

Summer School: Georeferenced genetic data and their evaluation

Faculty of Forestry, Technical University, Zvolen, Slovakia

Programme

September 7, 2014	September 8, 2014	September 9, 2014	September 10, 2014	September 11, 2014
Arrival	Landscape genetics - what is spatial structure? Trends, patterns	Spatial aspects of field experiment evaluation	Case studies	Presentations of participants
	Biological mechanisms leading to spatial and geographic structure at the population level and at the regional level (isolation by distance, colonization, local adaptation, hybrid zones)	Space, location and metrics Space concepts and modeling, positioning, reference system, metrics, distance Global refence systems, datum, geographic refence systems, map projections Changes in location definition – coordinates projection and transformation	Case studies	
	coffee	coffee	coffee	coffee
	Spatial patterns in genetic data (point processes, spatial autocorrelation for discrete and continuous data)	Distance concepts and analyses Different concepts of distance – Euclidean, manhattan, ground, spheric, cost(friction) Distance analyses – Thiessen polygons, location and allocation, buffering, network analyses Modelling and application aspects	Software practicals – geostatistics	Presentations of participants
	Basics of geostatistics (variogram, correlogram, kriging)		Software – landscape genetics	Final discussion and Evaluation of summer school
	lunch	lunch	lunch	lunch
	Software practicals – geostatistics	Software practicals – geostatistics	Field trip	Departure of participants
	Software – landscape genetics	Software – landscape genetics		