

# International Society for Geomorphometry Coffee Talk

December 7<sup>th</sup>, 2022

7:00 MST (UTC -7), 9:00 EST (UTC -5), 11:00 BRT (UTC - 3), 14:00 GMT (UTC +0), 15:00 CET (UTC +1),  
16:00 EET (UTC +2), 22:00 CST (UTC +8)

## “*WhiteBox for Geomorphometry*”

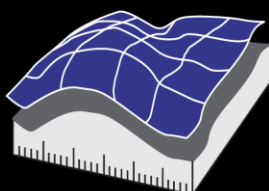


**Prof. John Lindsay**  
The University of Guelph, Canada

John Lindsay is a geomorphometry and geomatics researcher who explores the applications of topographic data to spatial hydrology, geomorphology, and environmental modelling. He is particularly interested in LiDAR digital elevation models (DEM) and their use in modelling surface drainage patterns, and in multi-scale land-surface characterization. Prof. Lindsay's research often involves the development and testing novel techniques for DEM analysis. John believes that the role of the academic researcher is to provide solutions to problems encountered by practitioner. Therefore, open-source geographical information system (GIS) software development has long been a component of his research program, serving as the means by which he disseminates advances in the field. Over the past 20 years, Prof. Lindsay has developed several open-source GIS, including the Terrain Analysis System (TAS), Whitebox Geospatial Analysis Tools (Whitebox GAT), and WhiteboxTools.

In this talk, Prof. John Lindsay explores the use of WhiteboxTools for geomorphometric applications. WhiteboxTools is an open-source geospatial analysis platform that serves as an analytical back-end for GIS and remote sensing software, including QGIS and ArcGIS. With nearly 250 tools for LiDAR data processing, geomorphometric analysis, spatial hydrology, and stream network analysis, WhiteboxTools is well suited for use by geomorphometry practitioners. John will describe the history of the Whitebox project and explore some of the functionality of this platform for LiDAR data processing, DEM pre-processing, and multi-scale topographic analysis.

Register here: <https://forms.gle/GopLcUmeGVcSVVrq5>



**GEO** MORPHOMETRY