

Integration of Low-Cost Sensor Technologies and Open Geospatial Data for Comprehensive 3D Cadastral Modeling of Terrain

Authors:

Willian Ney CASSOL | Université Laval (UL) | willian-ney.cassol@scg.ulaval.ca

Alexandre LAPLANTE | Université Laval (UL) | alexandre.laplante.2@ulaval.ca

Vicky BINETTE | Université Laval (UL) | vicky.binette.1@ulaval.ca

Sylvie DANIEL | Université Laval (UL) | sylvie.daniel@scg.ulaval.ca

Éric GUILBERT | Université Laval (UL) | eric.guilbert@scg.ulaval.ca

Frédéric HUBERT | Université Laval (UL) | frederic.hubert@scg.ulaval.ca

FROM 2D TO 3D CADASTRES

Land Administration Transformation



Emergence of 3D cadastres: move beyond traditional 2D mapping.

Québec's Current Situation



Cadastre still 2D-based, limited to parcel numbers and boundaries.



STUDY AREA

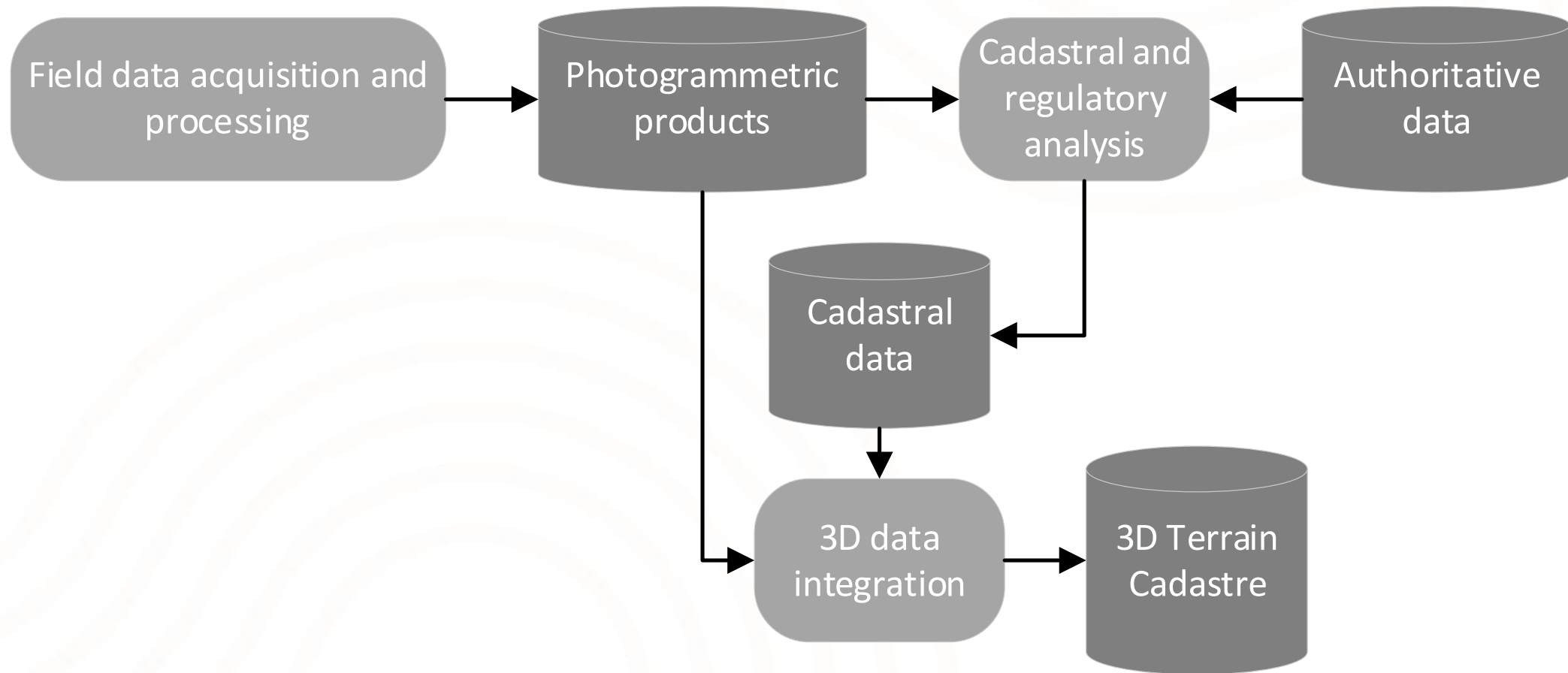
Study Area

Portneuf RCM, Québec

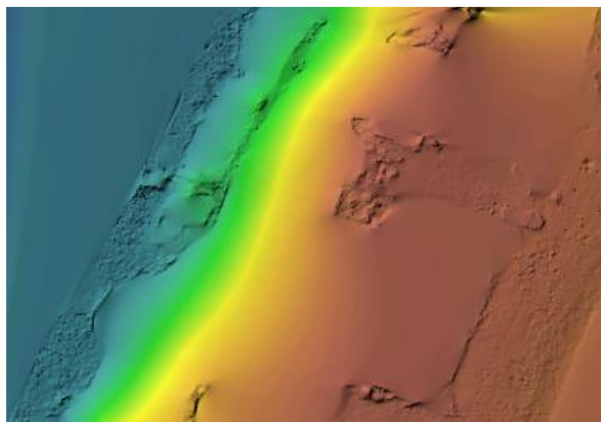
Rural riverside property characterized by uneven forested terrain and limited cadastral data availability.



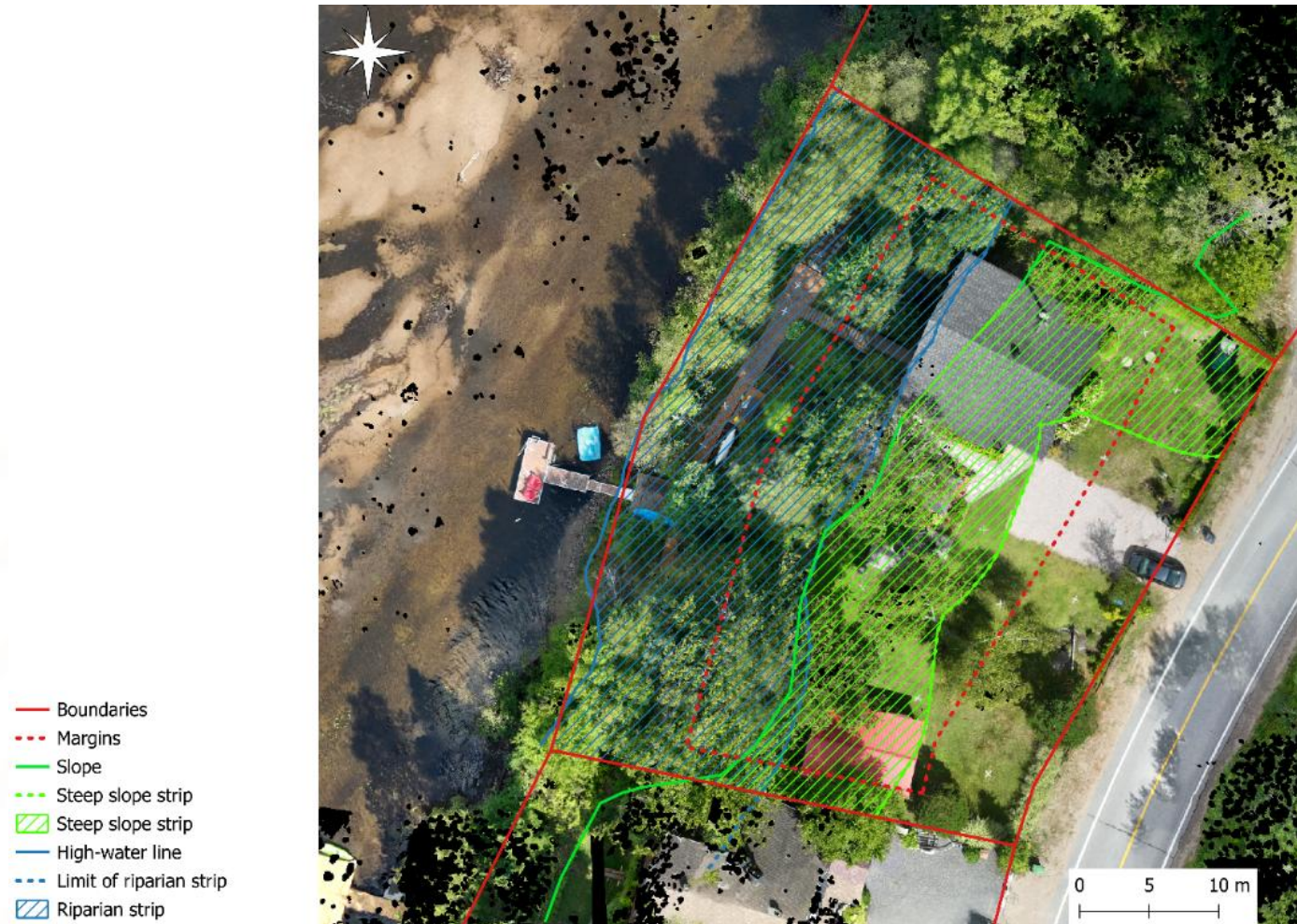
METHOD



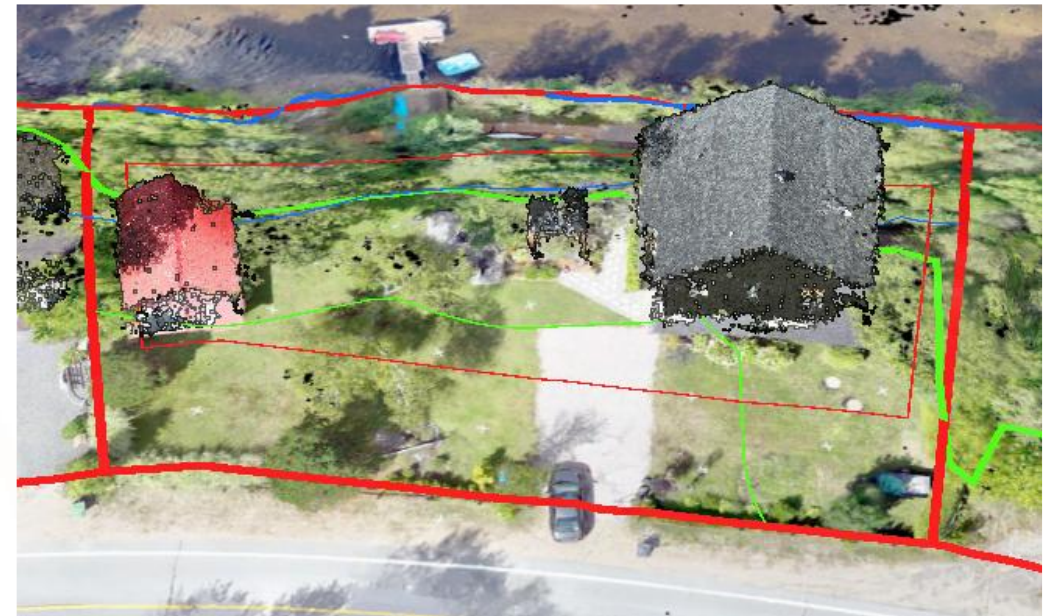
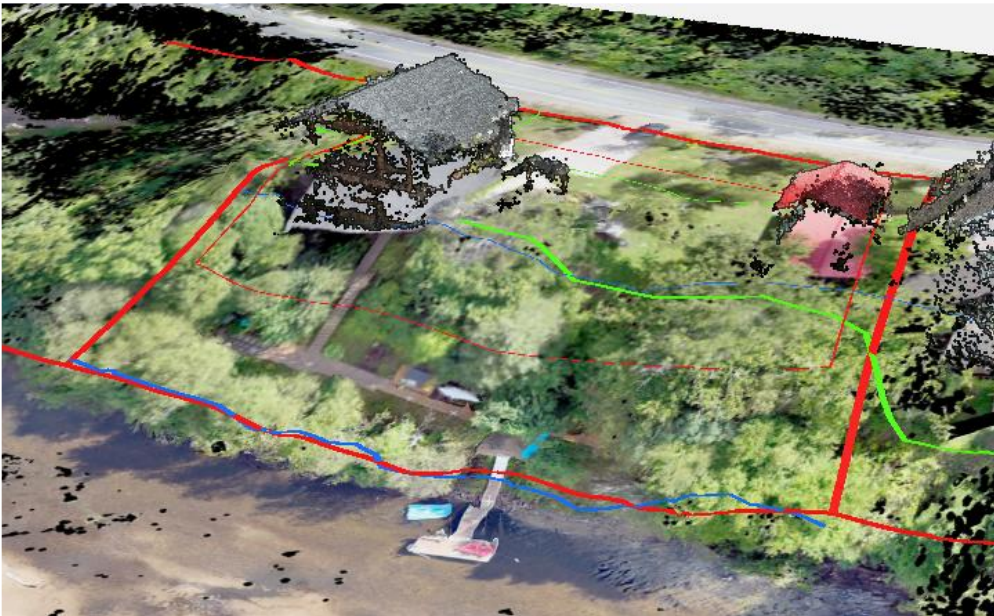
METHOD



RESULTS: CLASSICAL SURVEY PRODUCT

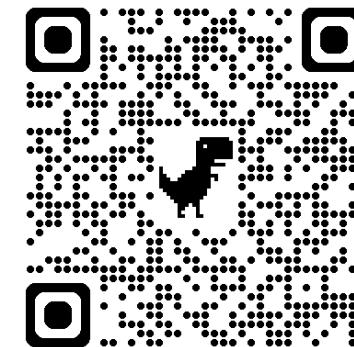


RESULTS: 3D CADASTRE AND SURVEY PRODUCT



Thank you! Questions?

The authors thank the property owner (anonymized) for granting access to the study site. We also acknowledge Lina Kokosha for her support in processing the photogrammetric data and generating the DTM.



REPER  **3D**



execução



patrocinadores



MINISTÉRIO DA
GESTÃO E DA INOVAÇÃO
EM SERVIÇOS PÚBLICOS

