

Sealed Experiment Record

Sealed 2026-10-13 · Signed by the K-Veritas server
Session 37fc56c4 · Data hash d006...0773

Abstract

This record seals 1 run (echo 'KVERITAS_METRIC name=phi value=0.50172 step=0'; echo 'KVERITAS_METRIC name=phi_bam value=0.561899 step=0'; echo 'KVERITAS_METRIC name=phi_bmq value=0.693351 step=0'; echo 'KVERITAS_METRIC name=phi_boz value=0.438394 step=0'; echo 'KVERITAS_METRIC name=phi_dtm value=0.511633 step=0'; echo 'KVERITAS_METRIC name=phi_ful value=0.410578 step=0'; echo 'KVERITAS_METRIC name=phi_mey value=0.30068 step=0'; echo 'KVERITAS_METRIC name=phi_mku value=0.409287 step=0'; echo 'KVERITAS_METRIC name=phi_kao value=0.802235 step=0'; echo 'KVERITAS_METRIC name=phi_myk value=0.359868 step=0'; echo 'KVERITAS_METRIC name=phi_ses value=0.440817 step=0'; echo 'KVERITAS_METRIC name=phi_spp value=0.391609 step=0'; echo 'KVERITAS_METRIC name=phi_snk value=0.486494 step=0'; echo 'KVERITAS_METRIC name=phi_taq value=0.715518 step=0') executed on Intel(R) Xeon(R) CPU @ 2.20GHz between 2026-10-13 02:32 and 02:32 UTC. Reported results: phi 0.50172, phi_bam 0.561899, phi_bmq 0.693351, phi_boz 0.438394. 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	37fc56c4-d42d-4e16-9597-b1b876f60392
Initialized	2026-10-12T04:28:10Z
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	d2da99afaeafb1035e3fd06014b986f2c19ffd48538eab93dba938c42c6d10fe
Disclosure	open
Source code, run 1	775618436ad9f84774607cde5871f35ab5ded74892770c57b48deea19ec81f9d

2 Runs

#	Command	Duration	Exit	Anchored
1	sh -c echo 'KVERITAS_METRIC name=phi value=...	1.8 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=0.50172 step=0'; echo 'KVERITAS_METRIC name=phi_bam value=0.5618

Metric	Final value	Step	Source
phi	0.50172	0	explicit
phi_bam	0.561899	0	explicit
phi_bmq	0.693351	0	explicit
phi_boz	0.438394	0	explicit
phi_dtm	0.511633	0	explicit
phi_ful	0.410578	0	explicit
phi_mey	0.30068	0	explicit
phi_mku	0.409287	0	explicit
phi_kao	0.802235	0	explicit
phi_myk	0.359868	0	explicit
phi_ses	0.440817	0	explicit
phi_spp	0.391609	0	explicit
phi_snk	0.486494	0	explicit
phi_taq	0.715518	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	7	0.0 s	0.00 GB	0%

5 Provenance

Run 1: echo 'KVERITAS_METRIC name=phi value=0.50172 step=0'; echo 'KVERITAS_METRIC name=phi_bam value=0.5618

Disclosure open. 27 tracked files, 2 snapshots. Every snapshot is bound into the signature.

#	Snapshot	Time	Root	Changed
0	run_start	02:32:25	7954b3f164473e2f	27
1	run_end	02:32:26	7954b3f164473e2f	0

Activity: 27 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	2026-10-13T02:32:29.441883+00:00
Algorithm	RSA-PSS-SHA256, 4096-bit key
Key fingerprint	eeac81653cf44ac029c4069cf2a06d9f
Data hash	d00670226ba6aceff75b860e724a719cc5d5e2185c658fafbe9755c448af0773
Code bundle hash	e5346341e95937da495125d82d4e19d780111ea0cce86a8f2049d7e49890f54d

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=0.50172 step=0'; echo 'KVERITAS_METRIC name=phi_bam value=0.5618'

Metric	Value	Step	Line	Source
phi	0.50172	0	1	explicit
phi_bam	0.561899	0	2	explicit
phi_bmq	0.693351	0	3	explicit
phi_boz	0.438394	0	4	explicit
phi_dtm	0.511633	0	5	explicit
phi_ful	0.410578	0	6	explicit
phi_mey	0.30068	0	7	explicit
phi_mku	0.409287	0	8	explicit
phi_kao	0.802235	0	9	explicit
phi_myk	0.359868	0	10	explicit
phi_ses	0.440817	0	11	explicit
phi_spp	0.391609	0	12	explicit
phi_snk	0.486494	0	13	explicit
phi_taq	0.715518	0	14	explicit

B Provenance timeline and activity map

Run 1: echo 'KVERITAS_METRIC name=phi value=0.50172 step=0'; echo 'KVERITAS_METRIC name=phi_bam value=0.5618'

#	Snapshot	Time	Root	Changed
0	run_start	02:32:25	7954b3f164473e2f	27
1	run_end	02:32:26	7954b3f164473e2f	0

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

Event	Path or command	Hash
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, 1.8 seconds, 14 output lines, started 2026-10-13T02:32:25

```
metric_hash 68d49f006f2e1e82ace57e4b499f7622f15c4bda61f195d075b8bc05ea334941
run_digest  0dcec1b78f1b32a6ad18af865a95cacf1bbd87a0104eb6c84e2f2d944ef2207c
anchored    at run end
```

D Raw seal fields and hashes

Seal

```
data_hash          d00670226ba6aceff75b860e724a719cc5d5e2185c658fafbe9755c448af0773
signed_message_hash e7d95bab2ec4337e8a95876e3e45e8ded8badb46ea88b8dca36e9489fb865834
nonce             8455faa5ad894c05b54a6c78a8544b6a
signed_at         2026-10-13T02:32:29.441883+00:00
sealed_at         2026-10-13T02:32:29.48829538Z
checkout_bundle   e5346341e95937da495125d82d4e19d780111ea0cce86a8f2049d7e49890f54d
```

Signature (base64)

```
iMpP9vyickgJE4YXjB9YcXf3V59YIf5G1PUxIeb2nQ9GZz3jqj6XRNhHCV0FHTYs6Ym9dA+z80RNo0Vq8EbPfviX
VYlMPgBPI+UfBubiEJH3rhhD0cIo5ESLlpDaLlKD0TZeYnP+Qjgl/90f0N9TXGKNNEatQUp5hfK+mo9bf0DbkPxT
piES4VTYkUHHYcJqvTjG95sLHez3dMQlqjS5/KwYNx/RhYUfS3mkGNMSPv1kXyA0faNvsEw4bayDNXk+IVnD8Qp5
oE5ZWML4Id0TfCtoXJg/Imn4Q1i3eRtDp40MrrmjB+sIF0MTS1iqg9oVpaDMkljGwc/yio412MtrLeBawBrb0iV
8tFpD+DRR9vQVK4T+NVtrfa7abo6i9zBwaytttCt3Q0bg7NKJhGIOMvceyGC/ItCsLCZ2E4fdg7P0y3Cbyxhc4ET
0xqZBUvYjJkWN/mte3ZFtKLfL5MLut3xTeGeRjWFrAssB4K09/zWYmMaJXgiOnYLE4jYYDmW+EoP4DPfPTRhG3Al
JzSTxxHxU1lzqdWvJ0t1vU0MjrPVUdsERmd+wW0RzLlIFNgtx5NX8+Syc+/aQcWavZNxaAaQU0xtR+2Y7ijUeHq
DUTz3likFOWqXwAjGYLDc0NJxBKivfgE5bnnCMSAKtwF03KMnXlGJdAjXjfJv9t8yNo=
```

Public key

```
-----BEGIN PUBLIC KEY-----
MIICIjANBgkqhkiG9w0BAQEFAAACAg8AMIICCgKCAgEA1QL3YyMgeShx8IhTC7jb
sM0w2BnRXgsBn3+SMXKjtWATqdekmlPlcjayJxD5fcPrOPPCqp/LouFz5CUZzRi
6+8FTv70dHuIz5A4LAt4vcgWP+iWscPc3HzpmjpsKbTmOemqgp6RB6GnnPpxYa5X
7qU95EfEisX/GfoS9ToxtqPBwCcVWSPBX8efec4TC58m96Fsp4mC8KIcEadbIbHN
av0JjdTJ//CM0WZSIbdzE6qvEbNfCqDB5tNU7oHfYvBeNlrvPU9TAqdbtozdHQ+D
AhfTRuJNgWEkjwD5lB0Vhi4qlkweSOEMTKT3ye9Il5xEaJn4bku4eKQeS7VSzt3o
XbUcmr2H5mKcKSvt6bXmX6ajAmgi900Cm9QJlaQkJM6z2iITnyvDMgueJtFxQpC9
HNBPgPZ242NH8JgE6CNF7ToL9syasS67u7UMgIcNgeNHNCy9bLgPU5annzP9gN2l
6HEMldkXNdKQRb1rDwyEJf3N/50YHnXXPmuf5sb8R/pxWNqtF04R5UGVV92qd2Mi
1GN7lE3mbQRbPsLL/JAPDXMNzNikaFFbSQK7iKxr7vIaTeZckFZWfThcYNT7Hasg
+eE4bf/oLCHBCf1VIDcDxohehdZ0WRRcgM9iK3I/0zZdaBsgdc8WuJRmb8LPP9v
8Jap/1PWjNcNku5cdW3gHLcCAwEAAQ==
-----END PUBLIC KEY-----
```

Run 1 outputs

```
stdout 68d49f006f2e1e82ace57e4b499f7622f15c4bda61f195d075b8bc05ea334941
stderr e3b0c44298fc1c149afb4c8996fb92427ae41e4649b934ca495991b7852b855
metrics 68d49f006f2e1e82ace57e4b499f7622f15c4bda61f195d075b8bc05ea334941
digest 0dcec1b78f1b32a6ad18af865a95cacf1bbd87a0104eb6c84e2f2d944ef2207c
```

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},  
}
```