

Sealed Experiment Record

Sealed 2026-10-12 · Signed by the K-Veritas server
Session ada4c64c · Data hash bc79...afd6

Abstract

This record seals 1 run (echo 'KVERITAS_METRIC name=phi value=0.51067 step=0'; echo 'KVERITAS_METRIC name=phi_bam value=0.574067 step=0'; echo 'KVERITAS_METRIC name=phi_bmq value=0.715822 step=0'; echo 'KVERITAS_METRIC name=phi_boz value=0.360562 step=0'; echo 'KVERITAS_METRIC name=phi_dtm value=0.594784 step=0'; echo 'KVERITAS_METRIC name=phi_ful value=0.551 step=0'; echo 'KVERITAS_METRIC name=phi_mey value=0.299815 step=0'; echo 'KVERITAS_METRIC name=phi_mku value=0.433409 step=0'; echo 'KVERITAS_METRIC name=phi_kao value=0.865789 step=0'; echo 'KVERITAS_METRIC name=phi_myk value=0.313592 step=0'; echo 'KVERITAS_METRIC name=phi_ses value=0.384177 step=0'; echo 'KVERITAS_METRIC name=phi_spp value=0.417665 step=0'; echo 'KVERITAS_METRIC name=phi_snk value=0.450497 step=0'; echo 'KVERITAS_METRIC name=phi_taq value=0.67753 step=0') executed on Intel(R) Xeon(R) CPU @ 2.20GHz between 2026-10-12 19:44 and 19:44 UTC. Reported results: phi 0.51067, phi_bam 0.574067, phi_bmq 0.715822, phi_boz 0.360562. 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	ada4c64c-74f0-446e-ab4d-f387b0beb6d5
Initialized	2026-10-12T15:03:28Z
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	7554f52a610c22b21bb0dcafed8efa75e036621ba256ac18bf8462ba1fd8de1f

2 Runs

#	Command	Duration	Exit	Anchored
1	sh -c echo 'KVERITAS_METRIC name=phi value=...	1.1 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=0.51067 step=0'; echo 'KVERITAS_METRIC name=phi_bam value=0.5740

Metric	Final value	Step	Source
phi	0.51067	0	explicit
phi_bam	0.574067	0	explicit
phi_bmq	0.715822	0	explicit
phi_boz	0.360562	0	explicit
phi_dtm	0.594784	0	explicit
phi_ful	0.551	0	explicit
phi_mey	0.299815	0	explicit
phi_mku	0.433409	0	explicit
phi_kao	0.865789	0	explicit
phi_myk	0.313592	0	explicit
phi_ses	0.384177	0	explicit
phi_spp	0.417665	0	explicit
phi_snk	0.450497	0	explicit
phi_taq	0.67753	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	6	0.0 s	0.00 GB	0%

5 Provenance

Run 1: echo 'KVERITAS_METRIC name=phi value=0.51067 step=0'; echo 'KVERITAS_METRIC name=phi_bam value=0.5740

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

#	Snapshot	Time	Root	Changed
0	run_start	19:44:14	9bfe0bad3a732aad	32
1	run_end	19:44:14	9bfe0bad3a732aad	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	2026-10-12T19:44:19.628611+00:00
Algorithm	RSA-PSS-SHA256, 4096-bit key
Key fingerprint	eeac81653cf44ac029c4069cf2a06d9f
Data hash	bc797885a7ffd31fee42961eeb2393e204aab725e676299a40204f76b384afd6
Code bundle hash	224375ae8bc00d344039fd054786a2fa92178a00eb0a03e450cebeda3b64dbe1

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=0.51067 step=0'; echo 'KVERITAS_METRIC name=phi_bam value=0.5740'

Metric	Value	Step	Line	Source
phi	0.51067	0	1	explicit
phi_bam	0.574067	0	2	explicit
phi_bmq	0.715822	0	3	explicit
phi_boz	0.360562	0	4	explicit
phi_dtm	0.594784	0	5	explicit
phi_ful	0.551	0	6	explicit
phi_mey	0.299815	0	7	explicit
phi_mku	0.433409	0	8	explicit
phi_kao	0.865789	0	9	explicit
phi_myk	0.313592	0	10	explicit
phi_ses	0.384177	0	11	explicit
phi_spp	0.417665	0	12	explicit
phi_snk	0.450497	0	13	explicit
phi_taq	0.67753	0	14	explicit

B Provenance timeline and activity map

Run 1: echo 'KVERITAS_METRIC name=phi value=0.51067 step=0'; echo 'KVERITAS_METRIC name=phi_bam value=0.5740'

#	Snapshot	Time	Root	Changed
0	run_start	19:44:14	9bfe0bad3a732aad	32
1	run_end	19:44:14	9bfe0bad3a732aad	0

Event	Path or command	Hash
read	adapter_config.json	
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	

Event	Path or command	Hash
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	
read	safety_snapshot.json	
read	tokenizer.json	
read	tokenizer_config.json	

C Run history

Invocation 1, OK, 1.1 seconds, 14 output lines, started 2026-10-12T19:44:13

```
metric_hash 094ba3bbc5077ecce27a67d81eb76bedb8be03cf1e0e43bd87eadc496f9db60a
run_digest  bcf8cdfbe4821515c2384581554d868ce10e9208220e6f489a8dcf84e7550f2a
anchored    at run end
```

D Raw seal fields and hashes

Seal

```
data_hash      bc797885a7ffd31fee42961eeb2393e204aab725e676299a40204f76b384afd6
signed_message_hash 6725d3528cad528ed901951f28f0972a7bfa88e735eeeb88a65f9f26347153b2
nonce          449553725331004c3cdcd84b9f75a5c
signed_at      2026-10-12T19:44:19.628611+00:00
sealed_at      2026-10-12T19:44:19.674333138Z
checkout_bundle 224375ae8bc00d344039fd054786a2fa92178a00eb0a03e450cebeda3b64dbe1
```

Signature (base64)

```
abKZ4utCBykYoXotw+fHmWHZ7W9HUPLxK6U3JLeVujiusi6cFBHEWZ/1zP/4im9wLGF/rgnY8YlCL86/S7t2EahC
rgJ3yhHi8U/tuf2LxqN5I+EYVQAEGHMwZrANlE8w31MdwPMU1Hf0wZhJEf/rKpXZk2dW6uYSUoKRt4Uj000IeyqT
b9+zzmTeltk2d2S7a16CStJ9M6tv3887trEpdHqgopNSfKRrPMcsxLlkrVHYqK210s9D25eQ93YH375CoblQlNqp
HZJuT5aHamJY480ohsYkNV1a0GKRf76gd37sGjxNgyt+QU8dzV5jEfLmAzoq/Y3N3pkQkmVRrT+E2sF0Evszv9w
p9e6l0tIrIly4zAPB4orrZ5YP1GZ48rcLw5p/Jnd8hFxU7t5mWX02FCVOp2YhCdX6eJlpmSehr9I3bEaUNeSS4v2
TCHEJM18XdJEPDsh46/camrE7Y4432JvI0jvoPPzwlP52PR3fU05PRW5vUSxtMXB2FpFpg5VKUWDQr8Uj/hxRX2/
Qw67nxuqWUXZ50JUyLzBwK/bzPRvA32jAl1CEaU3NepikT4FVbcL0g0b0DUBmuXH4A8Q0oDJsMJGAigYbKPDzI4g
Kk/ygE72xNGnjrUrSL8l1yvEdfXxDHtftRDSPkPoPxpQ2Vb1vmC0yZ0hd8ZSkvnNgSQ=
```

Public key

```
-----BEGIN PUBLIC KEY-----
MIICIjANBgkqhkiG9w0BAQEFAAOCAg8AMIICCgKCAgEAlQL3YyMgeShx8IhTC7jb
sM0w2BnRXgsBn3+SMXKjtwHATqdekmlPlcjayJxD5fcPrOPPCqp/LoUFz5CUZzRi
6+8FTv70dHuIz5A4Lat4vcgwP+iWscPc3HzpmjpsKbTm0emqgp6RB6GNNPpxYa5X
7qU95EfEisX/GfoS9ToxtqPBwCcVwSPBX8efec4TC58m96Fsp4mC8KIcEadbIbHN
av0JjdTJ//CM0WZSIbdzE6qvEbNfCqDB5tNU7oHfYvBeNLrvPU9TAqdbtozdHQ+D
AhfTRuJNgWekjwD5lb0Vhi4qlkweSOEMTKT3ye9I1L5xEaJn4bku4eKqes7VSzt3o
XbUcmr2H5mKcKsvt6bXmX6ajAmgi900Cm9QJlaQkJM6z2iITnyvDMgueJtFxQpC9
HNBPgPZ242NH8JgE6CNF7ToL9syas67u7UMgIcNgeNHncY9bLgPu5annzP9gN2l
6HEmldkXNdKQRb1rDwyEJf3N/50YHnXXPmuf5sb8R/pxWNqtF04R5UGVV92qd2Mi
1GN7LE3mbQRbPsLL/JApDXMNzNikaFbSbQK7iKxr7vIaTeZckFZwfThcYNT7Hasg
+eE4bf/olCHBCf1VIDcDxohehdZ0WRRcgM9iK3I/0zZdaBsgdc8WuJRmb8LPP9v
8Jap/1PwjNcNku5cdw3gHLcCAwEAAQ==
-----END PUBLIC KEY-----
```

Run 1 outputs

```
stdout  094ba3bbc5077ecce27a67d81eb76bedb8be03cf1e0e43bd87eadc496f9db60a
stderr  e3b0c44298fc1c149afb4c8996fb92427ae41e4649b934ca495991b7852b855
metrics 094ba3bbc5077ecce27a67d81eb76bedb8be03cf1e0e43bd87eadc496f9db60a
digest  bcf8cdfbe4821515c2384581554d868ce10e9208220e6f489a8dcf84e7550f2a
```

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},
}
```