









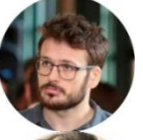

Program (Version 20190914)

Overview

Day	Sessions																							
	0800	0830	0900	0930	1000	1030	1100	1130	1200	1230	1300	1330	1400	1430	1500	1530	1600	1630	1700	1730	1800	1830	1900	1930
Oct 08	Registration & Opening			Keynotes KN1			Break	Parallel Sessions D1B1R1 D1B1R2			Lunch			Parallel Sessions D1B2R1 D1B2R2			Break	Parallel Sessions B1B3R1 B1B3R2			Icebreaker / Posters			
Oct 09	Keynotes KN2			Posters						Lunch			Field trip									Posters		Dinner
Oct 10	Keynotes KN3			Break	Parallel Sessions D3B1R1 D3B1R2				Lunch			Parallel Sessions D3B2R1 D3B2R2			Break	Parallel Sessions D3B3R1 D3B3R2			Farewell					



Keynotes

<p>Oct 08 (Tue) KN1</p>	 Michael Keller US Forest Service 09:30-10:05  Ralph O. Dubayah University of Maryland 10:05-10:40	<p><i>Understanding management, degradation, and regeneration of forests in the Brazilian Amazon using lidar remote sensing</i></p> <p><i>The first glimpse at GEDI data that will help us produce the first three-dimensional map of the world's temperate and tropical forests</i></p>
<p>Oct 09 (Wed) KN2</p>	 Svetlana Saarela Swedish Univ. of Agric. Sci. 08:00-08:35  Jean Pierre H. B. Ometto INPE 08:35-09:10  Matheus Henrique Nunes University of Cambridge 09:10-09:45	<p><i>Treating LiDAR-based predictions as pseudo-field data: possibilities and pitfalls</i></p> <p><i>Lidar and broad-scale forest biomass estimates in the Amazon</i></p> <p><i>Repeat-lidar survey reveals the primary tropical forests are most impacted by El Niño drought</i></p>
<p>Oct 10 (Thu) KN3</p>	 Eben North Broadbent University of Florida 08:00-08:35  Tiago de Conto ForLiDAR 08:35-09:10  Martin Isenburg LAStools 09:10-09:45	<p><i>LiDAR and hyperspectral data fusion for ecological mapping using the GatorEye Unmanned Flying Laboratory</i></p> <p><i>Mobile Laser Scanning - towards a new standard for forest inventory</i></p> <p><i>Tales of a Rascal (Scientist): What I Did for Love (of Points)</i></p>



October 8 -10

Iguazu Falls

Parallel Sessions

Day	Time	Day/Block/Room	Talk ID	Title	Presenter
08OCT	1130 - 1230	D1B1R1	SLS016D1B1R1	The Past, Current and Future Vision for NASA Research on Forest Ecosystem Structure and Function from Space	Michael Falkowski
			SLS145D1B1R1	Adopting GEDI's algorithms for estimating forest aboveground biomass with ICESat-2	Laura Duncanson
			SLS148D1B1R1	Global products of slope-adaptive waveform metrics of large footprint lidar over forested areas	Wenjian Ni
08OCT	1130 - 1230	D1B1R2	TLS010D1B1R2	Forest Inventory Using Ultra-High Density LiDAR Data in a Virtual Reality Environment.	Susana Gonzalez Aracil
			TLS045D1B1R2	On separating wood from leaves, accounting for leaf angle distribution, and occlusion effects in terrestrial lidar scans of dense forests	Martin Beland
			TLS132D1B1R2	Using multispectral terrestrial lidar for early detection of tree decline - from leaf water content to fine structural details	Samuli Junttila
08OCT	1400 - 1600	D1B2R1	SLS015D1B2R1	GEDI's potential to map structural diversity of plant canopies – a case study in the Sierra Nevada mountains in the Sierra Nevada mountains	Fabian Schneider
			SLS026D1B2R1	Exploring the potential of GEDI-derived canopy structure for mapping tree species diversity in the tropics	Suzanne Marselis
			SLS104D1B2R1	Forest degradation assessment in Tropical Dry Forests: a comparison of IceSat 2, UAV and ground-based observation data	Philipp Gärtner
			SLS121D1B2R1	Ground and Top of Canopy Extraction from ICESat-2 Data in the South of China	Yong Pang
			SLS143D1B2R1	Synergy of ICESat-2 and Landsat optical imagery data for mapping forest aboveground biomass with deep learning	Lana Narine
			SLS147D1B2R1	On-orbit evaluation of GEDI waveform biomass estimators	John Armston

Day	Time	Day/Block/Room	Talk ID	Title	Presenter
08OCT	1400 - 1600	D1B2R2	TLS002D1B1R2	Accurate geo-referencing of trees with no or inaccurate terrestrial location devices	Bogdan Strimbu
			TLS042D1B2R2	Comparing Terrestrial and UAV LiDAR for Monitoring Forest Structure	Kim Calders
			TLS057D1B2R2	Estimating fuel consumption at multiple scales from pre- and post-fire TLS and ALS	Andrew Hudak
			TLS064D1B2R2	Optimizing TLS sampling designs for the description of understory vegetation structure	Luke Wallace
			TLS066D1B2R2	Slice sector approximation as a tool for point cloud-based forest simulators	Demetrios Gatzoliis
			TLS075D1B2R2	Co-registration of ALS and TLS forestry data	Bernhard Groiss
			TLS101D1B2R2	Capturing global trends in tree and forest structure with a unified terrestrial laser scanning database	Atticus Stovall
08OCT	1630 - 1830	D1B3R1	ALS022D1B3R1	Potential of forest structural types detected directly from airborne LiDAR data in the aboveground biomass estimation	Syed Adnan
			ALS023D1B3R1	Enhancing sample design by auxiliary information - potential of airborne laser scanning and satellite image based forest resources maps	Minna Rätty
			ALS055D1B3R1	Influence of vegetation structure on the canopy penetration of single photon LiDAR (SPL)	Martin Queinnec
			ALS079D1B3R1	Spatial pattern of old large trees in a region of Amazon tropical forest	Gustavo Henrique de Oliveira Mourão
08OCT	1630 - 1830	D1B3R2	NLT009D1B3R2	Transferability of ALS-derived Forest Resource Inventory Attributes between Eastern and Western Canadian Boreal Forest Mixedwoods	Karin van Ewijk
			NLT019D1B3R2	Terrestrial Photogrammetric Measurements at the Individual Tree and Plot Levels in a Boreal Mixedwood Forest	Christopher Mulverhill
			NLT032D1B3R2	Using Unmanned Aerial System (UAS) LiDAR to estimate stocking density and basal area for forest hydrology modelling	Dominik Jaskierniak
			NLT038D1B3R2	Integration of UAV-based photogrammetric point cloud and hyperspectral data for tree species classification	Camile Sothe
			NLT088D1B3R2	Using state-of-the-art LiDAR technology for mapping Ecosystem Services of urban trees - a case study from Krakow (Poland)	Piotr Wężyk
			NLT114D1B3R2	Evaluation of the use of cross flight photo acquisition for improvement of forest structure reconstruction in SFM point clouds	Bryan Hally

Day	Time	Day/Block/Room	Talk ID	Title	Presenter
10OCT	1030 - 1230	D3B1R1	ALS031D3B1R1	Deep Learning of synchronized Airborne LiDAR and Hyperspectral data to map successional stages on a Tropical Dry Forest	Arturo Sanchez-Azofeifa
			ALS041D3B1R1	A pan-Canadian characterization of Boreal Forest gap size frequency distributions	Tristan R.H. Goodbody
			ALS074D3B1R1	Impact of wildfire regime on forest structural diversity in Northwest Spain	Isabel Aulló-Maestro
			ALS095D3B1R1	Challenges of multi-temporal and multi-sensor height growth analyses in a highly disturbed Boreal Mixedwood Forest in Canada.	Piotr Tompalski
			ALS122D3B3R1	Fuel Load Mapping in the Brazilian Savanna using Lidar Data and Multispectral Imagery	Andrew Hudak
			ALS126D3B1R1	Fusing multispectral lidar and aerial imagery for tree species classification	Peter Krzystek
			ALS151D3B3R1	Forests, fires, and the role of remote sensing science for sustainable solutions in the Amazon	Douglas Morton
10OCT	1030 - 1230	D3B1R2	TLS011D3B1R2	JIB-SCAN: How to avoid occlusion in single station TLS assessments	Günther Bronner
			TLS033D3B1R2	3D Forest 0.5 - new release of the tool for processing high density point cloud data from forest ecosystems.	Martin Krůček
			TLS039D3B1R2	Architectural modeling for upscaling tree- and plot-level attributes across forest landscape	Jean-François Côté
			TLS053D3B1R2	Estimating forest canopy equivalent water thickness using terrestrial laser scanning and implementing the 3D estimates in radiative transfer modelling	Ahmed Elsherif
			TLS080D3B1R2	L-Vox: An algorithm to estimate PAD from TLS point clouds acquired in forest environments	Jean-François Côté
			TLS094D3B1R2	Estimation of the tree and stand volume on point clouds derived from Terrestrial Laser Scanning using fractal methods.	J. Antonio Guzmán Q.
10OCT	1400 - 1600	D3B2R1	ALS024D3B2R1	Using airborne LiDAR and Landsat imagery to map forest aboveground biomass in the Brazilian Amazon	Qian Zhang
			ALS106D3B2R1	Changes in site productivity in the dynamic southeastern United States	Valerie Thomas
			ALS127D3B2R1	Resolution Dependence in Airborne Laser Scanning Based Forest inventory	Petteri Packalen
			ALS130D3B2R1	Extending LiDAR-based forested inventories through space and time	Michael Falkowski

Day	Time	Day/Block/Room	Talk ID	Title	Presenter
10OCT	1400 - 1600	D3B2R2	ALS017D3B2R2	UAS LiDAR data: very high density 3D data for accurate automatic assessment of individual tree parameters	Karel Kuželka
			ALS037D3B2R2	Impact of acquisition characteristics of unmanned aerial vehicle LiDAR missions on the quality of derived forest metrics	Wilfried Karel
			ALS059D3B2R2	How can variation in growth characteristics between genetic level and spacing of Douglas-fir realized-gains trials be characterized by ALS derived attributes?	Francois du Toit
			ALS060D3B2R2	Characterizing phenotypes and modeling realized genetic gain in tree breeding trials using super-dense UAV laser scanning	Samuel Grubinger
10OCT	1630 - 1830	D3B3R1	ALS065D3B3R1	Lasers, cyclones, and the dry rainforest: explorations in mapping and disturbance quantification	Gabrielle Davidson
			ALS070D3B3R1	Assimilating laser scanning and Landsat data following classical calibration	Göran Ståhl
			ALS072D3B3R1	Spatial analysis of ultrahigh density LiDAR data for species classification	Martin Slavík
			ALS087D3B3R1	Impact of simplifying assumptions on plant area density estimation with UAV-based Laser Scanning	Benjamin Brede
			ALS100D3B3R1	LiDAR monitoring of canopy clearings after sustainable logging operations in forest concessions in the Amazon	Leilson Gomes
10OCT	1630 - 1830	D3B3R2	ALS058D3B3R2	Comparison of multispectral airborne laser scanning and stereo matching of aerial images as a single sensor solution to forest inventories by tree species	Mikko Kukkonen
			ALS063D3B3R2	Forest canopy cover analysis using UAV-based LIDAR and photogrammetry	Qingwang Liu
			ALS071D3B3R2	Understanding the forest structure by utilizing full waveform LiDAR data	Yoshiko Maeda
			ALS073D3B3R2	Exploring very high resolution UAV-Laser scanning for above-ground biomass estimators	Alvaro Lau Sarmiento
			ALS077D3B3R2	Assessing the Role of Vegetation Structure and Foliage Characteristics as Drivers of Avian Diversity	Ross Hill
ALS131D3B3R2	Retrieving the stand volume of Scots pine stands using an allometric model applied on ALS-derived auxiliary metrics	Jaroslav Socha			

Posters

TV	Topic	Poster ID	Presenter	Title
		ALS001TV1	Bogdan Strimbu	Individual crown detection and height measurement of western juniper with deep convolutional and generative adversarial neural networks
		ALS006TV1	Yuri Shendryk	Fine-scale prediction of yield in sugarcane: A comparison of UAV-derived LiDAR scans and multispectral imagery
		ALS028TV1	Jhonathan Gomes Santos	ALS-derived indicators for monitoring sustainable forest management
		ALS040TV1	Lukas Jarron	Detection of Sub-Canopy Forest Structure Using Airborne LiDAR.
1	ALS	ALS043TV1	Wilfried Karel	Studying tree growth based on multi-temporal ALS data
		ALS044TV1	Manuela Hirschmugl	Method Comparison for the Assessment of Vertical Structure from ALS Data in Natural Forests
		ALS046TV1	Luizmar De Assis Barros	Defining old-growth forests with airborne lidar
		ALS051TV1	Rodrigo Vieira Leite	Tree buffer exclusion improves tree detection on airborne laser scanning surveys in even-aged stands
		ALS069TV1	Rubén Valbuena	Re-thinking accuracy assessment standards for LiDAR models predicting forest variables
		ALS082TV1	Zlatica Melichová	Forest growth monitoring using bitemporal areal LIDAR data: case study of national park Czech Switzerland
		ALS096TV1	Cristiano Rodrigues Reis	Qualification of emergent trees extracted from LiDAR point cloud in the Amazon forest
		ALS083TV2	Sead Mustafić	Deep Learning based single tree species classification using ALS data
		ALS089TV2	Rorai Pereira Martins-Neto	Altimetric evaluation of ground models of ground models from ALX over loblolly pine stands
		ALS092TV2	Bogdan Apostol	A comparative assessment of the area-based approach and individual tree detection for volume estimation in mixed temperate forests using Airborne Laser Scanning data
2	ALS	ALS093TV2	Piotr Wężyk	The use of very dense ULS and ALS point clouds in monitoring the effects of protective treatments carried out in Scots pine (<i>Pinus sylvestris</i> L.) stands in the National Park Bory Tucholskie, Poland.
		ALS097TV2	Milto Miltiadou	Multiscale 3D-windows for detecting dead standing Eucalyptus from voxelised full-waveform LiDAR data
		ALS099TV2	Leilson Gomes	LiDAR assessment of biomass changes in sustainably managed timber harvesting areas in the Amazon
		ALS102TV2	Bruno Ferraz Martins	Topographic Wetness Index from LiDAR Terrain Model Helps Forest Roads Maintenance
		ALS107TV2	Cibele Hummel do Amaral	Regression and machine learning models for estimating stand volume of eucalypt clonal and tropical highly diverse forests from LiDAR metrics
		ALS109TV2	Lucas da Luz	The Impact of Point Density for the generation of LIDAR derived Terrain Models
3	ALS	ALS116TV3	Lorena Stolle	Tree detection and height measurement from aerial laser scanning point cloud
		ALS117TV3	Bridget Hass	Estimating Burned Ecosystem Properties with NEONs Airborne Observation Platform
		ALS118TV3	Paula Gomides V. Scolforo	Measuring tree heights in Eucalyptus stands in Brazil using Airborne Laser Scanning (ALS), accounting for error-in-variable induced bias

TV	Topic	Poster ID	Presenter	Title
		ALS119TV3	Demetrios Gatzliolis	A Comparison of airborne ALS, photogrammetrically-derived, and IfSAR data for forest Inventory in Western Washington State, USA
		ALS120TV3	Yong Pang	Airborne Lidar technology in support of forest management
		ALS129TV3	Alline Motta	Choosing filtering parameters in LiDAR clouds collected over Amazon rainforest
		ALS134TV3	Janne Rätty	Predicting species-specific diameter distributions in boreal forests using bi-temporal ALS, multispectral ALS, and aerial images
		ALS150TV3	Elias Ayrey	The Use of Deep Learning and Three-Dimensional Convolutional Neural Networks to Interpret LiDAR Data for Live Standing Carbon Estimation in the Context of Carbon Offsets.
4	SLS	SLS048TV4	Rei Mitsuhashi	Overview of MOLI Mission to Estimate Forest Biomass
		SLS056TV4	Chad Babcock	Mapping forest biomass across the US using national forest inventory data, spaceborne lidar and a two-stage hierarchical model
		SLS144TV4	Lana Narine	Estimation of forest AGB from ICESat-2 and Landsat
		SLS146TV4	Lonesome Malambo	Preliminary validation of the ICESAT-2 land water vegetation elevation product (ATL08)
		SLS149TV4	Wenjian Ni	Modeling the growth of forest height using ICESat-2 photon counting data over tropical forested areas
5	TLS	TLS029TV5	Alvaro Lau Sarmiento	Tropical tree biomass equations from terrestrial LiDAR
		TLS047TV5	Aguida Beatriz Travaglia Viana	Terrestrial Laser Scanning: an alternative for collecting dendrometric data in Atlantic secondary forests
		TLS049TV5	Jiri Pyörälä	Using terrestrial and airborne laser scanning in the estimation of wood properties in standing timber
		TLS052TV5	Vagner Alex Pesck	Application of terrestrial laser scanner for the determination of forest inventory parameters using simple scans
		TLS067TV5	Luke Wallace	Improving ground filter optimization using terrestrial point clouds
		TLS081TV5	Serban Chivulescu	Fusing ALS and TLS point clouds - towards better forest parameters estimation
		TLS085TV5	Rafael Bohn Reckziegel	Carbon sequestration potential and wood quality aspects of southern African trees extended to agroforestry systems - an assessment through 3D data
		TLS086TV5	Martin Mokroš	Terrestrial Point Cloud Processing to Estimate Individual Tree Parameters
		TLS090TV5	Piotr Wężyk	Long time series of ground based laser scanning measurements of single trees and forest stands - 4D LiDAR monitoring.
		TLS091TV5	Rorai Pereira Martins-Neto	Comparing the number of trees retrieved with both ALS and TLS point cloud over a loblolly pine stand
TLS103TV5	Gabriel Prata	Use of terrestrial laser scanning to assess fuel consumption in amazon rainforests		
TLS108TV5	Alan Schreiner	Extraction of biophysical parameters using terrestrial laser scanner in a sample of Pinus taeda L.		

TV	Topic	Poster ID	Presenter	Title
		NLT007TV6	Benjamin Roth	Deciduous Broad Leaf Bidirectional Scattering Distribution Function (BSDF): Measurements, Modeling, and Effects on Leaf Area Index (LAI) for Forest Ecological Assessments
		NLT012TV6	Alex Appiah Mensah	Adjustment of leaf area conversion functions in managed conifer stands in Sweden
		NLT018TV6	Luiza Marina E. de Carvalho	Estimating charcoal piles volume using an unmanned aerial vehicle
		NLT076TV6	Martin Mokroš	Highly Accurate Estimation of Lower Part Tree Trunk Perimeter by SfM Photogrammetry for Annual Tree increment Estimation
6	NLT	NLT078TV6	Anton Kuzmin	Advanced earth observation techniques in forest biodiversity assessment
		NLT105TV6	Wilfried Karel	Mobile Phone Videos for Forest Inventory
		NLT111TV6	David Robledo Di Martini	The Importance of GRSS Student Grand Challenge for promoting UAV Applications in Brazil
		NLT112TV6	Randolph Wynne	The Science of SAFE, a Smallsat complement to SBG
		NLT128TV6	Mauro Assis	The challenge to assess the Amazon forest structure
		NLT138TV6	Leilson Gomes	Geostatistics applied to the estimation of volume in a management plan in the Amazon
		NLT139TV6	Leilson Gomes	Changes in the floristic composition of a harvested forest area in the Amazon
		NLT142TV6	Leilson Gomes	Biomass reduction in a forest concession area of the Antimary State Forest - Acre, Brazil