

Sealed Experiment Record

Sealed 2026-10-12 · Signed by the K-Veritas server
Session 34476d77 · Data hash f8ab...1804

Abstract

This record seals 1 run (echo 'KVERITAS_METRIC name=phi value=0.49631 step=0'; echo 'KVERITAS_METRIC name=phi_bam value=0.515023 step=0'; echo 'KVERITAS_METRIC name=phi_bmq value=0.644887 step=0'; echo 'KVERITAS_METRIC name=phi_boz value=0.426366 step=0'; echo 'KVERITAS_METRIC name=phi_dtm value=0.572217 step=0'; echo 'KVERITAS_METRIC name=phi_ful value=0.34976 step=0'; echo 'KVERITAS_METRIC name=phi_mey value=0.205956 step=0'; echo 'KVERITAS_METRIC name=phi_mku value=0.49062 step=0'; echo 'KVERITAS_METRIC name=phi_kao value=0.763131 step=0'; echo 'KVERITAS_METRIC name=phi_myk value=0.354474 step=0'; echo 'KVERITAS_METRIC name=phi_ses value=0.440974 step=0'; echo 'KVERITAS_METRIC name=phi_spp value=0.432305 step=0'; echo 'KVERITAS_METRIC name=phi_snk value=0.408532 step=0'; echo 'KVERITAS_METRIC name=phi_taq value=0.847779 step=0') executed on Intel(R) Xeon(R) CPU @ 2.20GHz between 2026-10-12 20:10 and 20:10 UTC. Reported results: phi 0.49631, phi_bam 0.515023, phi_bmq 0.644887, phi_boz 0.426366. 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	34476d77-f82c-4007-9abd-b5ace643eaf3
Initialized	2026-10-12T04:11:51Z
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	86672cb0e21fecf6ef73d2630d63cf211f710fa23b57b5a6b2b05dd0115982cc

2 Runs

#	Command	Duration	Exit	Anchored
1	sh -c echo 'KVERITAS_METRIC name=phi value=...	0.4 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=0.49631 step=0'; echo 'KVERITAS_METRIC name=phi_bam value=0.515023 step=0';

Metric	Final value	Step	Source
phi	0.49631	0	explicit
phi_bam	0.515023	0	explicit
phi_bmq	0.644887	0	explicit
phi_boz	0.426366	0	explicit
phi_dtm	0.572217	0	explicit
phi_ful	0.34976	0	explicit
phi_mey	0.205956	0	explicit
phi_mku	0.49062	0	explicit
phi_kao	0.763131	0	explicit
phi_myk	0.354474	0	explicit
phi_ses	0.440974	0	explicit
phi_spp	0.432305	0	explicit
phi_snk	0.408532	0	explicit
phi_taq	0.847779	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	3	0.0 s	0.00 GB	0%

5 Provenance

Run 1: echo 'KVERITAS_METRIC name=phi value=0.49631 step=0'; echo 'KVERITAS_METRIC name=phi_bam value=0.515023 step=0';

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

#	Snapshot	Time	Root	Changed
0	run_start	20:10:28	065d7f2e04eeb783	27
1	run_end	20:10:28	065d7f2e04eeb783	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	2026-10-12T20:10:33.409194+00:00
Algorithm	RSA-PSS-SHA256, 4096-bit key
Key fingerprint	eeac81653cf44ac029c4069cf2a06d9f
Data hash	f8ab933aaf6092f14eab8b4a8ca77a55314b7f8afc95df541f524c5997dd1804
Code bundle hash	6eeadb91f8931cb0541628154092b687bd754911c29316718007b9cf5380790c

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=0.49631 step=0'; echo 'KVERITAS_METRIC name=phi_bam value=0.5150'

Metric	Value	Step	Line	Source
phi	0.49631	0	1	explicit
phi_bam	0.515023	0	2	explicit
phi_bmq	0.644887	0	3	explicit
phi_boz	0.426366	0	4	explicit
phi_dtm	0.572217	0	5	explicit
phi_ful	0.34976	0	6	explicit
phi_mey	0.205956	0	7	explicit
phi_mku	0.49062	0	8	explicit
phi_kao	0.763131	0	9	explicit
phi_myk	0.354474	0	10	explicit
phi_ses	0.440974	0	11	explicit
phi_spp	0.432305	0	12	explicit
phi_snk	0.408532	0	13	explicit
phi_taq	0.847779	0	14	explicit

B Provenance timeline and activity map

Run 1: echo 'KVERITAS_METRIC name=phi value=0.49631 step=0'; echo 'KVERITAS_METRIC name=phi_bam value=0.5150'

#	Snapshot	Time	Root	Changed
0	run_start	20:10:28	065d7f2e04eeb783	27
1	run_end	20:10:28	065d7f2e04eeb783	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, 0.4 seconds, 14 output lines, started 2026-10-12T20:10:28

metric_hash 806f72f2ecb33fc8ad09099237d1ac7c3a418fd3fd9bc6ca1c791e0a62ec0fb2
run_digest 2af7eaf8b834d6ba9f94de311e92db224997696cb457c88fb719075ba4a5b74a
anchored at run end

D Raw seal fields and hashes

Seal

data_hash f8ab933aaf6092f14eab8b4a8ca77a55314b7f8afc95df541f524c5997dd1804
signed_message_hash b4b885856487e2305e4dbd062d6a5e4fb0a8559e7b4e9cc647d5143dc9fb4e7e
nonce 5def4eff8cc570d6d2770a28fa7b2899
signed_at 2026-10-12T20:10:33.409194+00:00
sealed_at 2026-10-12T20:10:33.459595449Z
checkout_bundle 6eeadb91f8931cb0541628154092b687bd754911c29316718007b9cf5380790c

Signature (base64)

QcownjFURYpiKuA54mEH5J1qhZKg407pAt6Aw02KYsr+jxStbuclCj0xDReghydcC4CTm1Cb1jc6MeG+bGqLJ8Pj
lt844XNF3mV8goVh93x2wHCu5EWom23BGz58Kqk/4HD8pcBlB1jQ0GdBKHLqLXu908AoHY/dK7TIEmm1S74E/RJ1
hkQKo0XiuyAMIW/mxtL79yZfGQmtqPi/Zx7MP8spljqHV+kdJ5nrjMLvAw+Y2pqiyuvaYI46PhWM7Y25w5Cs0TQe
WoLNVdShn1xdw2pQ27pPL4aNat4ubvyoi3xE0nSisxsEn5Qm0lyIC0oJ8e+Q6/68KgWdD2cd+cbXByRb/OQ+zla4
7Vmql8yzxLYvZENTGr9bCUveeDIujLn7wCAsxc0BJ89o/WliTJ6JLH3TWGpm6c1nKl+IdVKq2fthlXr0LDAuqhdA
bbwRWIkB7oUoD80Ba2lhouJ/qJ8ccTzi9MIEJoaznbMN5JZ8C04Jjs7bwcwqMFuNcn8l/tmTNxT61bHPdI3VN5HH
0mMUy5hqmA0Hxd+eSe60thnsxwUgTw1zLa4qGRYehuRypdgnPaLbi77kbmyu3LzhQB7SGQm8VVTTxmbvvQPPLcBI
TK39SYGBTqWsnF3NGL4Am/C6T9RG8LZTy1doumMu+YZFfwrBGceieaRxoCQCt5588s4=

Public key

-----BEGIN PUBLIC KEY-----
MIICIjANBgkqhkiG9w0BAQEFAAACg8AMIICCgKCAgEA1QL3YyMgeShx8IhTC7jb
sM0w2BnRXgsBn3+SMXKjtwHATqdekmlPlcjayJxD5fcPrOPPCqp/LouFz5CUZzRi
6+8FTv70dHuIz5A4LAt4vcgwP+iWscPc3HzpmjpsKbTm0emqgp6RB6GnnPpxYa5X
7qU95EfEisX/GfoS9ToxtqPBWccVWSPBX8efec4TC58m96Fsp4mC8KIcEadbIbHN
av0JjdTJ//CM0WZSIbdzE6qvEbNfcqDB5tNU7oHfYvBenLrvPU9TAqdbtozdHQ+D
AhfTRuJNgWEkjwD5lb0Vhi4qlkweSOEMTKT3ye9Il5xEaJn4bku4eKQeS7VSzt3o
XbUcmr2H5mKcKSvt6bXmX6ajAmgi900Cm9QJlaQkJM6z2iITnyvDMgueJtFxQpC9
HNBPgPZ242NH8JgE6CNF7ToL9syans67u7UMGicNgeNHncY9bLgPU5annzP9gN2l
6HEMldkXNdKQRb1rDwyEJf3N/50YHnXXPmuf5sb8R/pxwNqtf04R5UGVV92qd2Mi
1GN7lE3mbQRbPsLL/JAPDXMNzNikaFFBsQK7iKxr7vIaTeZckFZWfThcYNT7Hasg
+eE4bf/oLCHBCf1VIDcKDxohehdZ0WRRcgM9iK3I/0zZdaBsgdc8WuJRmb8LPP9v
8Jap/1PwjNcNku5cdw3gHLcCAwEAAQ==
-----END PUBLIC KEY-----

Run 1 outputs

stdout 806f72f2ecb33fc8ad09099237d1ac7c3a418fd3fd9bc6ca1c791e0a62ec0fb2
stderr e3b0c44298fc1c149afb4c8996fb92427ae41e4649b934ca495991b7852b855
metrics 806f72f2ecb33fc8ad09099237d1ac7c3a418fd3fd9bc6ca1c791e0a62ec0fb2
digest 2af7eaf8b834d6ba9f94de311e92db224997696cb457c88fb719075ba4a5b74a

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},  
}
```