

Sealed Experiment Record

Sealed 2026-10-12 · Signed by the K-Veritas server
Session fc040d92 · Data hash 0496...1f54

Abstract

This record seals 1 run (echo 'KVERITAS_METRIC name=phi value=0.500696 step=0'; echo 'KVERITAS_METRIC name=phi_bam value=0.542398 step=0'; echo 'KVERITAS_METRIC name=phi_bmq value=0.722896 step=0'; echo 'KVERITAS_METRIC name=phi_boz value=0.367929 step=0'; echo 'KVERITAS_METRIC name=phi_dtm value=0.576727 step=0'; echo 'KVERITAS_METRIC name=phi_ful value=0.476789 step=0'; echo 'KVERITAS_METRIC name=phi_mey value=0.256 step=0'; echo 'KVERITAS_METRIC name=phi_mku value=0.428211 step=0'; echo 'KVERITAS_METRIC name=phi_kao value=0.807126 step=0'; echo 'KVERITAS_METRIC name=phi_myk value=0.403434 step=0'; echo 'KVERITAS_METRIC name=phi_ses value=0.364965 step=0'; echo 'KVERITAS_METRIC name=phi_spp value=0.364618 step=0'; echo 'KVERITAS_METRIC name=phi_snk value=0.468311 step=0'; echo 'KVERITAS_METRIC name=phi_taq value=0.72964 step=0') executed on Intel(R) Xeon(R) CPU @ 2.20GHz between 2026-10-12 23:33 and 23:33 UTC. Reported results: phi 0.500696, phi_bam 0.542398, phi_bmq 0.722896, phi_boz 0.367929. 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	fc040d92-d12b-4b1c-aa77-e8bfd18869f5
Initialized	2026-10-12T04:24:39Z
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	a25393df17365c60d58fba50dbcd68ed9a76d731f752aaf7fb47b2b3829b602a
Disclosure	open
Source code, run 1	4c9693da57d890e80ea81e7977caa70b3b2b93932a97fe44d4407f1e9224b13f

2 Runs

#	Command	Duration	Exit	Anchored
1	sh -c echo 'KVERITAS_METRIC name=phi value=...	1.8 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=0.500696 step=0'; echo 'KVERITAS_METRIC name=phi_bam value=0.542398 step=0';

Metric	Final value	Step	Source
phi	0.500696	0	explicit
phi_bam	0.542398	0	explicit
phi_bmq	0.722896	0	explicit
phi_boz	0.367929	0	explicit
phi_dtm	0.576727	0	explicit
phi_ful	0.476789	0	explicit
phi_mey	0.256	0	explicit
phi_mku	0.428211	0	explicit
phi_kao	0.807126	0	explicit
phi_myk	0.403434	0	explicit
phi_ses	0.364965	0	explicit
phi_spp	0.364618	0	explicit
phi_snk	0.468311	0	explicit
phi_taq	0.72964	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	8	0.0 s	0.00 GB	0%

5 Provenance

Run 1: echo 'KVERITAS_METRIC name=phi value=0.500696 step=0'; echo 'KVERITAS_METRIC name=phi_bam value=0.542398 step=0';

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

#	Snapshot	Time	Root	Changed
0	run_start	23:33:10	37b30c269f352d3c	27
1	run_end	23:33:11	37b30c269f352d3c	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	2026-10-12T23:33:17.407290+00:00
Algorithm	RSA-PSS-SHA256, 4096-bit key
Key fingerprint	eeac81653cf44ac029c4069cf2a06d9f
Data hash	04966a415717e46f20dfd9742613c7f1a73a81fed2196af672409a2c554a1f54
Code bundle hash	54bfccd0bcc3b2c671c45dd223d7793bc649d6fd3b25937616f74fbd0e1c309e

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=0.500696 step=0'; echo 'KVERITAS_METRIC name=phi_bam value=0.542398'

Metric	Value	Step	Line	Source
phi	0.500696	0	1	explicit
phi_bam	0.542398	0	2	explicit
phi_bmq	0.722896	0	3	explicit
phi_boz	0.367929	0	4	explicit
phi_dtm	0.576727	0	5	explicit
phi_ful	0.476789	0	6	explicit
phi_mey	0.256	0	7	explicit
phi_mku	0.428211	0	8	explicit
phi_kao	0.807126	0	9	explicit
phi_myk	0.403434	0	10	explicit
phi_ses	0.364965	0	11	explicit
phi_spp	0.364618	0	12	explicit
phi_snk	0.468311	0	13	explicit
phi_taq	0.72964	0	14	explicit

B Provenance timeline and activity map

Run 1: echo 'KVERITAS_METRIC name=phi value=0.500696 step=0'; echo 'KVERITAS_METRIC name=phi_bam value=0.542398'

#	Snapshot	Time	Root	Changed
0	run_start	23:33:10	37b30c269f352d3c	27
1	run_end	23:33:11	37b30c269f352d3c	0

Event	Path or command	Hash
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	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, 1.8 seconds, 14 output lines, started 2026-10-12T23:33:10

metric_hash 2070386da546b8aac7cc867b1f6dc55ef22786dd1ea3108575ff234c753762a1
run_digest 0b10d2c86e1d9faf040d884a7abd692d31f3903a04acf9480946771eddc2208
anchored at run end

D Raw seal fields and hashes

Seal

data_hash 04966a415717e46f20dfd9742613c7f1a73a81fed2196af672409a2c554a1f54
signed_message_hash f623a55583e5919c997dcbff7a9bc1f39ff20f69fb589859d5cc0e8d599ac653
nonce 2029bd3d3962ef8f7861921c8a5e9d01
signed_at 2026-10-12T23:33:17.407290+00:00
sealed_at 2026-10-12T23:33:17.450237145Z
checkout_bundle 54bfccd0bcc3b2c671c45dd223d7793bc649d6fd3b25937616f74fbd0e1c309e

Signature (base64)

LY2radRbPFL6D3maTtkfcThm2KZeb1CktEsEFJ3zeBC9h7efHyg+0PrZICGr55L0EQEYzsymTFCHh0ZLbqVUD/gO
M5FiY+B0xLZ2cs9Ucy8o2HABx6mgKkGcdZu0L79Pwi1N3m0E91TgJmY6FmZUVu0uhzTwwpX2S92D5ax3M6w58sHT
m/sQ3lsha8Yjs/T6GZgKhTZSU7Zz9rYE4R6f6Muc+Izw2V7vPsCdeanL3vCKsQsREmxjSq6xUJd+/5/C86MLzrc2
gHNeWONjc2A861NvU81HJujKkoLmsNe8aryXNkSah40Rmo6G0syDBflmb+iznlz82vsRKYCdoFNLDNytJi1x6J
047Ga0ouvxoWiUTYlVQUumCj4Smny3VnZAxkFb7I1h4hftjL5In1WsVzfJz5v0u412uNOUQwDbau4ofp+QVI75RA
JEfPb8K4aP517ifeJrImh0PbgSDgVoX3if1x0UVn016qmtJQwIquukEMQNc+3bB9EQ10QT0VM3wFbGaRUU0x9cHh
/ednCmg3HEyP/BJB27xuisl6BIrxTfd20Fhs/kwQuEPCIKx0M9AX4rw5L/g0uOt0/74/gpW3fv7cma0A2IhaI7n4
qIBWm+dBMH1GwUTpbv6SfYv+U+tQWKR4vGz0AjJOLl8MxPdXaEj6Vawj2g6BvpurZ/4=

Public key

-----BEGIN PUBLIC KEY-----
MIICIjANBgkqhkiG9w0BAQEFAAACg8AMIICCgKCAgEA1QL3YyMgeShx8IhTC7jb
sM0w2BnRXgsBn3+SMXKjtwHATqdekmlPlcjayJxD5fcPrOPPCqp/LouFz5CUZzRi
6+8FTv70dHuIz5A4LAt4vcgwP+iWscPc3HzpmjpsKbTm0emqgp6RB6GnnPpxYa5X
7qU95EfEisX/GfoS9ToxtqPBWccVWSPBX8efec4TC58m96Fsp4mC8KICeadbIbHN
av0JjdTJ//CM0WZSIbZdE6qvEbNfcqDB5tNU7oHfYvBenLrvPU9TAqdbtozdHQ+D
AhfTRuJNgWEkjwD5lb0Vhi4qlkweSOEMTKT3ye9Il5xEaJn4bku4eKQeS7VSZt3o
XbUcmr2H5mKcKSvt6bXmX6ajAmgi900Cm9QJlaQkJM6z2iITnyvDMgueJtFxQpC9
HNBPgPZ242NH8JgE6CNF7ToL9syasS67u7UMGicNgeNHNCy9bLgPU5annzP9gN2l
6HEMldkXNdKQRb1rDwyEJf3N/50YHnXXPmuf5sb8R/pxwNqtf04R5UGVV92qd2Mi
1GN7lE3mbQRbPsLL/JAPDXMNZNikaFFBsQK7iKxr7vIaTeZckFZWfThcYNT7Hasg
+eE4bf/olCHBCF1VIDCKDxohehdZ0WRRcgM9iK3I/0zZdaBsgdc8WuJRmb8LPP9v
8Jap/1PWjNcNku5cdW3gHLcCAwEAAQ==
-----END PUBLIC KEY-----

Run 1 outputs

stdout 2070386da546b8aac7cc867b1f6dc55ef22786dd1ea3108575ff234c753762a1
stderr e3b0c44298fc1c149afbfc4c8996fb92427ae41e4649b934ca495991b7852b855
metrics 2070386da546b8aac7cc867b1f6dc55ef22786dd1ea3108575ff234c753762a1
digest 0b10d2c86e1d9faf040d884a7abd692d31f3903a04acf9480946771eddc2208

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},  
}
```