

Sealed Experiment Record

Sealed 2026-10-12 · Signed by the K-Veritas server
Session 4ef5d23f · Data hash 3f61...4682

Abstract

This record seals 1 run (echo 'KVERITAS_METRIC name=phi value=0.514043 step=0'; echo 'KVERITAS_METRIC name=phi_bam value=0.571181 step=0'; echo 'KVERITAS_METRIC name=phi_bmq value=0.76255 step=0'; echo 'KVERITAS_METRIC name=phi_boz value=0.411667 step=0'; echo 'KVERITAS_METRIC name=phi_dtm value=0.699308 step=0'; echo 'KVERITAS_METRIC name=phi_ful value=0.380613 step=0'; echo 'KVERITAS_METRIC name=phi_mey value=0.274569 step=0'; echo 'KVERITAS_METRIC name=phi_mku value=0.414502 step=0'; echo 'KVERITAS_METRIC name=phi_kao value=0.852257 step=0'; echo 'KVERITAS_METRIC name=phi_myk value=0.380295 step=0'; echo 'KVERITAS_METRIC name=phi_ses value=0.364299 step=0'; echo 'KVERITAS_METRIC name=phi_spp value=0.425676 step=0'; echo 'KVERITAS_METRIC name=phi_snk value=0.386128 step=0'; echo 'KVERITAS_METRIC name=phi_taq value=0.759513 step=0') executed on Intel(R) Xeon(R) CPU @ 2.20GHz between 2026-10-12 17:22 and 17:22 UTC. Reported results: phi 0.514043, phi_bam 0.571181, phi_bmq 0.76255, phi_boz 0.411667. 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	4ef5d23f-1fd4-4c33-aba8-977c35bc6cc6
Initialized	2026-10-12T16:46:22Z
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	e4db5a2a5796334903685c518fa0f15b94a989b07b8cc31d2756d50ea50e3315

2 Runs

#	Command	Duration	Exit	Anchored
1	sh -c echo 'KVERITAS_METRIC name=phi value=...	2.2 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=0.514043 step=0'; echo 'KVERITAS_METRIC name=phi_bam value=0.571181 step=0';

Metric	Final value	Step	Source
phi	0.514043	0	explicit
phi_bam	0.571181	0	explicit
phi_bmq	0.76255	0	explicit
phi_boz	0.411667	0	explicit
phi_dtm	0.699308	0	explicit
phi_ful	0.380613	0	explicit
phi_mey	0.274569	0	explicit
phi_mku	0.414502	0	explicit
phi_kao	0.852257	0	explicit
phi_myk	0.380295	0	explicit
phi_ses	0.364299	0	explicit
phi_spp	0.425676	0	explicit
phi_snk	0.386128	0	explicit
phi_taq	0.759513	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	9	0.0 s	0.00 GB	0%

5 Provenance

Run 1: echo 'KVERITAS_METRIC name=phi value=0.514043 step=0'; echo 'KVERITAS_METRIC name=phi_bam value=0.571181 step=0';

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

#	Snapshot	Time	Root	Changed
0	run_start	17:22:08	cfb2d6d504133f85	31
1	run_end	17:22:09	cfb2d6d504133f85	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	2026-10-12T17:22:15.436059+00:00
Algorithm	RSA-PSS-SHA256, 4096-bit key
Key fingerprint	eeac81653cf44ac029c4069cf2a06d9f
Data hash	3f61ddff5e1e1b9cd38e7a5e915b261a69f60f0bf9a63bde6dd54144a1314682
Code bundle hash	31327cd5c82af61685ad4727e37474d5c03ea6c6e7c0c795838d1e5c22ea39d9

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=0.514043 step=0'; echo 'KVERITAS_METRIC name=phi_bam value=0.571

Metric	Value	Step	Line	Source
phi	0.514043	0	1	explicit
phi_bam	0.571181	0	2	explicit
phi_bmq	0.76255	0	3	explicit
phi_boz	0.411667	0	4	explicit
phi_dtm	0.699308	0	5	explicit
phi_ful	0.380613	0	6	explicit
phi_mey	0.274569	0	7	explicit
phi_mku	0.414502	0	8	explicit
phi_kao	0.852257	0	9	explicit
phi_myk	0.380295	0	10	explicit
phi_ses	0.364299	0	11	explicit
phi_spp	0.425676	0	12	explicit
phi_snk	0.386128	0	13	explicit
phi_taq	0.759513	0	14	explicit

B Provenance timeline and activity map

Run 1: echo 'KVERITAS_METRIC name=phi value=0.514043 step=0'; echo 'KVERITAS_METRIC name=phi_bam value=0.571

#	Snapshot	Time	Root	Changed
0	run_start	17:22:08	cfb2d6d504133f85	31
1	run_end	17:22:09	cfb2d6d504133f85	0

Event	Path or command	Hash
read	adapter_config.json	
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	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, 2.2 seconds, 14 output lines, started 2026-10-12T17:22:07

metric_hash 2daec2c66fc139e94c1648111fcdabb4a0726c76719f1d3d13d951c90e4462d63
run_digest 106acc0550a261c315a69c8ecbaadf4c2cb1f8d4ce03598fb6ef5e8e90627a20
anchored at run end

D Raw seal fields and hashes

Seal

data_hash 3f61ddff5e1e1b9cd38e7a5e915b261a69f60f0bf9a63bde6dd54144a1314682
signed_message_hash f370aba07b564b448744141a6a16a8074c786a98b1df510cf9ebd363bb42342f
nonce cd9697dbc92ee94143d9d71421b9ce28
signed_at 2026-10-12T17:22:15.436059+00:00
sealed_at 2026-10-12T17:22:15.48257211Z
checkout_bundle 31327cd5c82af61685ad4727e37474d5c03ea6c6e7c0c795838d1e5c22ea39d9

Signature (base64)

TX1IT3AMP6CWG0w6gSfDgXApD5D5qF5XwwKi661ZoHoAZUgiYZGrWV2HGMDCiQnjXgiEnY5oKpR1JMqadiIhRi/d
2EoHh1L34q9U00NKEefCIYHEWKC8RP1XTydnIae0dtuq8XJ+fLUAAi1Eb+cSq0zA8RHxd9bdI6nnxlrzrmvL/Bi
MxvzLVY5kgH92Iv89JFjlMgeAitWJ9D6PJ/xAWq9pv6isa+cUJoesyGpGXjwW4BqWwLxITBArfnme620mvm6zJGov
ZVYzgGpc97Gx7Fju8HLPryuVGypKpfhZQ/I/C7P6tuM7Sd5+1SGKGKu5r8i09TPfaBkwyHEKd20sLLEWdFZCAfjfZ
IMcc6wAMFtljX4PYVXBP/vT6c3rg9d+EuyTx42Fd7mYXw6jiAGDdsZsBT4Es7eCWMI9dwtixgxRBPbtBHTTT/pBK
Wr14pBFgriRHTLWZ1lxjVw2bNaEKk5Tb1bud/hlhtg7cTG/g5Za5/bx0WxtMgEk93y9+KPwjpaYpz19GwtKL73Fy
CR23AhzXxlKKgFvn20veWqaBa0R4FJQbDxwiybhTF+d1lBd3lEPL20JfeImIRMC3G+0Mi3FHDjsDMbhtWmrYAg
lyAypKmBllFzmvruD2hAs0WwB/NyWdmYa8WYnWIO6rxRzU0cwXn7+y40aC6iFH18AES=

Public key

-----BEGIN PUBLIC KEY-----
MIICIjANBgkqhkiG9w0BAQEFAAOCAg8AMIICCgKCAgEA1QL3YyMgeShx8IhTC7jb
sM0w2BnRXgsBn3+SMXKjtwHATqdekmlPlcjayJxD5fcPrOPPCqp/LoUFz5CUZzRi
6+8FTv70dHuIz5A4Lat4vcgwP+iWscPc3HzpmjpsKbTm0emqgp6RB6GNnPpxYa5X
7qu95EfEisX/GfoS9ToxtgPBwCcVwSPBX8efeC4TC58m96Fsp4mC8KicEadbIbHN
av0JjdTJ//CM0WZSIbdzE6qvEbNFcqDB5tNU7oHfYvBeNLrvPU9TAqdbtozdhQ+D
AhfTRuJNgWEkjWd5lb0Vhi4qlkweSOEMTKT3ye9Il5xEaJn4bku4eKqeSVSZt3o
XbUcmr2H5mKcKsvt6bXmx6ajAmgi900Cm9QJlaQkJM6z2iITnyvDMgueJtFxQpC9
HNBPgPZ242NH8JgE6CNF7ToL9syasS67u7UMgIcNgeNHNCy9bLgPU5annzP9gn2l
6HEmlDkXndKQRb1rDwyEJf3N/50YHnXXPmuf5sb8R/pxWNqtF04R5UGVV92qd2Mi
1GN7lE3mbQRBpSLl/JApDXMNzNikaFfBsQK7iKxr7vIaTeZckFZWfThcYNT7Hasg
+eE4bf/olCHBCf1VIDCkDxohehdZ0WRRcgM9iK3I/0zZdaBsgdc8WuJRmb8LPP9v
8Jap/1PwjNcNku5cdw3gHLCCAwEAAQ==
-----END PUBLIC KEY-----

Run 1 outputs

```
stdout  2daec2c66fc139e94c1648111fcdbb4a0726c76719f1d3d13d951c90e4462d63
stderr  e3b0c44298fc1c149afb4c8996fb92427ae41e4649b934ca495991b7852b855
metrics 2daec2c66fc139e94c1648111fcdbb4a0726c76719f1d3d13d951c90e4462d63
digest  106acc0550a261c315a69c8ecbaadf4c2cb1f8d4ce03598fb6ef5e8e90627a20
```

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},
}
```