

Sealed Experiment Record

Sealed 2026-10-12 · Signed by the K-Veritas server
Session 56490df4 · Data hash 2253...9aef

Abstract

This record seals 1 run (echo 'KVERITAS_METRIC name=phi value=0.499372 step=0'; echo 'KVERITAS_METRIC name=phi_bam value=0.565924 step=0'; echo 'KVERITAS_METRIC name=phi_bmq value=0.709444 step=0'; echo 'KVERITAS_METRIC name=phi_boz value=0.390159 step=0'; echo 'KVERITAS_METRIC name=phi_dtm value=0.569545 step=0'; echo 'KVERITAS_METRIC name=phi_ful value=0.423977 step=0'; echo 'KVERITAS_METRIC name=phi_mey value=0.336661 step=0'; echo 'KVERITAS_METRIC name=phi_mku value=0.351723 step=0'; echo 'KVERITAS_METRIC name=phi_kao value=0.783419 step=0'; echo 'KVERITAS_METRIC name=phi_myk value=0.329046 step=0'; echo 'KVERITAS_METRIC name=phi_ses value=0.348706 step=0'; echo 'KVERITAS_METRIC name=phi_spp value=0.490032 step=0'; echo 'KVERITAS_METRIC name=phi_snk value=0.380257 step=0'; echo 'KVERITAS_METRIC name=phi_taq value=0.812938 step=0') executed on Intel(R) Xeon(R) CPU @ 2.20GHz between 2026-10-12 15:31 and 15:31 UTC. Reported results: phi 0.499372, phi_bam 0.565924, phi_bmq 0.709444, phi_boz 0.390159. 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	56490df4-2514-4a03-b851-bbd23f3a5767
Initialized	2026-10-12T15:11:19Z
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	6a4f0d079bfc1eb3a00484bdccfc4cbc86d441717de8d94e8750238f47b9134b

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=0.499372 step=0'; echo 'KVERITAS_METRIC name=phi_bam value=0.565924 step=0';

Metric	Final value	Step	Source
phi	0.499372	0	explicit
phi_bam	0.565924	0	explicit
phi_bmq	0.709444	0	explicit
phi_boz	0.390159	0	explicit
phi_dtm	0.569545	0	explicit
phi_ful	0.423977	0	explicit
phi_mey	0.336661	0	explicit
phi_mku	0.351723	0	explicit
phi_kao	0.783419	0	explicit
phi_myk	0.329046	0	explicit
phi_ses	0.348706	0	explicit
phi_spp	0.490032	0	explicit
phi_snk	0.380257	0	explicit
phi_taq	0.812938	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	4	0.0 s	0.00 GB	0%

5 Provenance

Run 1: echo 'KVERITAS_METRIC name=phi value=0.499372 step=0'; echo 'KVERITAS_METRIC name=phi_bam value=0.565924 step=0';

Disclosure open. 31 tracked files, 2 snapshots. Every snapshot is bound into the signature.

#	Snapshot	Time	Root	Changed
0	run_start	15:31:09	adae1c048cbb8a3a	31
1	run_end	15:31:09	adae1c048cbb8a3a	0

Activity: 31 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	2026-10-12T15:31:14.331659+00:00
Algorithm	RSA-PSS-SHA256, 4096-bit key
Key fingerprint	eeac81653cf44ac029c4069cf2a06d9f
Data hash	22537d944a5cf42522146bc324dc63c2befdd841bea0d46cb229859c324d9aef
Code bundle hash	d601ea47d5f5a3494ba0d683ea18649e25d8ba997ac42acb2b331b048e0403d3

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=0.499372 step=0'; echo 'KVERITAS_METRIC name=phi_bam value=0.565924'

Metric	Value	Step	Line	Source
phi	0.499372	0	1	explicit
phi_bam	0.565924	0	2	explicit
phi_bmq	0.709444	0	3	explicit
phi_boz	0.390159	0	4	explicit
phi_dtm	0.569545	0	5	explicit
phi_ful	0.423977	0	6	explicit
phi_mey	0.336661	0	7	explicit
phi_mku	0.351723	0	8	explicit
phi_kao	0.783419	0	9	explicit
phi_myk	0.329046	0	10	explicit
phi_ses	0.348706	0	11	explicit
phi_spp	0.490032	0	12	explicit
phi_snk	0.380257	0	13	explicit
phi_taq	0.812938	0	14	explicit

B Provenance timeline and activity map

Run 1: echo 'KVERITAS_METRIC name=phi value=0.499372 step=0'; echo 'KVERITAS_METRIC name=phi_bam value=0.565924'

#	Snapshot	Time	Root	Changed
0	run_start	15:31:09	adae1c048cbb8a3a	31
1	run_end	15:31:09	adae1c048cbb8a3a	0

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

Event	Path or command	Hash
read	models/adapter_config.json	
read	models/checkpoint-50/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/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, 0.5 seconds, 14 output lines, started 2026-10-12T15:31:09

metric_hash 6c717d25eaec0091ecc0f8b862226f8b1c826978aac4705840131987571ddfb9
run_digest 2f57a95b9e0ede5a6abda2789767b3063b799b58e3dc643aba9842556f756
anchored at run end

D Raw seal fields and hashes

Seal

data_hash 22537d944a5cf42522146bc324dc63c2befdd841bea0d46cb229859c324d9aef
signed_message_hash c2a3cbb9300cd76c0537165eb1659b0e213c052e59c367ae942ab26c3e637ab3
nonce 0e74ee4e7437f04d2e482e963a0f14aa
signed_at 2026-10-12T15:31:14.331659+00:00
sealed_at 2026-10-12T15:31:14.377506488Z
checkout_bundle d601ea47d5f5a3494ba0d683ea18649e25d8ba997ac42acb2b331b048e0403d3

Signature (base64)

vXBDat0UKU9B06vaIVUN0/7NXRwDNqxeICSnqKBpM7PoZE9hrfBkM0df44Wil13gNcDumWY1P9tIecwe1JN+mC9Y
2oiVFMxRkg4sj9+olSQGRNRbDJiXj3DBUnnzcrrvD03VAQHkecdVG79yZlEYavoDo1A2pt2UeEypklKT9FtbjOrq
i4Qo0Yj6XCfPux0q59ktcc/wK5WwTNJ/pQKoc8CeZ8YjJAvhEn9Ipl0r0QFasjfxNKCHgzp+j0BDctKvnwq/6oaG
nnYfa9Vx72eM2xOSNBdRttnK/Ce9wrSMxZ/CHufBIv9X+P5Iu0rHCyDqp3uK+VR4E06SZkDGommwXrQELdJaC/E3
FK5b2RaA96ril532sYX0hlcggBnXH7ThqSPm085oCXDZz3BSswyzGgU90RXT5B1UotulQQdEIuvjht6tNcacrI6N
WkbmBCRkFtf2FmWZ2v0YHSGb0/G5jAXuLZGkY+i6RiscfQma4zCRGmq0HXeZFYlrKp9+j8ssRLxIXTkj8XVRYpKe
QE5ivAgMPKZdEIYB7+YKR8AFgtVKaCsL2AAFHNiAp0hD8AQuSunVLAyMcotowyDLw+SGUTetA4QAXzGKJYakLA7w
PtU1vyslRqNgk2mGJeZqhQtVwVCsLIK0kNwE4DFOPNUzXxZgTN+bEdo1iJGz2TdsDwY=

Public key

-----BEGIN PUBLIC KEY-----
MIICIjANBgkqhkiG9w0BAQEFAAOCAg8AMIICCgKCAgEA1QL3YyMgeShx8IhTC7jb
sM0w2BnRXgsBn3+SMXKjtwHATqdekmlPlcjayJxD5fcPrOPPCqp/LoUFz5CUZzRi
6+8FTv70dHuIz5A4LAT4vcgwP+iWscPc3HzpmjpsKbTm0emqgp6RB6GNnPpxYa5X
7qu95EfEisX/GfoS9ToxtqPBwCvWSPBX8efeC4TC58m96Fsp4mC8KicEadbIbHN
av0JjdTJ//CM0WZSIbdzE6qvEbNFcqDB5tNU7oHfYvBeNlrvPU9TAqdbtozdhQ+D
AhfTRuJNgWEkjWd5lb0Vhi4qlkweSOEMTKT3ye9Il5xEaJn4bku4eKqeS7VSzt3o
XbUcmr2H5mKcKsvt6bXmx6ajAmgi900Cm9QJlaQkJM6z2iITnyvDMgueJtFxQpC9
HNBPgPZ242NH8JgE6CNF7ToL9syasS67u7UMgIcNgeNHnNcy9bLgPU5annzP9gN2l
6HEmldkXndKQRb1rDwyEJf3N/50YHnXXPmuf5sb8R/pxWNqtF04R5UGVV92qd2Mi
1GN7lE3mbQRBpSLl/JApDXMNzNikaFfBsQK7iKxr7vIaTeZckFZWfThcYNT7Hasg
+eE4bf/olCHBCf1VIDCKDxohehdZ0WRRcgM9iK3I/0zZdaBsgdc8WuJRMb8LPP9v
8Jap/1PWjncNku5cdw3gHLcCAwEAAQ==
-----END PUBLIC KEY-----

Run 1 outputs

```
stdout 6c717d25eaec0091ecc0f8b862226f8b1c826978aac4705840131987571ddfb9
stderr e3b0c44298fc1c149afb4c8996fb92427ae41e4649b934ca495991b7852b855
metrics 6c717d25eaec0091ecc0f8b862226f8b1c826978aac4705840131987571ddfb9
digest 2f57a95b9e0edebb55a6abda2789767b3063b799b58e3dc643aba9842556f756
```

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},
}
```