



SPATIAL ACCURACY 2016

5-8 JULY 2016
MONTPELLIER, FRANCE

Detailed program

Tuesday, July 5 2016

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| 08.00-09.00 | <i>Conference Participant Welcome and Registration – Coffee</i> | | [Hall d'Honneur-SupAgro] |
| 09.00-10.30 | Workshop A. [Room "Zenith" - SupAgro] The spatial analysis of accuracy using geographically weighted frameworks Dr. Alexis Comber & Dr. Paul Harris | Workshop B. [Room "Grand Louvre" - SupAgro] Bayesian calibration and uncertainty propagation Dr. Gerard B.M. Heuvelink & Dr.Kasia Sawicka | |
| 10.30-11.00 | <i>Coffee break</i> | | [Hall d'Honneur - SupAgro] |
| 11.00-12.00 | Workshop A. [Room "Zenith" - SupAgro] The spatial analysis of accuracy using geographically weighted frameworks Dr. Alexis Comber & Dr. Paul Harris | Workshop B. [Room "Grand Louvre" - SupAgro] Bayesian calibration and uncertainty propagation Dr. Gerard B.M. Heuvelink & Dr.Kasia Sawicka | |
| 12.00-13.30 | <i>Cold buffet within SupAgro gardens</i> | | [Supagro Chateau] |
| 13.30-15.00 | Workshop A. [Room "Zenith" - SupAgro] The spatial analysis of accuracy using geographically weighted frameworks Dr. Alexis Comber & Dr. Paul Harris | Workshop B. [Room "Grand Louvre" - SupAgro] Bayesian calibration and uncertainty propagation Dr. Gerard B.M. Heuvelink & Dr. Kasia Sawicka | Workshop C. [Room "Cesar" - SupAgro] Positional accuracy assessment and control Dr. F.J. Ariza-López & Dr. J. Rodríguez-Avi |
| 15.00-15.30 | <i>Coffee break</i> | | [Hall d'Honneur- SupAgro] |
| 15.30-17.00 | Workshop A. [Room "Zenith" - SupAgro] The spatial analysis of accuracy using geographically weighted frameworks Dr. Alexis Comber & Dr. Paul Harris | Workshop B. [Room "Grand Louvre" - SupAgro] Bayesian calibration and uncertainty propagation Dr. Gerard B.M. Heuvelink & Dr. Kasia Sawicka | Workshop C. [Romm "Cesar" - SupAgro] Positional accuracy assessment and control Dr. F.J. Ariza-López & Dr. J. Rodríguez-Avi |
| Evening | <i>Free dinner down town</i> | | |



organized by



Wednesday, July 6 2016

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| 08.00-08.45 | Conference Participant Welcome – Coffee | [Hall d'Honneur - SupAgro] |
| 08.45-09.00 | Conference Introduction | |
| | D. Griffith, J.-S. Bailly, D. Josselin | [Amphi 208 - SupAgro] |
| 09.00-09.45 | Keynote: Fuzzy logic and spatial uncertainties | [Amphi 208 - SupAgro] |
| | Isabelle Bloch / Chair : <i>S. Guillaume</i> | |
| | • Spatial uncertainty in knowledge-based systems / Chair : <i>A. Shortridge</i> | [Amphi 208 - SupAgro] |
| 09.45-10.00 | Is spatial information in ICT data reliable? Maxime Lenormand | |
| 10.00-10.15 | Modelling, interpreting and visualizing uncertainties for the North Wyke Farm Platform baseline field surveys | |
| | Paul Harris | |
| 10.15-10.30 | Machine learning to deal with uncertainty in knowledge base for multivariate clustering applied to spatial analysis | |
| | Stéphane Bourrelly | |
| 10.30-10.45 | Generation of Plateau-Approximation Fuzzy Zones Hazael Jones | |
| 10.45-11.00 | Modeling process chain of SPOT images for resources uncertainty to monitor change in forest cover | |
| | Thérèse Libourel | |
| 11.00-11.30 | Coffee break | [Hall d'Honneur - SupAgro] |
| | • Spatial accuracy quantification in mapping / Chair : <i>A. Comber</i> | [Amphi 208 - SupAgro] |
| 11.30-11.45 | Uncertainty quantification of interpolated maps derived from observations with different accuracy levels | |
| | Gerard B.M. Heuvelink | |
| 11.45-12.00 | Survey designs which maximize efficiency gains in ALS-based forestry plot imputation Gavin Melville | |
| 12.00-12.15 | Validation of Copernicus High Resolution Layer on Imperviousness degree for 2006, 2009 and 2012 | |
| | Christophe Sannier | |
| 12.15-12.30 | The polygon overlay problem in electoral geography Romain Louvet | |
| 12.30-12.45 | Modelling Uncertainty using Geostatistics, a Case Study in Ecuador Elena Chicaiza | |
| 12.45-13.00 | Founder's Award for contributions to spatial accuracy | [Amphi 208 - SupAgro] |
| | Chair: <i>D. Griffith</i> | |
| 13.00-14.30 | Lunch at SupAgro Restaurant | [Supagro Chateau] |
| | • Spatial inference under uncertainty | • Spatial accuracy quantification in mapping |
| | Chair : <i>Y. Ge</i> [Amphi 208 - SupAgro] | Chair : <i>G. Heuvelink</i> [Room 106 - SupAgro] |
| 14.30-14.45 | Where (we think) the wild things are: comparing citizen generated and formal measures of wilderness | A Hybrid approach for land cover mapping based on the combination of soft classifiers outputs and uncertainty information Luisa M.S. Gonçalves |
| | Alexis Comber | |
| 14.45-15.00 | Uncertain Clustering of Social Specialization in Metropolitan Areas Giovanni Fusco | Sampling to validate a global cropland map Javier Gallego |
| 15.00-15.15 | Detection of outliers in crowdsourced GPS traces | Exploring the Usefulness of Land Parcel Data for Evaluating Multi-Temporal Built-up Land Layers Johanes Uhl |
| | Stefan Ivanovic | |
| 15.15-15.30 | Locational error impacts on local spatial autocorrelation Indices: a Syracuse soil sample Pb-level data case study Daniel Griffith | Urban objects recognition feasibilities by airborne hyperspectral and multispectral remote sensing Walid Ouerghemmi |
| 15.30-15.45 | Modeling spatial risk of the Foot-Mouth-Disease epidemic in South Korea Eunhye Yoo | Space-Time Kriging of Temperature over Van-Turkey Pinar Aslantas |
| 15.45-16.00 | Poster pico presentation (5 min./poster) / Chair : <i>B. Charnomordic</i> | [Amphi 208 - SupAgro] |
| 16.00-16.15 | Coffee break | [Hall d'Honneur - SupAgro] |

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| 16.15-17.00 | <p>• Poster Session / <i>Chair : B. Charnomordic</i> [Amphi 208 - SupAgro]</p> <p>A method for testing the similarity of spatial samples Maria Virtudes Alba-Fernández</p> <p>Combining punctual and ordinal contour data for accurate floodplain topography mapping Mathieu Dartevelle</p> <p>Monitoring spatial accuracy of oil palm cultivation mapping in southern Cameroun from Landsat series images Prune Christobelle Komba Mayossa</p> | <p>• Business meetings 1 [Hall d'honneur - Room 106 - SupAgro]</p> |
| 17.00-18.00 | <p>2016 Peter Burrough Award and Keynote: Spatio-temporal sub-pixel mapping of time - series images - / <i>Chair : D. Griffith</i> [Amphi 208 - SupAgro]</p> | |
| 18.00-23.30 | <p>Conference Gala Dinner (including bus transportation from/to Supagro) to "Chateau Bas d'Aumelas" (Rendez-vous at 18.30 at Supagro main entrance)</p> | |



Thursday, July 7 2016

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| 08.00-08.30 | <p><i>Conference Participant Welcome – Coffee</i> [Hall d'Honneur - SupAgro]</p> | |
| 08.30-09.15 | <p>Keynote: The U.S. Cropland Data Layer: Accuracy and The Impact on Its Applications Linda Young / <i>Chair : D. Josselin</i> [Amphi 208 - SupAgro]</p> | |
| 09.15-09.30 | <p>• Scale effects in spatial accuracy / <i>Chair : E. Eunhye Yoo</i> [Amphi 208 - SupAgro]</p> <p>Getting the right spatial mix: optimising the size, type and location of renewable energy facilities Alexis Comber</p> | |
| 09.30-09.45 | <p>Impact of compositional and configurational data loss on downscaling accuracy Amy Frazier</p> | |
| 09.45-10.00 | <p>A Hierarchical Scale Setting Strategy for Improved Segmentation Performance Using Very High Resolution Images Merve Yildiz Erdemir</p> | |
| 10.00-10.15 | <p>Exploring Accurate Spatial Downscaling using Optimization Michael Poss</p> | |
| 10.15-10.30 | <p>Downscaling of soil moisture with area-to-point geographically weighted regression kriging and uncertainty analysis Yong Ge</p> | |
| 10.30-11.00 | <p><i>Coffee break</i> [Hall d'Honneur - SupAgro]</p> | |
| 11.00-11.15 | <p>• Uncertainty in 3D geodata <i>Chair : L. M. S. Gonçalves</i> [Amphi 208 - SupAgro]</p> <p>A proposal of a statistical test to control positional accuracy by means of 2 tolerances simultaneously José Rodríguez-Avi</p> | <p>• Spatial inference under uncertainty <i>Chair : C. Vieira</i> [Room 106 - SupAgro]</p> <p>Sensitivity of DBSCAN in identifying activity zones using online footprints David W. S. Wong</p> |
| 11.15-11.30 | <p>Practical global elevation data error simulation Ashton Shortridge</p> | <p>On Reliability of Remote Sensing Data and Classification Methods for estimating transition rules of the land-use Cellular Automata Yulia Grinblat</p> |
| 11.30-11.45 | <p>How far is far enough? Towards an adaptive and "site-centric" modelling integrating co-visibility constraints for optimal land use Thomas Leduc</p> | <p>Evaluating Performances of Spectral Indices for Burned Area Mapping Using object-based image analysis Merve Yildiz Erdemir</p> |
| 11.45-12.00 | <p>Combination of error characterization and spatial error model to improve quality of digital elevation models Tomaž Podobnikar</p> | <p>Irregularly sampled data in space and time: using Poisson kriging to reduce the influence of uncertain observations in assessing the risk of aflatoxin contamination of corn in Southern Georgia, USA Ruth Kerry (Eunhye Yoo)</p> |
| 12.00-12.15 | <p>A comparison of optimal map classification methods incorporating uncertainty information Yongwan Chun</p> | |

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| 12.15-13.30 | <i>Cold buffet within SupAgro gardens</i> | [SupAgro Chateau] |
| | • Spatial uncertainties simulation and propagation / Chair: <i>F.J. Ariza-Lopez</i> | [Amphi 208 - SupAgro] |
| 13.30-13.45 | Exploring the uncertainty of soil water holding capacity information | Linda Lilburne |
| 13.45-14.00 | Simulation of realistic digitizing errors on geographical objects using constraints modeling the operator input process | Jean-François Girres |
| 14.00-14.15 | How far spatial accuracy governs land-use changes monitoring frequency: the urban sprawl monitoring example | Jean-Pierre Chéry |
| 14.15-14.30 | 'spup' – a R package for uncertainty propagation in spatial environmental modelling | Kasia Sawicka |
| 14.30-14.45 | Combining spatial and thematic uncertainty and sensitivity analysis for mountain natural hazards assessment | Guillaume Dupouy |
| 14.45-15.00 | Performing Multi-Temporal Spatial Data Analysis for Coastal Areas and Assessing Thematic Accuracy | Carlos Vieira |
| 15.00-15.30 | <i>Coffee break</i> | [Hall d'Honneur - SupAgro] |
| 15.30-17.30 | Canal de Gignac field trip (including bus transportation from/to Supagro) | |
| | <i>Rendez-vous at 15.30 at Supagro entrance</i> | [Countryside] |
| 17.45-22.30 | Saint-Guilhem Abbaye and village visits (bus and walk) – Free Dinner - way back to Montpellier (bus) | |
| | <i>Rendez-vous at 22.00 at Saint-Guilhem village entrance</i> | [Countryside] |

Friday, July 8 2016

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| 08.00-08.30 | <i>Conference Participant Welcome – Coffee</i> | [Hall d'Honneur - SupAgro] |
| 08.30-09.15 | Keynote: Global sensitivity analyses on models with multivariate inputs and/or outputs Clémentine Prieur / Chair : <i>J-S. Bailly</i> | [Amphi 208 - SupAgro] |
| | • Spatial model sensitivity analyses / Chair : <i>J-S. Bailly</i> | [Amphi 208 - SupAgro] |
| 09.15-09.30 | Multiway sensitivity analysis of the fusion of earth observation, topography and social media data for rapid flood mapping | Didier Leibovici |
| 09.30-09.45 | A GPU-based Solution for Accelerating Spatially-Explicit Uncertainty- and Sensitivity Analysis in Multi-Criteria Decision Making | Gernot Paulus |
| 09.45-10.00 | Uncertainty propagation in urban hydrology water quality modelling | Jairo Arturo Torres Matallana |
| 10.00-10.15 | How can big data be used to reduce uncertainty in stormwater modelling? | Nanée Chahinian |
| 10.15-10.30 | Sensitivity analysis of spatio-temporal models describing nitrogen transfers, transformations and losses at the landscape scale | Jordi Ferrer Savall |
| 10.30-10.45 | The transformed optimal transportation problem: sensitivity and segregation of the children-to-school constrained assignment in Lausanne | Théophile Emmanouilidis |
| 10.45-11.15 | <i>Coffee break</i> | [Hall d'Honneur - SupAgro] |
| 11.15-11.30 | Student paper Awards / Chair : <i>A. Shortridge</i> | [Amphi 208 - SupAgro] |
| 11.30-12.30 | Business Meetings 2 | [Amphi 208 - Room 106 - SupAgro] |
| 12.30-13.00 | Final thoughts, conference closes by conference organizers and ISARA (including friendly cold buffet outside) | [Amphi 208 - SupAgro] |
| | D. Griffith, J.-S. Bailly, D. Josselin | |
| 13.00-14.30 | <i>Cold buffet within SupAgro gardens</i> | [SupAgro Chateau] |
| 14.30 | Conference end | |