

Sealed Experiment Record

Sealed 2026-10-11 · Signed by the K-Veritas server
Session e2b6de58 · Data hash 7310...d070

Abstract

This record seals 1 run (echo 'KVERITAS_METRIC name=phi value=0.48328 step=0'; echo 'KVERITAS_METRIC name=phi_bam value=0.515217 step=0'; echo 'KVERITAS_METRIC name=phi_bmq value=0.689472 step=0'; echo 'KVERITAS_METRIC name=phi_boz value=0.325034 step=0'; echo 'KVERITAS_METRIC name=phi_dtm value=0.566503 step=0'; echo 'KVERITAS_METRIC name=phi_ful value=0.324842 step=0'; echo 'KVERITAS_METRIC name=phi_mey value=0.214444 step=0'; echo 'KVERITAS_METRIC name=phi_mku value=0.649702 step=0'; echo 'KVERITAS_METRIC name=phi_kao value=0.870567 step=0'; echo 'KVERITAS_METRIC name=phi_myk value=0.342347 step=0'; echo 'KVERITAS_METRIC name=phi_ses value=0.368177 step=0'; echo 'KVERITAS_METRIC name=phi_spp value=0.328663 step=0'; echo 'KVERITAS_METRIC name=phi_snk value=0.346684 step=0'; echo 'KVERITAS_METRIC name=phi_taq value=0.740981 step=0') executed on Intel(R) Xeon(R) CPU @ 2.20GHz between 2026-10-11 18:33 and 18:33 UTC. Reported results: phi 0.48328, phi_bam 0.515217, phi_bmq 0.689472, phi_boz 0.325034. 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	e2b6de58-7cfb-4981-9c24-e27274c87063
Initialized	2026-10-11T16:19:41Z
Machine	937dd175be8ad753
Operating system	linux / amd64
CPU	Intel(R) Xeon(R) CPU @ 2.20GHz, 4 cores
Memory	15.6 GB
GPU	NVIDIA L4, 23034 MiB
Environment, run 1	0dc3e841c648c09654fd37a16e699308e15bd9b83d69b92b4308ae00333ee99a
Disclosure	open
Source code, run 1	2ee560cfe7fa0df62e0b7651b839241b38a67b77f29e84f94b8cc8342a633a51

2 Runs

#	Command	Duration	Exit	Anchored
1	sh -c echo 'KVERITAS_METRIC name=phi value=...	0.6 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=0.48328 step=0'; echo 'KVERITAS_METRIC name=phi_bam value=0.515217 step=0';

Metric	Final value	Step	Source
phi	0.48328	0	explicit
phi_bam	0.515217	0	explicit
phi_bmq	0.689472	0	explicit
phi_boz	0.325034	0	explicit
phi_dtm	0.566503	0	explicit
phi_ful	0.324842	0	explicit
phi_mey	0.214444	0	explicit
phi_mku	0.649702	0	explicit
phi_kao	0.870567	0	explicit
phi_myk	0.342347	0	explicit
phi_ses	0.368177	0	explicit
phi_spp	0.328663	0	explicit
phi_snk	0.346684	0	explicit
phi_taq	0.740981	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=0.48328 step=0'; echo 'KVERITAS_METRIC name=phi_bam value=0.515217 step=0';

Disclosure open. 30 tracked files, 2 snapshots. Every snapshot is bound into the signature.

#	Snapshot	Time	Root	Changed
0	run_start	18:33:54	3894aac857035e07	30
1	run_end	18:33:54	3894aac857035e07	0

Activity: 30 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	2026-10-11T18:33:56.583467+00:00
Algorithm	RSA-PSS-SHA256, 4096-bit key
Key fingerprint	eeac81653cf44ac029c4069cf2a06d9f
Data hash	73105e4d2253c922bec34d48e64fe1f5df26520f6e822912ba8045a5ad17d070
Code bundle hash	c0a8da50811d44193cb82d21a00bc816bcb92049ee13ce9c1e347b1ebab141ea

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=0.48328 step=0'; echo 'KVERITAS_METRIC name=phi_bam value=0.5152'

Metric	Value	Step	Line	Source
phi	0.48328	0	1	explicit
phi_bam	0.515217	0	2	explicit
phi_bmq	0.689472	0	3	explicit
phi_boz	0.325034	0	4	explicit
phi_dtm	0.566503	0	5	explicit
phi_ful	0.324842	0	6	explicit
phi_mey	0.214444	0	7	explicit
phi_mku	0.649702	0	8	explicit
phi_kao	0.870567	0	9	explicit
phi_myk	0.342347	0	10	explicit
phi_ses	0.368177	0	11	explicit
phi_spp	0.328663	0	12	explicit
phi_snk	0.346684	0	13	explicit
phi_taq	0.740981	0	14	explicit

B Provenance timeline and activity map

Run 1: echo 'KVERITAS_METRIC name=phi value=0.48328 step=0'; echo 'KVERITAS_METRIC name=phi_bam value=0.5152'

#	Snapshot	Time	Root	Changed
0	run_start	18:33:54	3894aac857035e07	30
1	run_end	18:33:54	3894aac857035e07	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	exp/sft_label_report.json	
read	models/adapter_config.json	
read	models/checkpoint-100/adapter_config.json	

Event	Path or command	Hash
read	models/checkpoint-100/tokenizer.json	
read	models/checkpoint-100/tokenizer_config.json	
read	models/checkpoint-100/trainer_state.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	

C Run history

Invocation 1, OK, 0.6 seconds, 14 output lines, started 2026-10-11T18:33:54

metric_hash 3f57492336ba18201236cad64181b6f83d827985380165e12f9f69fc814e984f
run_digest b0d982032ec026779a7f3a2c628b3b2e4d607c9cfba5d12ad2ac6ddaba5b31b4
anchored at run end

D Raw seal fields and hashes

Seal

data_hash 73105e4d2253c922bec34d48e64fe1f5df26520f6e822912ba8045a5ad17d070
signed_message_hash a5885a0752805f6337215f96bb24d60e8de1a1295654689ac4c15ddc1a5d5eed
nonce 568a2fb6abfda6a006468e8ba52aca45
signed_at 2026-10-11T18:33:56.583467+00:00
sealed_at 2026-10-11T18:33:56.622092236Z
checkout_bundle c0a8da50811d44193cb82d21a00bc816bcb92049ee13ce9c1e347b1ebab141ea

Signature (base64)

YIEaqnEMEouoVhhEmIdm7Y10Z5rrSed2Envk51HJop4tBP8ZgkSf+W3KCvk7L20Pm30orAVMZf9sFQCTIq4ub8NI
aOLKMiuwDS0eCk86WmbpAf6ckccNfp/2hE8sgkZHo9eHNN9f0TF0YjuYuCLGtBQ9PT5t9YKpuq4Da7TVpKFHBr5q
d+t8riVKmXUPZ+xzbyJsu7+V+0/6PP0+gKCbqXVpaeS1yma3LJ4eGeUL6tEOqt13l5RxdBB5I+i1LydKajbS8qVu
yIVII6qdH8DqLiSQVzS4cDJbaH+90whNmL70tD2fZJPNEbKjE0w20CcmZ0bD3yu4doCp5lQoYuQGFWYGQl//sNe
L00NMOa4LSpEYwXPvaF6nqLxbbfatZPnvznnCHEM3AYCSVnGU/PT+9ktoF7fKYhQREfb1yZrtYK8obN+IuoNinaZ
VyXLAzv+nfh8ACdpdroZfFaWzcyEIVbxoIJUweQ1NnHqndW0cxfNtX3906vD8Dhtp3TlxqJm5ym7DR+6a/0c/5G7
lpsgdXRZ79/p6KEkt81k8Quw+Mr2Y5//qg3z5B7QHYi2BA0WoDsXQIZCIFmnez9NZemLxB5DhUeC7MQmuHSqq+N
SougQsOgw/ck+iwYeoryYcGtVo0drdMRIEhu1D4HsfYHaDDW1LQ06VV8+v3gxSCM2ac=

Public key

-----BEGIN PUBLIC KEY-----
MIICIjANBgkqhkiG9w0BAQEFAAOCAG8AMIICCGKCAgEA1QL3YyMgeShx8IhTC7jb
sM0w2BnRXgsBn3+SMXKjtwHATqdekm1PlcjayJxXD5fcPrOPPCqp/LoUFz5CUZzRi
6+8FTv70dHuIz5A4Lat4vcgwP+iWscPc3HzpmjpsKbTm0emqgp6RB6GNNpPxYa5X
7qU95EfEisX/GfoS9ToXtqPBwCcVWSPBX8efeC4TC58m96Fsp4mC8KICeadbIbHN
av0JjdTJ//CMOWZSIbdzE6qvEbNFCqDB5tNU7oHfYvBeNLrvPU9TAqdbtozdHQ+D
AhfTRuJNgWEkjwD5lboVhi4qlkweS0EMTKT3ye9I15xEaJn4bku4eKqeS7VSZt3o
XbUcmr2H5mKcKsvt6bXmX6ajAmgi900Cm9QJlaQkJM6z2iITnyvDMgueJtFxQpC9
HNBPgpZ242NH8JgE6CNF7ToL9syasS67u7UMgIcNgeNHNCy9bLgPU5annzP9gN2l
6HEMldkXNdKQRb1rDwyEJf3N/50YHnXXPmuf5sb8R/pxWNqtF04R5UGVV92qd2Mi
1GN7LE3mbQRbPsLL/JapDXMNzNikaFfBsQK7iKxr7vIaTeZckFZWfThcYNT7Hasg
+eE4bf/olCHBCf1VIDCKDxohehdZ0WRRcgM9iK3I/0zZdaBsgdc8WuJRMb8LPP9v
8Jap/1PwjNcNku5cdW3gHLCCAWEAAQ==
-----END PUBLIC KEY-----

Run 1 outputs

```
stdout  3f57492336ba18201236cad64181b6f83d827985380165e12f9f69fc814e984f
stderr  e3b0c44298fc1c149afb4c8996fb92427ae41e4649b934ca495991b7852b855
metrics 3f57492336ba18201236cad64181b6f83d827985380165e12f9f69fc814e984f
digest  b0d982032ec026779a7f3a2c628b3b2e4d607c9cfba5d12ad2ac6ddaba5b31b4
```

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},
}
```