d58	0

Event	Path or command	Hash
read	config.yaml	
read	data/resources/bam/ashes.json	
read	data/resources/bmq/ashes.json	
read	data/resources/boz/ashes.json	
read	data/resources/dtm/ashes.json	
read	data/resources/frozen.json	
read	data/resources/ful/ashes.json	
read	data/resources/kao/ashes.json	
read	data/resources/mey/ashes.json	
read	data/resources/mku/ashes.json	
read	data/resources/myk/ashes.json	
read	data/resources/ses/ashes.json	
read	data/resources/snk/ashes.json	
read	data/resources/spp/ashes.json	
read	data/resources/taq/ashes.json	
read	exp/eval.json	
read	exp/manifest.json	
read	models/adapter_config.json	
read	models/checkpoint-100/adapter_config.json	
read	models/checkpoint-100/ref/adapter_config.json	

Event	Path or command	Hash
read	models/checkpoint-100/tokenizer.json	
read	models/checkpoint-100/tokenizer_config.json	
read	models/checkpoint-100/trainer_state.json	
read	models/checkpoint-50/adapter_config.json	
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, 0.5 seconds, 14 output lines, started 2026-10-11T04:28:44

```
metric_hash 68c1d6075af4042f7f17eaf1c76880d8d58142aa2f0f2a2c1aa909223b73e351
run_digest  f2f436cddd77c5141d56c5cb3c357079bdc793b49611eb857c634981dcc0d9e8
anchored    at run end
```

D Raw seal fields and hashes

Seal

```
data_hash          63156e409a6b4efd4eb75204f6278276d8184d53e244f0bcfd4dfb4136bddc0
signed_message_hash 5806cd5536a784cb2b446bb80f6317c32bc0cd7582d2c0ac57836aec4a578a2f
nonce             ed8bf9b5006354631036952602876020
signed_at         2026-10-11T04:28:46.321549+00:00
sealed_at         2026-10-11T04:28:46.352331677Z
checkout_bundle   2ce9e21b046b05de06eb9ca9c5251b38045a1cac188df4a5a7120b9c504c3d16
```

Signature (base64)

```
mt6qd0BBxEhJeRQiY/yiQt0naJ30/CSGrLi0+RLx/2Gw1lp3SpqoIwwhN2aUtrsd97D7RDthYAywwBCxwYLDUfbT
rjYtj0BS0NHTQBs1ejbAhrPBLivVlHqVFrXPPQJmUQhnEavWb8CSuWgeBs29WgBKvEr82ueLyxiNigVR1jc0zUWU
Wp2Z4ceASOkbgJK2c1EgWRwxnxj060nVzwTELKU7GjWIhJRLIuAufschDc9Kpi/6zCuYr7wZjhb94jmJ0bdIaEzA
XOU/E1PY2teK3W03xFcFvPXU7Hl5q2EGozYqw/togIJ2BShlFrVdVeNER5L4sgYr/qEz1wL0A75FQlyzjZG1nnZh
ro0CcIgtY8l0eVQJRZYT/kY/GYtTukaJKnBDEAD7Cz6I1hPnl6j1cS99wM0BumINGycKoDqR4ykqh4n850dT7yyS
RMBWvk4Ypu8izdNXVcycyFvSvHp2M+0dPMDFoJkvZG3jMLjQ74sahg/p0A+SGe48MLoDqKFY0BTvczNjdQUWHqIZ
0Ut0Fc5VbyE50YTmhAisQJSluL4HW3Yr+mvil08ECwpfGY/ydKiPCq9F62fh0JJmpcjA1f6s+4tLV7SSp+lBh9Ic
7TU0mZlhZ/upsKpE0qG0oyH7KAXq89G5E0VsgDm8/ihts8LjGvohmu7fSOK0Iff0tco=
```

Public key

```
-----BEGIN PUBLIC KEY-----
MIICIjANBgkqhkiG9w0BAQEFAAOCAg8AMIICCgKCAgEA1QL3YyMgeShx8IhTC7jb
sM0w2BnRXgsBn3+SMXktwHATqdekmlPlcjayJxD5fcPrOPPCqp/LoUFz5CUZzRi
6+8FTv70dHuIz5A4LAT4vcgwP+iWscPc3HzpmjpsKbTm0emqgp6RB6GNNPpxYa5X
7qU95EfEisX/GfoS9ToxtqPBwCcVwSPBX8efec4TC58m96Fsp4mC8KIcEadbIbHN
av0JjdTJ//CM0WZSIbdzE6qvEbNfcqDB5tNU7oHfYvBeNlrvPU9TAqdbtozdHQ+D
AhfTRuJNgWekjwD5lb0Vhi4qlkweSOEMTKT3ye9I1LxEaJn4bku4eKqes7VSZt3o
XbUcmr2H5mKcKsvt6bXmX6ajAmgi900Cm9QJlaQkJM6z2iITnyvDMgueJtFxQpC9
HNBPgPZ242NH8JgE6CNF7ToL9syas67u7UMgIcNgeNHncy9bLgPU5annzP9gN2l
6HEmlkXNdKQRb1rDwyEJf3N/50YHnXXPmuf5sb8R/pxWNqtF04R5UGVV92qd2Mi
1GN7lE3mbQRbPsLL/JApDXMNzNikaFbSgK7iKxr7vIaTeZckFZWfThcYNT7Hasg
+eE4bf/olCHBCf1VIDckDxohehdZ0WRRcgM9iK3I/0zZdaBsgdc8WuJRmb8LPP9v
8Jap/1PwjNcNku5cdW3gHLcCAwEAAQ==
-----END PUBLIC KEY-----
```

Run 1 outputs

```
stdout 68c1d6075af4042f7f17eaf1c76880d8d58142aa2f0f2a2c1aa909223b73e351
stderr e3b0c44298fc1c149afb4c8996fb92427ae41e4649b934ca495991b7852b855
metrics 68c1d6075af4042f7f17eaf1c76880d8d58142aa2f0f2a2c1aa909223b73e351
digest f2f436cddd77c5141d56c5cb3c357079bdc793b49611eb857c634981dcc0d9e8
```

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},
}
```