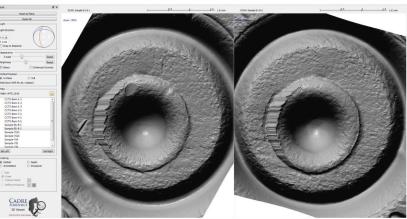
Call for Participants VCM-ER Study

<u>V</u>irtual <u>Comparison</u> <u>M</u>icroscopy <u>Error</u> <u>Rate</u> <u>S</u>tudy





In collaboration with the Royal Canadian Mounted Police, Cadre Forensics will be distributing a test designed to study **Virtual Comparison Microscopy** (VCM) error rates. VCM is the examination of measured 3D surface topographies using computer software and without physical access to the specimen. The study is designed to investigate error rates and to identify the specific features used in the VCM decision process. The test will be conducted anonymously. The use of VCM for this type of study has many advantages:

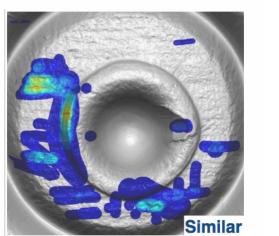


VCM software used to compare two fired cartridge cases

- VCM tests eliminate sample to sample variance.
- VCM allows examiners the ability to annotate areas of agreement and disagreement. These marks provide insight into how conclusions were reached.
- VCM does not require the shipping of fired ammunition.
- VCM can be performed on any compatible computer
- Once the study is complete, VCM provides participants the option of comparing their basis for conclusions with published summary maps like that shown at right.

The study will take place in the second half of 2018. Participants will be provided a trial version of the comparison software, training manual, and electronic data files (practice and test scans) for the duration of the study. We need <u>as many trained firearms examiners</u> <u>as possible</u> to participate in the study! The test is open to all casework examiners, both within the United States, as well as International.





Summary map visualization of the features annotated by participants of pilot study when reaching conclusions[1].

References

(1) Duez P, Weller T, Brubaker M, Hockensmith R, Lilien R; Development and Validation of a Virtual Examination Tool for Firearm Forensics, *Journal of Forensic Sciences*, (2018, in press) doi 10.1111/1556-4029.13668