

ANLY482 Supervisor MEETING MINUTES (28 Mar 2018)

Date:	28 Mar 2018
Time:	18:00 – 19:00
Venue:	SIS Meeting Room 4.6
Attendees:	Team: Ruiyan, Qian, Nicholas Supervisor: Prof Kam
Agenda:	1. Discuss about the analysis methods

S/N	Things Discussed/Done	Remark
1	Discuss about area analysis and point pattern analysis	<ul style="list-style-type: none"> • Use Philippines 3 main islands, Luzon, Visayas and Mindanao, to further analyze. Edit the shape file to include the island information. • For easy comparison, use tmap_facet (lesson 7 slides) • Queen method: neighbors must share boundary. • Distance based neighbors: use distance matrix (either fix distance or weighted distance) • Cannot replace NA with 0. 0 means no borrowings but NA means missing. -> Exclude those regions with NA value. • Check the Moran statistics • Combine the Philippines situation and Kiva and interpret the LISA results (HH, HL, LL, LH), • When dealing with distance, it cannot be decimal degree. Transform them to Philippines' projected coordinate system. -> use RGDAL, spTransform method to transform. • When looking at the point pattern, heat map will give higher intensity of borrowers. -> discuss about locations where higher intensity exists. • By looking at the borrower itself is not enough. Look at different sectors, generate

		<p>map for each sector, and compare the difference of the distribution.</p> <ul style="list-style-type: none"> • The limit of distance should be same for both L and G function.
2	Reading list	<ul style="list-style-type: none"> • About LISA: geospatial wiki lesson 10 articles • Point pattern: geospatial wiki lesson 9 articles • Library: Spatial data analysis in R, applied spatial data analysis with R (to understand what is spatial polygon data frame) • Can Describe why use R as a spatial handling tool in the research paper
3	Mapping Technique	<ul style="list-style-type: none"> • tmap in r: make the map interactive • Explore the view mode of tmap • Can explain the use of tmap in the research paper.

Item Due (Team) / Actions
<p>Deadline: By the end of 4 Apr</p> <ol style="list-style-type: none"> 1. Add the island information in the shape file and Kiva data 2. Work out point pattern analysis and area analysis