

Sealed Experiment Record

Sealed 2026-10-12 · Signed by the K-Veritas server
Session 9fd690f4 · Data hash fc81...ae79

Abstract

This record seals 1 run (echo 'KVERITAS_METRIC name=phi value=0.439655 step=0'; echo 'KVERITAS_METRIC name=phi_bam value=0.460386 step=0'; echo 'KVERITAS_METRIC name=phi_bmq value=0.737672 step=0'; echo 'KVERITAS_METRIC name=phi_boz value=0.439545 step=0'; echo 'KVERITAS_METRIC name=phi_dtm value=0.517174 step=0'; echo 'KVERITAS_METRIC name=phi_ful value=0.372382 step=0'; echo 'KVERITAS_METRIC name=phi_mey value=0.23003 step=0'; echo 'KVERITAS_METRIC name=phi_mku value=0.212097 step=0'; echo 'KVERITAS_METRIC name=phi_kao value=0.842144 step=0'; echo 'KVERITAS_METRIC name=phi_myk value=0.304299 step=0'; echo 'KVERITAS_METRIC name=phi_ses value=0.232788 step=0'; echo 'KVERITAS_METRIC name=phi_spp value=0.384497 step=0'; echo 'KVERITAS_METRIC name=phi_snk value=0.315231 step=0'; echo 'KVERITAS_METRIC name=phi_taq value=0.667272 step=0') executed on Intel(R) Xeon(R) CPU @ 2.20GHz between 2026-10-12 16:10 and 16:10 UTC. Reported results: phi 0.439655, phi_bam 0.460386, phi_bmq 0.737672, phi_boz 0.439545. 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	9fd690f4-302e-46dd-9f50-4e985d4521a6
Initialized	2026-10-12T15:36:13Z
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	a46ba9614adeade9fcc501abed2c650834be91a01bfb9a0f0008e1acf31b747b

2 Runs

#	Command	Duration	Exit	Anchored
1	sh -c echo 'KVERITAS_METRIC name=phi value=...	0.5 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=0.439655 step=0'; echo 'KVERITAS_METRIC name=phi_bam value=0.460386 step=0';

Metric	Final value	Step	Source
phi	0.439655	0	explicit
phi_bam	0.460386	0	explicit
phi_bmq	0.737672	0	explicit
phi_boz	0.439545	0	explicit
phi_dtm	0.517174	0	explicit
phi_ful	0.372382	0	explicit
phi_mey	0.23003	0	explicit
phi_mku	0.212097	0	explicit
phi_kao	0.842144	0	explicit
phi_myk	0.304299	0	explicit
phi_ses	0.232788	0	explicit
phi_spp	0.384497	0	explicit
phi_snk	0.315231	0	explicit
phi_taq	0.667272	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=0.439655 step=0'; echo 'KVERITAS_METRIC name=phi_bam value=0.460386 step=0';

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

#	Snapshot	Time	Root	Changed
0	run_start	16:10:50	5dd4a51f8ea3ee7a	32
1	run_end	16:10:50	5dd4a51f8ea3ee7a	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	2026-10-12T16:10:54.657572+00:00
Algorithm	RSA-PSS-SHA256, 4096-bit key
Key fingerprint	eeac81653cf44ac029c4069cf2a06d9f
Data hash	fc816fad926bc175c5e36204931fdc87c2569dc6c97e48ba97eeb2fd32ceae79
Code bundle hash	9b85cb69d6db2bfd1f64156054eda14d34c3a664360fdb5dc3b02b6355c85b98

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=0.439655 step=0'; echo 'KVERITAS_METRIC name=phi_bam value=0.460386'

Metric	Value	Step	Line	Source
phi	0.439655	0	1	explicit
phi_bam	0.460386	0	2	explicit
phi_bmq	0.737672	0	3	explicit
phi_boz	0.439545	0	4	explicit
phi_dtm	0.517174	0	5	explicit
phi_ful	0.372382	0	6	explicit
phi_mey	0.23003	0	7	explicit
phi_mku	0.212097	0	8	explicit
phi_kao	0.842144	0	9	explicit
phi_myk	0.304299	0	10	explicit
phi_ses	0.232788	0	11	explicit
phi_spp	0.384497	0	12	explicit
phi_snk	0.315231	0	13	explicit
phi_taq	0.667272	0	14	explicit

B Provenance timeline and activity map

Run 1: echo 'KVERITAS_METRIC name=phi value=0.439655 step=0'; echo 'KVERITAS_METRIC name=phi_bam value=0.460386'

#	Snapshot	Time	Root	Changed
0	run_start	16:10:50	5dd4a51f8ea3ee7a	32
1	run_end	16:10:50	5dd4a51f8ea3ee7a	0

Event	Path or command	Hash
read	adapter_config.json	
read	config.yaml	
read	data/resources/bam/ashes.json	
read	data/resources/bmq/ashes.json	
read	data/resources/boz/ashes.json	
read	data/resources/dtm/ashes.json	
read	data/resources/frozen.json	
read	data/resources/ful/ashes.json	
read	data/resources/kao/ashes.json	
read	data/resources/mey/ashes.json	
read	data/resources/mku/ashes.json	
read	data/resources/myk/ashes.json	
read	data/resources/ses/ashes.json	
read	data/resources/snk/ashes.json	
read	data/resources/spp/ashes.json	
read	data/resources/taq/ashes.json	
read	exp/eval.json	
read	exp/manifest.json	
read	kveritas_report.pdf.provkey.json	
read	models/adapter_config.json	

Event	Path or command	Hash
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	
read	safety_snapshot.json	
read	tokenizer.json	
read	tokenizer_config.json	

C Run history

Invocation 1, OK, 0.5 seconds, 14 output lines, started 2026-10-12T16:10:49

metric_hash 87dcd079ddf4d5ba2ca79b8f9fec3d798f6235123cdf3be1a53125a00f4f24a
run_digest 97663519d60c711b645ed506e011cdceddc7aa881013a5a7d6750787dbaeb9ba
anchored at run end

D Raw seal fields and hashes

Seal

data_hash f816fad926bc175c5e36204931fdc87c2569dc6c97e48ba97eeb2fd32ceae79
signed_message_hash fb19b2f3ec42a8a3ffa3e6256a5d935c96d727da436ed03281eeab19988cf950
nonce a897563bde3e28cd14932b8d4f776ff3
signed_at 2026-10-12T16:10:54.657572+00:00
sealed_at 2026-10-12T16:10:54.704267092Z
checkout_bundle 9b85cb69d6db2bfdf1f64156054eda14d34c3a664360fdb5dc3b02b6355c85b98

Signature (base64)

ca+Hj8bqwaNj+43j4vZygGXf+l6uKU0kkYeQqKeAF4Bu6oSZoH6MUsV2gdNQP2f+taoaaXggwz5IPs3IpA80I5Lh
vPanvJC3eC212JUuQvGgT04QMqxV8yiaHDuuv2MGtdCl/fk4K8ZFbLAqKxsvqJarMWVnDzha9sZ4q23cMtubT5ka
fLLD04evSky7838U8ZCxPkLfYSCP9gens0BnHyEnnwyJUenF52Nvj4EuHZWUn9n62KEpgvaFC3k0eJGoBX7YbDbt
QIcqvZ6JAQXU9VSs/L5QI5DZCpIxEG4Yt8GYNLZCCa0BNgl05QfumlVmdUdHLE5EQEVshcfvo7yI15ZEHGeUP93Q
d31zXZQiNKVP02v78Yx0yhG9K7P4nhF5K9RZoqII7Es0XVaR6IyCZWnsyPSODXyvmIX+zzXK4QgsZMEWLQc39gZX
SJvpTt2hlcR5zjw/9+UhfMTjLF6icR9W+fgYx79w2nsan0CK82MuqeYCexCB+JNDww+jbLHjHSNmfeKmeLkVAHJD
wXVKsjWugSRudVEE84ArheGly+ckPlmwp3QyKsY0HMiVwtKtZpS6zgleI3D6Fvo+iVb5yoZUKm9kddbJuvj/cQt7
epDLxoGsEiPhmnTm0JabCVil/0dHLDavRs2peEf0a+5/szS3BkHlX+bFshceWNXKo+E=

Public key

-----BEGIN PUBLIC KEY-----
MIICijANBgkqhkiG9w0BAQEFAAOCAg8AMIICCGKCAgEA1QL3YyMgeShx8IhTC7jb
sM0w2BnRXgsBn3+SMXKjtwHATqdekmlPlcjayJxD5fcPrOPPCqp/LoUFz5CUZzRi
6+8FTv70dHuIz5A4Lat4vcgwP+iWscPc3HzpmjpsKbTm0emqgp6RB6GNNPpxYa5X
7qu95EfEisX/GfoS9ToxtqPBwCcVwSPBX8efec4TC58m96Fsp4mC8KIcEadbIbHN
av0JjdTJ//CM0WZSIbdzE6qvEbNfcqDB5tNU7oHfYvBeNLrvPU9TAqdbtozdHQ+D
AhfTRuJNgWEkjwD5lb0Vhi4qlkweSOEMTKT3ye9I1LxEaJn4bku4eKqes7VSZt3o
XbUcmr2H5mKcKsvt6bXmX6ajAmgi900Cm9QJlaQkJM6z2iITnyvDMgueJtFxQpC9
HNBPgPZ242NH8JgE6CNF7ToL9syas67u7UMgIcNgeNHncy9bLgPU5annzP9gN2l
6HEMldkXNdKQRb1rDwyEJf3N/50YHnXXPmuf5sb8R/pxWNqtF04R5UGVV92qd2Mi
1GN7LE3mbQRbPsLL/JApDXMNzNikaFbSQK7iKxr7vIaTeZckFZwfThcYNT7Hasg
+eE4bf/olCHBCF1VIDcDxohehdZ0WRRcgM9iK3I/0zZdaBsgdc8WuJRmb8LPP9v
8Jap/1PwjNcNku5cdw3gHLcCAwEAAQ==
-----END PUBLIC KEY-----

Run 1 outputs

```
stdout 87dcd079ddf4d5ba2ca79b8f9fec3d798f6235123cdfe3be1a53125a00f4f24a
stderr e3b0c44298fc1c149afb4c8996fb92427ae41e4649b934ca495991b7852b855
metrics 87dcd079ddf4d5ba2ca79b8f9fec3d798f6235123cdfe3be1a53125a00f4f24a
digest 97663519d60c711b645ed506e011cdceddc7aa881013a5a7d6750787dbaeb9ba
```

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},
}
```