

Sealed Experiment Record

Sealed 2026-10-12 · Signed by the K-Veritas server
Session aac8e9a5 · Data hash c4a8...f32f

Abstract

This record seals 1 run (echo 'KVERITAS_METRIC name=phi value=0.504376 step=0'; echo 'KVERITAS_METRIC name=phi_bam value=0.550204 step=0'; echo 'KVERITAS_METRIC name=phi_bmq value=0.705471 step=0'; echo 'KVERITAS_METRIC name=phi_boz value=0.368103 step=0'; echo 'KVERITAS_METRIC name=phi_dtm value=0.588395 step=0'; echo 'KVERITAS_METRIC name=phi_ful value=0.496525 step=0'; echo 'KVERITAS_METRIC name=phi_mey value=0.379906 step=0'; echo 'KVERITAS_METRIC name=phi_mku value=0.394684 step=0'; echo 'KVERITAS_METRIC name=phi_kao value=0.841474 step=0'; echo 'KVERITAS_METRIC name=phi_myk value=0.333167 step=0'; echo 'KVERITAS_METRIC name=phi_ses value=0.381402 step=0'; echo 'KVERITAS_METRIC name=phi_spp value=0.401826 step=0'; echo 'KVERITAS_METRIC name=phi_snk value=0.446357 step=0'; echo 'KVERITAS_METRIC name=phi_taq value=0.669377 step=0') executed on Intel(R) Xeon(R) CPU @ 2.20GHz between 2026-10-12 14:55 and 14:55 UTC. Reported results: phi 0.504376, phi_bam 0.550204, phi_bmq 0.705471, phi_boz 0.368103. 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	aac8e9a5-2003-4e12-b819-94d1a6969aa1
Initialized	2026-10-12T14:39:09Z
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	b0c2104bc39e76b7c70d5f4d0f714a23d01bcff9fff6416e6d006791d4d8a73f

2 Runs

#	Command	Duration	Exit	Anchored
1	sh -c echo 'KVERITAS_METRIC name=phi value=...	1.0 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=0.504376 step=0'; echo 'KVERITAS_METRIC name=phi_bam value=0.550204'

Metric	Final value	Step	Source
phi	0.504376	0	explicit
phi_bam	0.550204	0	explicit
phi_bmq	0.705471	0	explicit
phi_boz	0.368103	0	explicit
phi_dtm	0.588395	0	explicit
phi_ful	0.496525	0	explicit
phi_mey	0.379906	0	explicit
phi_mku	0.394684	0	explicit
phi_kao	0.841474	0	explicit
phi_myk	0.333167	0	explicit
phi_ses	0.381402	0	explicit
phi_spp	0.401826	0	explicit
phi_snk	0.446357	0	explicit
phi_taq	0.669377	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=0.504376 step=0'; echo 'KVERITAS_METRIC name=phi_bam value=0.550204'

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

#	Snapshot	Time	Root	Changed
0	run_start	14:55:46	d7ab032f00585456	32
1	run_end	14:55:46	d7ab032f00585456	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	2026-10-12T14:55:50.495776+00:00
Algorithm	RSA-PSS-SHA256, 4096-bit key
Key fingerprint	eeac81653cf44ac029c4069cf2a06d9f
Data hash	c4a8a550ff62b34391812a4dab80c7b5a04870b5deab8cfa40aecc3f26a5f32f
Code bundle hash	a08efbd5da2593f93db9bd700e8ff0b0145f60f9104e3916d57b61a61491792c

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=0.504376 step=0'; echo 'KVERITAS_METRIC name=phi_bam value=0.550

Metric	Value	Step	Line	Source
phi	0.504376	0	1	explicit
phi_bam	0.550204	0	2	explicit
phi_bmq	0.705471	0	3	explicit
phi_boz	0.368103	0	4	explicit
phi_dtm	0.588395	0	5	explicit
phi_ful	0.496525	0	6	explicit
phi_mey	0.379906	0	7	explicit
phi_mku	0.394684	0	8	explicit
phi_kao	0.841474	0	9	explicit
phi_myk	0.333167	0	10	explicit
phi_ses	0.381402	0	11	explicit
phi_spp	0.401826	0	12	explicit
phi_snk	0.446357	0	13	explicit
phi_taq	0.669377	0	14	explicit

B Provenance timeline and activity map

Run 1: echo 'KVERITAS_METRIC name=phi value=0.504376 step=0'; echo 'KVERITAS_METRIC name=phi_bam value=0.550

#	Snapshot	Time	Root	Changed
0	run_start	14:55:46	d7ab032f00585456	32
1	run_end	14:55:46	d7ab032f00585456	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, 1.0 seconds, 14 output lines, started 2026-10-12T14:55:45

metric_hash f6edac9c6adc750fd614bc11904dec1a00f1bb6198d7a5d13c5eca77098f9eac
run_digest 9ed5ed66663d0740a44561f4f6fad38141410b8172eaea22c9e72710a9e31e93
anchored at run end

D Raw seal fields and hashes

Seal

data_hash c4a8a550ff62b34391812a4dab80c7b5a04870b5deab8cfa40aecc3f26a5f32f
signed_message_hash 37ee0a2c85e3619a56422c3d28e3b1becd10b42f61589035dfce5865b8987460
nonce 8007727c9829ba124a25885203e85b85
signed_at 2026-10-12T14:55:50.495776+00:00
sealed_at 2026-10-12T14:55:50.547384766Z
checkout_bundle a08efbd5da2593f93db9bd700e8ff0b0145f60f9104e3916d57b61a61491792c

Signature (base64)

cuYhAlnIDiz7tRAisw7etbnpqd8Bp1gff6mPDMSiSG7QMbMLL37DLZ/eMYNxZmPmYHi0wiEIaLU/NBgFz37CR8Rt
il/wq0btJFUaS0Tlo3WTjQAJqt7Ywa5v4ozTDIqHxdSyuTZBLGRhRU2dddQBrubZ5xM3HSchsq8u55FvKlAyZq2m
m7HHLfNkCLNwt3tU/cpEwCADU3nLI7Afy0mu63zQ0hrB9/GLY0E6q7iEXDTW3dnYRauY8WN05vqnLNkn6zEFX+KE
NLM/jhk0a6N/6+VnfrbrI8jmmXXGjsC9IIPwkkgl1JyXRqeFzjyVqn/6bIGUKiHk0v0LjHTsXKm1YtN9FhAeIRH0V
swIOHJWv7JAF68IMVa0aHzcTJHTcEdmuqEpyEzAMpZom/jcR0USFjAi1a8zXm1x0aG9b8POT54ah0YzzMvAuCCY
ZGppx0FYaPBipV/uIMSlgfYDDjRRSweCdjo0ZnIdl9hS8R5p86qPSN1ge3XB94w2L8rctooZvd6qJmeixJKCmj0g
A70f6EXcUm63IKqGmBFg+hKLkQyapTCzR8AJKZCcZLZk8i6XteKp3eMfIneXc0bQ50nRTz4nVCU353P/f8TjGJb4
lNvDyCeb/WvjdkMnYp+0VL2U6TNvm7CMXz16Wl9DCILZq1wlrh1x91ebrP6Ldatvhj8=

Public key

-----BEGIN PUBLIC KEY-----
MIICIjANBgkqhkiG9w0BAQEFAAOCAg8AMIICCGKCAgEA1QL3YyMgeShx8IhTC7jb
sM0w2BnRXgsBn3+SMXKjtwHATqdekmlPlcjayJxD5fcPrOPPCqp/LoUFz5CUZzRi
6+8FTv70dHuIz5A4Lat4vcgwP+iWscPc3HzpmjpsKbTm0emqgp6RB6GNNPpxYa5X
7qU95EfEisX/GfoS9ToxtqPBwCcVwSPBX8efec4TC58m96Fsp4mC8KIcEadbIbHN
av0JjdTJ//CM0WZSIbdzE6qvEbNfCqDB5tNU7oHfYvBeNLrvPU9TAqdbtozdHQ+D
AhfTRuJNgWEkjWD5lb0Vhi4qlkweSOEMTKT3ye9IL5xEaJn4bku4eKqes7VSZt3o
XbUcmr2H5mKcKSvt6bXmX6ajAmgi900Cm9QJlAQkJM6z2iITnyvDMgueJtFxQpC9
HNBPgPZ242NH8JgE6CNF7ToL9syasS67u7UMgIcNgeNHncY9bLgPU5annzP9gN2l
6HEMldkXNdKQRb1rDwyEJf3N/50YHnXXPmuf5sb8R/pxWNqtF04R5UGVV92qd2Mi
1GN7LE3mbQRbPsLL/JApDXMNzNikaFfBsQK7iKxr7vIaTeZckFZwfThcYNT7Hasg
+eE4bf/olCHBCF1VIDckDxohehdZ0WRRcgM9iK3I/0zZdaBsgdc8WuJRmb8LPP9v
8Jap/1PWjNcNku5cdw3gHLcCAwEAAQ==
-----END PUBLIC KEY-----

Run 1 outputs

```
stdout  f6edac9c6adc750fd614bc11904dec1a00f1bb6198d7a5d13c5eca77098f9eac
stderr  e3b0c44298fc1c149afb4c8996fb92427ae41e4649b934ca495991b7852b855
metrics f6edac9c6adc750fd614bc11904dec1a00f1bb6198d7a5d13c5eca77098f9eac
digest  9ed5ed66663d0740a44561f4f6fad38141410b8172eaea22c9e72710a9e31e93
```

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},
}
```