

Sealed Experiment Record

Sealed 2026-10-12 · Signed by the K-Veritas server
Session d2f8c618 · Data hash b242...20fe

Abstract

This record seals 1 run (echo 'KVERITAS_METRIC name=phi value=0.5256 step=0'; echo 'KVERITAS_METRIC name=phi_bam value=0.579857 step=0'; echo 'KVERITAS_METRIC name=phi_bmq value=0.743126 step=0'; echo 'KVERITAS_METRIC name=phi_boz value=0.40078 step=0'; echo 'KVERITAS_METRIC name=phi_dtm value=0.60896 step=0'; echo 'KVERITAS_METRIC name=phi_ful value=0.56789 step=0'; echo 'KVERITAS_METRIC name=phi_mey value=0.332941 step=0'; echo 'KVERITAS_METRIC name=phi_mku value=0.427132 step=0'; echo 'KVERITAS_METRIC name=phi_kao value=0.854803 step=0'; echo 'KVERITAS_METRIC name=phi_myk value=0.331227 step=0'; echo 'KVERITAS_METRIC name=phi_ses value=0.415598 step=0'; echo 'KVERITAS_METRIC name=phi_spp value=0.412775 step=0'; echo 'KVERITAS_METRIC name=phi_snk value=0.436358 step=0'; echo 'KVERITAS_METRIC name=phi_taq value=0.72136 step=0') executed on Intel(R) Xeon(R) CPU @ 2.20GHz between 2026-10-12 14:38 and 14:38 UTC. Reported results: phi 0.5256, phi_bam 0.579857, phi_bmq 0.743126, phi_boz 0.40078. 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	d2f8c618-a1a5-4326-911b-9fc5cddfed22
Initialized	2026-10-12T14:05:04Z
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	cb43998bca1b006e5f5fe5e1e4b3bdbd79bf2a43fcefcdd14df37801b82de7e2

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=0.5256 step=0'; echo 'KVERITAS_METRIC name=phi_bam value=0.57985

Metric	Final value	Step	Source
phi	0.5256	0	explicit
phi_bam	0.579857	0	explicit
phi_bmq	0.743126	0	explicit
phi_boz	0.40078	0	explicit
phi_dtm	0.60896	0	explicit
phi_ful	0.56789	0	explicit
phi_mey	0.332941	0	explicit
phi_mku	0.427132	0	explicit
phi_kao	0.854803	0	explicit
phi_myk	0.331227	0	explicit
phi_ses	0.415598	0	explicit
phi_spp	0.412775	0	explicit
phi_snk	0.436358	0	explicit
phi_taq	0.72136	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=0.5256 step=0'; echo 'KVERITAS_METRIC name=phi_bam value=0.57985

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

#	Snapshot	Time	Root	Changed
0	run_start	14:38:54	78c506201c831597	31
1	run_end	14:38:55	78c506201c831597	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	2026-10-12T14:39:00.142363+00:00
Algorithm	RSA-PSS-SHA256, 4096-bit key
Key fingerprint	eeac81653cf44ac029c4069cf2a06d9f
Data hash	b24282941316fec2cd171e99e22a5b5868dc4205550e6ed78bf02310fd7d20fe
Code bundle hash	6130ae6f6358397b16e6a048c23e38f94f38a6dfc2abcb9f71c4649125b6ad38

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=0.5256 step=0'; echo 'KVERITAS_METRIC name=phi_bam value=0.57985'

Metric	Value	Step	Line	Source
phi	0.5256	0	1	explicit
phi_bam	0.579857	0	2	explicit
phi_bmq	0.743126	0	3	explicit
phi_boz	0.40078	0	4	explicit
phi_dtm	0.60896	0	5	explicit
phi_ful	0.56789	0	6	explicit
phi_mey	0.332941	0	7	explicit
phi_mku	0.427132	0	8	explicit
phi_kao	0.854803	0	9	explicit
phi_myk	0.331227	0	10	explicit
phi_ses	0.415598	0	11	explicit
phi_spp	0.412775	0	12	explicit
phi_snk	0.436358	0	13	explicit
phi_taq	0.72136	0	14	explicit

B Provenance timeline and activity map

Run 1: echo 'KVERITAS_METRIC name=phi value=0.5256 step=0'; echo 'KVERITAS_METRIC name=phi_bam value=0.57985'

#	Snapshot	Time	Root	Changed
0	run_start	14:38:54	78c506201c831597	31
1	run_end	14:38:55	78c506201c831597	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, 1.0 seconds, 14 output lines, started 2026-10-12T14:38:54

metric_hash 51e64af7f2fcde2c3f2fc69e37b8468ecdc7c3ec853ddc3fd0ed25cd5473b64c
run_digest 31a02ca5ee925e0187f7eaa348ea7a23407fd3f31ffa78dd2dc1669884a0421c
anchored at run end

D Raw seal fields and hashes

Seal

data_hash b24282941316fec2cd171e99e22a5b5868dc4205550e6ed78bf02310fd7d20fe
signed_message_hash 9c95d2b7e4801df7b548d39d86549f0a3ee3f48e764434f534f10054d53de8f4
nonce 09c59bc522cf0bcb5301efd77f0e5ac1
signed_at 2026-10-12T14:39:00.142363+00:00
sealed_at 2026-10-12T14:39:00.188364997Z
checkout_bundle 6130ae6f6358397b16e6a048c23e38f94f38a6dfc2abcb9f71c4649125b6ad38

Signature (base64)

cTdbn7thao5xyZ67dGPQMhJIN7AgeI88vwXZZ+S8SloiUmqi8qvE8Hf9ZW/iB/86KUKQo9oBTGRwnIMh1lDoIGWQ
J8rE09r7rHHb79g0GPYoghDABpqVYPWCK7065jBolc702I71Dw7oZdbofRKkTtCF4e0crr+IZFh6tLjMXSFF3y1h
wghszYwkMgc/099iIzZ2/Uxjz0aXIF0K3EBLqvsW72Se8SAzXV9MgSB4k5aQvfhPe4Y6fDyH9H8a63FDCaL00N11
dZbl01l93JwmRWhPEFCn1Phy+A0e0gcw8P3ff4KCgsmH8v5iBT5GeVYvT7ZpkPF5f3JxLCUFfgL0ZKw5S+l61+Ua
ea8NFvaZLbU7Hnp92JfY0J3ghSTIkH5bZLq0iz3mjLZpFTs4XM8jL5cTcMImJSz69Qe7vk3ib//ehJG2vzchDvbb
P7EEHwsgHh8RN0wgrPZ6EFSiEq7kjsY2yEZVQ1S3uFAY9tF53UPB5P3aMizhTo/jpD8KX7yITT6hg+JRPZ27Kqa4
t79bV5delFDz06sSZRs4FbQYnmfef1f3/3nd80IMlpDjHEI2Nw1EuL5+s9SZRCxSQRkhfSyZ5/Vpi+Ahl18VjHir
7htCy801AmX96oLEH93/HZGafS9ZVbwzrxUqDrFMTdAYk06lxE4DVGaNLxV+W3F3tmQ=

Public key

-----BEGIN PUBLIC KEY-----
MIICIjANBgkqhkiG9w0BAQEFAAOCAg8AMIICCgKCAgEA1QL3YyMgeShx8IhTC7jb
sM0w2BnRXgsBn3+SMXKjtwHATqdekmlPlcjayJxD5fcPrOPPCqp/LoUFz5CUZzRi
6+8FTv70dHuIz5A4LAT4vcgwP+iWscPc3HzpmjpsKbTm0emqgp6RB6GNnPpxYa5X
7qu95EfEisX/GfoS9ToxtqPBwCcVwSPBX8efeC4TC58m96Fsp4mC8KicEadbIbHN
av0JjdTJ//CM0WZSIbdzE6qvEbNFcqDB5tNU7oHfYvBeNLrvPU9TAqdbtozdhQ+D
AhfTRuJNgWEkjWd5lb0Vhi4qlkweSOEMTKT3ye9Il5xEaJn4bku4eKqeSV7SZt3o
XbUcmr2H5mKcKsvt6bXmX6ajAmgi900Cm9QJlaQkJM6z2iITnyvDMgueJtFxQpC9
HNBPgPZ242NH8JgE6CNF7ToL9syasS67u7UMgIcNgeNHNCy9bLgPU5annzP9gN2l
6HEmldkXndKQRb1rDwyEJf3N/50YHnXXPmuf5sb8R/pxWNqtF04R5UGVV92qd2Mi
1GN7lE3mbQRbPsLL/JApDXMNzNikaFfBsQK7iKxr7vIaTeZckFZWfThcYNT7Hasg
+eE4bf/olCHBCf1VIDCKDxohehdZ0WRRcgM9iK3I/0zZdaBsgdc8WuJRMb8LPP9v
8Jap/1PwjncNku5cdw3gHLCCAwEAAQ==
-----END PUBLIC KEY-----

Run 1 outputs

```
stdout 51e64af7f2fcde2c3f2fc69e37b8468ecdc7c3ec853ddc3fd0ed25cd5473b64c
stderr e3b0c44298fc1c149afb4c8996fb92427ae41e4649b934ca495991b7852b855
metrics 51e64af7f2fcde2c3f2fc69e37b8468ecdc7c3ec853ddc3fd0ed25cd5473b64c
digest 31a02ca5ee925e0187f7eaa348ea7a23407fd3f31ffa78dd2dc1669884a0421c
```

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},
}
```