

## **Special Session on Drone Geophysics** and Remote Sensing

## **Tucson Convention Center**

3/27/2024 - Room 202

Start 7:00 8:20 8:40 9:00 9:20 9:40	9:00 9:20 9:40	Introduction to the Special Session Drone Geophysics and Remote Sensing  Applying 3D modelling from RPAS magnetic data to enhance the separation of magnetic anomalies in the near-surface glacial sediments from shallow bedrock anomalies.	Presenter  Session Chair  Melvin E Best  Jamie Davis	Affiliation  Bemex Internation Consutling
8:20 8:40 9:00 9:20	9:00 9:20 9:40	Applying 3D modelling from RPAS magnetic data to enhance the separation of magnetic anomalies in the near-surface glacial sediments from shallow bedrock anomalies.	Session Chair  Melvin E Best	
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9:00	9:20	the near-surface glacial sediments from shallow bedrock anomalies.		Bemex Internation Consutlin
9:20	9:40	Remote Sensing at the Ohio UAS Center	Jamie Davis	
				Ohio Department of Transportat
9:40	9:40	Retrieving Subsurface Properties of Mars-analog Glaciers with Drone-based GPR	Roberto Aguilar	University of Arizona
		Comparison of Four Drone Enabled Magnetometers in Different Applications	Matiss Brants	SPH Engineering, SIA
10:00	10:30	COFFEE BREAK		
10:30	10:50	Estimating UXO Detection Limits for Drone-enabled Magnetometers Using an Upward Continuation filter and Comparing with Real Data	Matiss Brants	SPH Engineering, SIA
10:50	11:10	Use of UAV Magnetometer Survey for Engineering Site Investigations versus Traditional Magnetic Methods	Justin M Jarratt	DMT Geosciences Ltd.
11:10	11:30	Mapping Soil Water Content Using a UAV and a L-Band Radiometer	Maik Wollenben, PhD	Skaha Labs
11:30	11:50	Multi-disciplinary Geophysical Evidence for Modifications to Rock Glacier Morphology and Debris Distribution through Dynamic Processes	Tyler M Meng	University of Arizona
11:20	11:40	Hyperspectral Imaging for Environmental Remediation using a UAS	Dean Riley, PhD.	Echo Labs
0:10	12:30	Multi-drone electromagnetic system with cloud processing for subsurface conductivity imaging	Esteban J Bowles-Martinez	acific Northwest National Labor
12:30	1:40	LUNCH BREAK		
1:40	2:00	Comparison of UAV-borne and Helicopter-borne Gamma Ray Spectrometer	Marshall MacNabb	MWH Geosurveys
2:00	2:20	Applying a Blue UAS to Collecting Magnetic and EM data	R. S. Bell	Drone Geoscience, LLC
2:20	2:40	Subsuface Imaging Technology Test Site: A Multi-Disciplinary Facility for Near Surface Methods	Alex Olsen-Mikitowicz	CSU Drone Center
2:40	3:00	The Guidelines for Drone Geophysics: A Progress Report	Geoff Petiffer	Terra Entheos
3:00	3:20	Summary & Q&A		
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