

Sealed Experiment Record

Sealed 2026-10-12 · Signed by the K-Veritas server
Session 3dd7d283 · Data hash 13cc...52d1

Abstract

This record seals 1 run (echo 'KVERITAS_METRIC name=phi value=0.490894 step=0'; echo 'KVERITAS_METRIC name=phi_bam value=0.531287 step=0'; echo 'KVERITAS_METRIC name=phi_bmq value=0.716173 step=0'; echo 'KVERITAS_METRIC name=phi_boz value=0.366731 step=0'; echo 'KVERITAS_METRIC name=phi_dtm value=0.580731 step=0'; echo 'KVERITAS_METRIC name=phi_ful value=0.469334 step=0'; echo 'KVERITAS_METRIC name=phi_mey value=0.25935 step=0'; echo 'KVERITAS_METRIC name=phi_mku value=0.459184 step=0'; echo 'KVERITAS_METRIC name=phi_kao value=0.777122 step=0'; echo 'KVERITAS_METRIC name=phi_myk value=0.359593 step=0'; echo 'KVERITAS_METRIC name=phi_ses value=0.380133 step=0'; echo 'KVERITAS_METRIC name=phi_spp value=0.365613 step=0'; echo 'KVERITAS_METRIC name=phi_snk value=0.42287 step=0'; echo 'KVERITAS_METRIC name=phi_taq value=0.693508 step=0') executed on Intel(R) Xeon(R) CPU @ 2.20GHz between 2026-10-12 22:41 and 22:41 UTC. Reported results: phi 0.490894, phi_bam 0.531287, phi_bmq 0.716173, phi_boz 0.366731. 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	3dd7d283-31a7-4a54-b71c-f79b0c74e72b
Initialized	2026-10-12T04:21:17Z
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	35e671b5be5eb5cdedb5c655c51f09312208663c58721376860636a9f2396cef

2 Runs

#	Command	Duration	Exit	Anchored
1	sh -c echo 'KVERITAS_METRIC name=phi value=...	1.9 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=0.490894 step=0'; echo 'KVERITAS_METRIC name=phi_bam value=0.531

Metric	Final value	Step	Source
phi	0.490894	0	explicit
phi_bam	0.531287	0	explicit
phi_bmq	0.716173	0	explicit
phi_boz	0.366731	0	explicit
phi_dtm	0.580731	0	explicit
phi_ful	0.469334	0	explicit
phi_mey	0.25935	0	explicit
phi_mku	0.459184	0	explicit
phi_kao	0.777122	0	explicit
phi_myk	0.359593	0	explicit
phi_ses	0.380133	0	explicit
phi_spp	0.365613	0	explicit
phi_snk	0.42287	0	explicit
phi_taq	0.693508	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=0.490894 step=0'; echo 'KVERITAS_METRIC name=phi_bam value=0.531

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

#	Snapshot	Time	Root	Changed
0	run_start	22:41:26	9fa3fcad214d492c	27
1	run_end	22:41:26	9fa3fcad214d492c	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	2026-10-12T22:41:33.880396+00:00
Algorithm	RSA-PSS-SHA256, 4096-bit key
Key fingerprint	eeac81653cf44ac029c4069cf2a06d9f
Data hash	13ccb04c72f4dd55b2c3da9c9cef6a29a86c36df53449d5298a80701d3cd52d1
Code bundle hash	4f29186b5eaf7337f3ada815ac99e3b68143bdba070d3c0201df1873ac0817ad

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=0.490894 step=0'; echo 'KVERITAS_METRIC name=phi_bam value=0.531

Metric	Value	Step	Line	Source
phi	0.490894	0	1	explicit
phi_bam	0.531287	0	2	explicit
phi_bmq	0.716173	0	3	explicit
phi_boz	0.366731	0	4	explicit
phi_dtm	0.580731	0	5	explicit
phi_ful	0.469334	0	6	explicit
phi_mey	0.25935	0	7	explicit
phi_mku	0.459184	0	8	explicit
phi_kao	0.777122	0	9	explicit
phi_myk	0.359593	0	10	explicit
phi_ses	0.380133	0	11	explicit
phi_spp	0.365613	0	12	explicit
phi_snk	0.42287	0	13	explicit
phi_taq	0.693508	0	14	explicit

B Provenance timeline and activity map

Run 1: echo 'KVERITAS_METRIC name=phi value=0.490894 step=0'; echo 'KVERITAS_METRIC name=phi_bam value=0.531

#	Snapshot	Time	Root	Changed
0	run_start	22:41:26	9fa3fcad214d492c	27
1	run_end	22:41:26	9fa3fcad214d492c	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, 1.9 seconds, 14 output lines, started 2026-10-12T22:41:25

```
metric_hash 0b435d1805b6064d50bad7294c38d9d26a14efd33ec0afd1829c3c11945ade5a
run_digest  4afdec998615f0619f7c3cb1a47624de3f6f233791a80ad36abf3ebbf6173123
anchored    at run end
```

D Raw seal fields and hashes

Seal

```
data_hash      13ccb04c72f4dd55b2c3da9c9cef6a29a86c36df53449d5298a80701d3cd52d1
signed_message_hash d10e42733aec0f30382b568353da20d92d42d917c073157ad3d8fac5566d6f86
nonce          792cd0a1dcc29f684307e55fde48d2f5
signed_at      2026-10-12T22:41:33.880396+00:00
sealed_at      2026-10-12T22:41:33.925329991Z
checkout_bundle 4f29186b5eaf7337f3ada815ac99e3b68143bdba070d3c0201df1873ac0817ad
```

Signature (base64)

```
KT0LDxCHG52CAZDhKixs2YDbBoVpCgrCBv3XPAU+5883/92IcWl0Ml05QhuYdqHkrwvflMg8RG4nZW/YSG1i10jq
k9gk9g/GwxZ6MCuDRUQabmX64gvc+1COZt/08yOYCjj20vSwyGmC5oWndjOyfUEC2PiRULgERYINj6h0/wsr0X/M
YF5uCJWMz5DyJ34liehZK40HxjWdKr9fr7ztDEMewoJHp1pJBz5d3HzuvI4dmu5EF9AkEMIEcZjmZY2EDCe24zzm
X8PFGQi+C2NVJR35qu0qHOMh3iFExbdK42RuV3MmJQims/o49W78V0B5Yzv/QLxNYjPBDISxrVmIZ7c/wyvp0b2P
EzPogFrCqrjDySVKBNXDxRZkyoCqNJeJwYpajOA+AUirz3MxaAjcI0I1l1TNp1HrP633kQfDMzaGwJ0xPy5E0wNl
h1d5bDj1mHswIMBSa6WwrA5/XNc3opY8NRS5BYWjyeUAPSSzLJPJvhLbfR0F0x8jRPuol6n45iVbrXVYHMFsqKdG
5GfTzax0sR+zZUhgTjgBrBdwDfVoQVmu7JCUXPagy09nVEaSaCAfHWXDXfAoi28Im67PIITvDB4Jca4wpC3UIiS
FuQBpfrMQE4C6E4FuSiYhpnPbvp20Vx9a1DbYx3GKCz4XfyfP6XVh8B7qGuASzbAPrw=
```

Public key

```
-----BEGIN PUBLIC KEY-----
MIICIjANBgkqhkiG9w0BAQEFAAACg8AMIICCgKCAgEA1QL3YyMgeShx8IhTC7jb
sM0w2BnRXgsBn3+SMXKjtwHATqdekmlPlcjayJxD5fcPrOPPCqp/LouFz5CUZzRi
6+8FTv70dHuIz5A4LAT4vcgwP+iWscPc3HzpmjpsKbTmOemqgp6RB6GnnPpxYa5X
7qU95EfEisX/GfoS9ToxtqPBWccVWSPBX8efec4TC58m96Fsp4mC8KIcEadbIbHN
av0JjdTJ//CM0WZSIbdzE6qvEbNfcqDB5tNU7oHfYvBenLrvPU9TAqdbtozdHQ+D
AhfTRuJNgWEkjWd5lb0Vhi4qlkweSOEMTKT3ye9Il5xEaJn4bku4eKQeS7VSzt3o
XbUcmr2H5mKcKSvt6bXmX6ajAmgi900Cm9QJlaQkJM6z2iITnyvDMgueJtFxQpC9
HNBPgPZ242NH8JgE6CNF7ToL9syasS67u7UMGicNgeNHNCy9bLgPU5annzP9gN2l
6HEMldkXNdKQRb1rDwyEJf3N/50YHnXXPmuf5sb8R/pxwNqtf04R5UGVV92qd2Mi
1GN7lE3mbQRbPsLL/JApDXMNzNikaFFBsQK7iKxr7vIaTeZckFZWfThcYNT7Hasg
+eE4bf/oLCHBCF1VIDCKDxohehdZ0WRRcgM9iK3I/0zZdaBsgdc8WuJRmb8LPP9v
8Jap/1PWjNcNku5cdW3gHLcCAwEAAQ==
-----END PUBLIC KEY-----
```

Run 1 outputs

```
stdout 0b435d1805b6064d50bad7294c38d9d26a14efd33ec0afd1829c3c11945ade5a
stderr e3b0c44298fc1c149afbfc4c8996fb92427ae41e4649b934ca495991b7852b855
metrics 0b435d1805b6064d50bad7294c38d9d26a14efd33ec0afd1829c3c11945ade5a
digest 4afdec998615f0619f7c3cb1a47624de3f6f233791a80ad36abf3ebbf6173123
```

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},  
}
```