

Sealed Experiment Record

Sealed 2026-10-11 · Signed by the K-Veritas server
Session 6f53e0e1 · Data hash c3c1...7434

Abstract

This record seals 1 run (echo 'KVERITAS_METRIC name=phi value=0.804974 step=0'; echo 'KVERITAS_METRIC name=phi_bam value=0.823658 step=0'; echo 'KVERITAS_METRIC name=phi_bmq value=0.695688 step=0'; echo 'KVERITAS_METRIC name=phi_boz value=0.892011 step=0'; echo 'KVERITAS_METRIC name=phi_dtm value=0.758926 step=0'; echo 'KVERITAS_METRIC name=phi_ful value=0.974206 step=0'; echo 'KVERITAS_METRIC name=phi_mey value=0.768726 step=0'; echo 'KVERITAS_METRIC name=phi_mku value=0.884478 step=0'; echo 'KVERITAS_METRIC name=phi_kao value=0.970238 step=0'; echo 'KVERITAS_METRIC name=phi_myk value=0.763677 step=0'; echo 'KVERITAS_METRIC name=phi_ses value=0.806021 step=0'; echo 'KVERITAS_METRIC name=phi_spp value=0.496919 step=0'; echo 'KVERITAS_METRIC name=phi_snk value=0.781673 step=0'; echo 'KVERITAS_METRIC name=phi_taq value=0.84844 step=0') executed on Intel(R) Xeon(R) CPU @ 2.20GHz between 2026-10-11 13:11 and 13:11 UTC. Reported results: phi 0.804974, phi_bam 0.823658, phi_bmq 0.695688, phi_boz 0.892011. 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	6f53e0e1-c028-4b88-a050-19fe1eee918d
Initialized	2026-10-11T12:36:51Z
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	8e35946d3a1c45d60d7734d581c5942871b295e221c014ccfb5aa2b9634efd54
Disclosure	open
Source code, run 1	3bfe6083ec1a9b89424ded1ca8768c83c18c097018ce8ae9a158500fce27ebff

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=0.804974 step=0'; echo 'KVERITAS_METRIC name=phi_bam value=0.823

Metric	Final value	Step	Source
phi	0.804974	0	explicit
phi_bam	0.823658	0	explicit
phi_bmq	0.695688	0	explicit
phi_boz	0.892011	0	explicit
phi_dtm	0.758926	0	explicit
phi_ful	0.974206	0	explicit
phi_mey	0.768726	0	explicit
phi_mku	0.884478	0	explicit
phi_kao	0.970238	0	explicit
phi_myk	0.763677	0	explicit
phi_ses	0.806021	0	explicit
phi_spp	0.496919	0	explicit
phi_snk	0.781673	0	explicit
phi_taq	0.84844	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=0.804974 step=0'; echo 'KVERITAS_METRIC name=phi_bam value=0.823

Disclosure open. 32 tracked files, 2 snapshots. Every snapshot is bound into the signature.

#	Snapshot	Time	Root	Changed
0	run_start	13:11:45	ccdc918c6ba5506f	32
1	run_end	13:11:45	ccdc918c6ba5506f	0

Activity: 32 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	2026-10-11T13:11:47.141784+00:00
Algorithm	RSA-PSS-SHA256, 4096-bit key
Key fingerprint	eeac81653cf44ac029c4069cf2a06d9f
Data hash	c3c1591a3c896b5a7c709d829e420b93c2d6a32d85a2459a174922e771be7434
Code bundle hash	e412a902153d43eedde941b3922070553e6a64fde95ed9ade7ceb40eaf624280

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=0.804974 step=0'; echo 'KVERITAS_METRIC name=phi_bam value=0.823

Metric	Value	Step	Line	Source
phi	0.804974	0	1	explicit
phi_bam	0.823658	0	2	explicit
phi_bmq	0.695688	0	3	explicit
phi_boz	0.892011	0	4	explicit
phi_dtm	0.758926	0	5	explicit
phi_ful	0.974206	0	6	explicit
phi_mey	0.768726	0	7	explicit
phi_mku	0.884478	0	8	explicit
phi_kao	0.970238	0	9	explicit
phi_myk	0.763677	0	10	explicit
phi_ses	0.806021	0	11	explicit
phi_spp	0.496919	0	12	explicit
phi_snk	0.781673	0	13	explicit
phi_taq	0.84844	0	14	explicit

B Provenance timeline and activity map

Run 1: echo 'KVERITAS_METRIC name=phi value=0.804974 step=0'; echo 'KVERITAS_METRIC name=phi_bam value=0.823

#	Snapshot	Time	Root	Changed
0	run_start	13:11:45	ccdc918c6ba5506f	32
1	run_end	13:11:45	ccdc918c6ba5506f	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-100/adapter_config.json	
read	models/checkpoint-100/ref/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/ref/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/ref/adapter_config.json	
read	models/safety_snapshot.json	
read	models/tokenizer.json	
read	models/tokenizer_config.json	

C Run history

Invocation 1, OK, 0.6 seconds, 14 output lines, started 2026-10-11T13:11:45

```
metric_hash 68c1d6075af4042f7f17eaf1c76880d8d58142aa2f0f2a2c1aa909223b73e351
run_digest  5d25ba12114104121fd9410fb1b01b8210535048f321e1b5f4042ae1e586d552
anchored    at run end
```

D Raw seal fields and hashes

Seal

```
data_hash          c3c1591a3c896b5a7c709d829e420b93c2d6a32d85a2459a174922e771be7434
signed_message_hash 163f9b03e6fd8ad3364b38cfd5913ccf581f9b6ae5b9e3c5a9be87f02b7e0dde
nonce             bfbbc7fa40ce3e5756bf5c6a7ae4ddb
signed_at         2026-10-11T13:11:47.141784+00:00
sealed_at         2026-10-11T13:11:47.173422512Z
checkout_bundle   e412a902153d43eedde941b3922070553e6a64fde95ed9ade7ceb40eaf624280
```

Signature (base64)

```
eNTuLEGqyE9M/K14Q9a1DzUlkHH2ArLCyeXULQ3WJ2tas7qq6XF1ChAimPxb1eX9IjL+T/hnrGvRgp8xuxawcT+o
S/0m0dazp4yqCt+PwDgG9my5PMFvFszzt4Y/kLYnnomi1wCt/tnfXEFzqW1BMzojWjFULzwsOefA9gE67mnt5RA
3hQ0bmJta2M8AdZmvaZho/EwyfMgLvpxfbWtDGkvHQcubBa3H+1+/jtUg7jxP/c/PgewKkFvShqiXKCjyUGkL8m
1dkN91+3FbX6y5dwI0I2adIgl8JqLcb00nyLuArNd5nUXQAI5smrg0C7HGNQdlpJ+Fif2MK0/1PjZhdKjDptbX0
KYyK34KG18z7JGsJtd0nZKzPtTt1qeKRLqyFGFTrfGY40lMaX7Yd3/yUJfTyPB0HTqm0Vbl8QjXgj2Aei3YT9Yt+
myfWYOkRXE+9oi90NgbLJNMCQCTPCBZl0ztFR71zuKemYb8Mh/e998ZymBMsNiH702/XKQspAvRTeAMCuU79TWay
ZVhYzstdYnh22sLSmtsSP06r8h4A89LuXoDqDU81ig/8cUnpl/k3dpGcFdiqQw15KQTPWxxXmqu+mn8LOZmGJ8o
Wrr8Ngp7j+2qurmIbk4Lq80a8f+Hrw7FQ/zA90w6LzfdyXMTVYZ/68eBVUrTbCLHikk=
```

Public key

```
-----BEGIN PUBLIC KEY-----
MIICIjANBgkqhkiG9w0BAQEFAAOCAg8AMIICCgKCAgEA1QL3YyMgeShx8IhTC7jb
sM0w2BnRXgsBn3+SMXKjtwHATqdekmlPlcjayJxD5fcPrOPPCqp/LoUFz5CUZzRi
6+8FTv70dHuIz5A4Lat4vcgwP+iWscPc3HzpmjpsKbTm0emqgp6RB6GNNPpxYa5X
7qU95EfEisX/GfoS9ToxtqPBwCcVwSPBX8efec4TC58m96Fsp4mC8KIcEadbIbHN
av0JjdTJ//CM0WZSIbdzE6qvEbNfCqDB5tNU7oHfYvBeNLrvPU9TAqdbtozdHQ+D
AhfTRuJNgWekjWd5lb0Vhi4qlkweSOEMTKT3ye9I1LxEaJn4bku4eKqes7VSZt3o
XbUcmr2H5mKcKsvt6bXmX6ajAmgi900Cm9QJlaQkJM6z2iITnyvDMgueJtFxQpC9
HNBPgPZ242NH8JgE6CNF7ToL9syasS67u7UMgIcNgeNHnCy9bLgPU5annzP9gN2l
6HEMldkXNdKQRb1rDwyEJf3N/50YHnXXPmuf5sb8R/pxWNqtF04R5UGVV92qd2Mi
1GN7lE3mbQRbPsLL/JApDXMNzNikaFbSgK7iKxr7vIaTeZckFZwfThcYNT7Hasg
+eE4bf/olCHBCF1VIDCkDxohehdZ0WRRcgM9iK3I/0zZdaBsgdc8WuJRmb8LPP9v
8Jap/1PwjNcNku5cdw3gHLcCAwEAAQ==
-----END PUBLIC KEY-----
```

Run 1 outputs

```
stdout  68c1d6075af4042f7f17eaf1c76880d8d58142aa2f0f2a2c1aa909223b73e351
stderr  e3b0c44298fc1c149afb4c8996fb92427ae41e4649b934ca495991b7852b855
metrics 68c1d6075af4042f7f17eaf1c76880d8d58142aa2f0f2a2c1aa909223b73e351
digest  5d25ba12114104121fd9410fb1b01b8210535048f321e1b5f4042ae1e586d552
```

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},
}
```