


FIG Working Week 2015
"From the Wisdom of the Ages
to the Challenges of the Modern

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Nicolas Karanikolas
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**A GeoCartographic Approach to the Value of
Tourism in Greece Concerning the Luxury Tourism**

17 - 21 May, Sofia, Bulgaria


Introduction

Greece

- popular tourist destination
- ranked 32nd worldwide (2013)

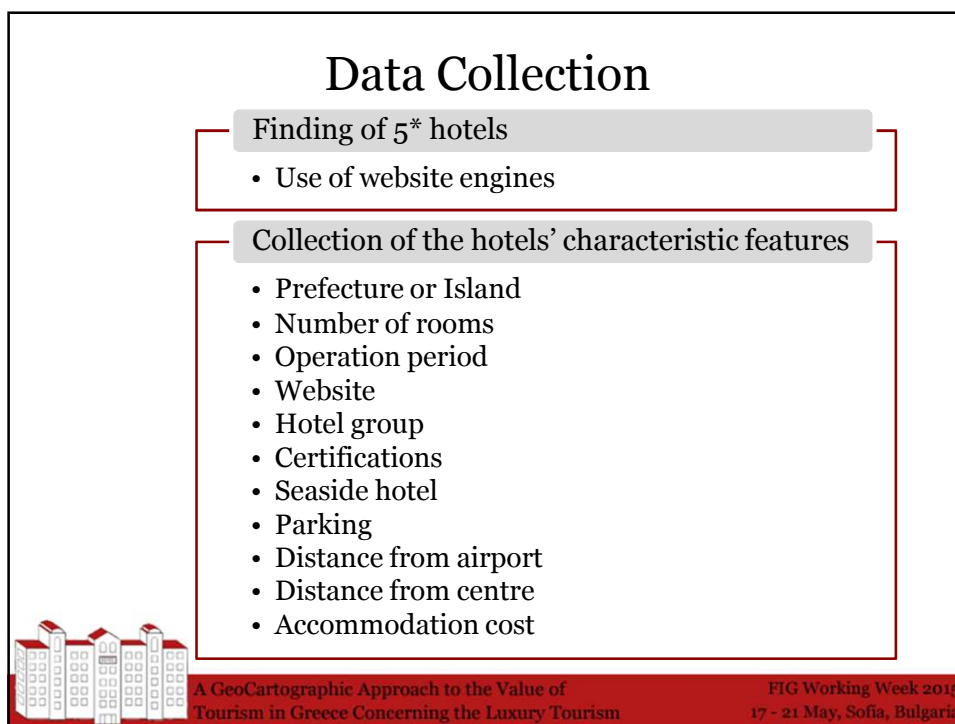
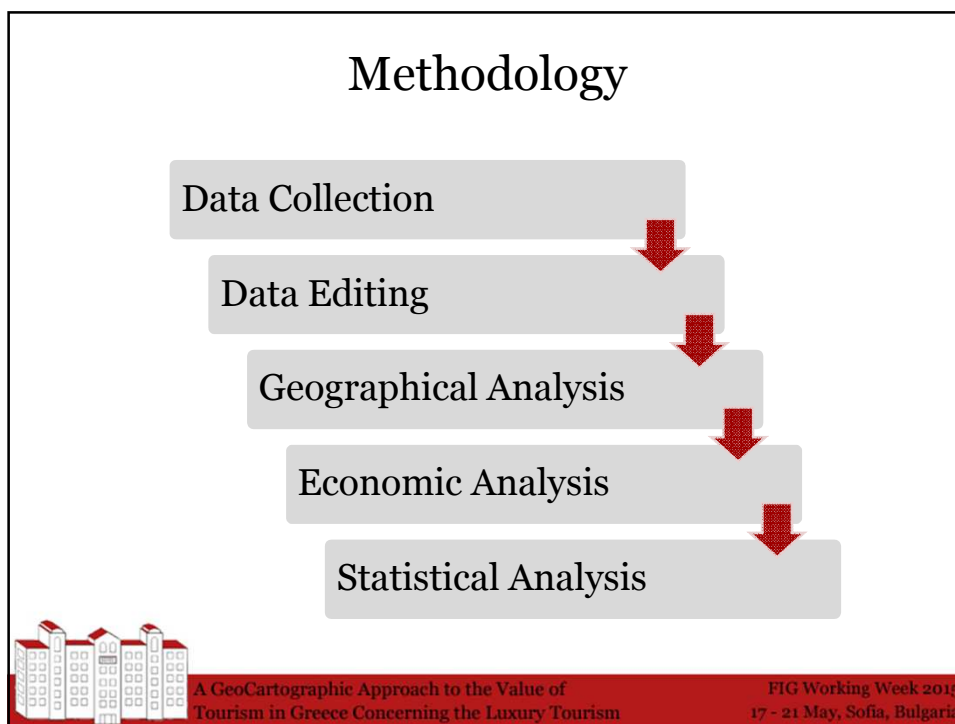
Tourism

- key pillar of the Greek economy



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Data Editing

- Editing of the hotels' features
- Editing of the data used in the geographical and economic approach
- Mapping

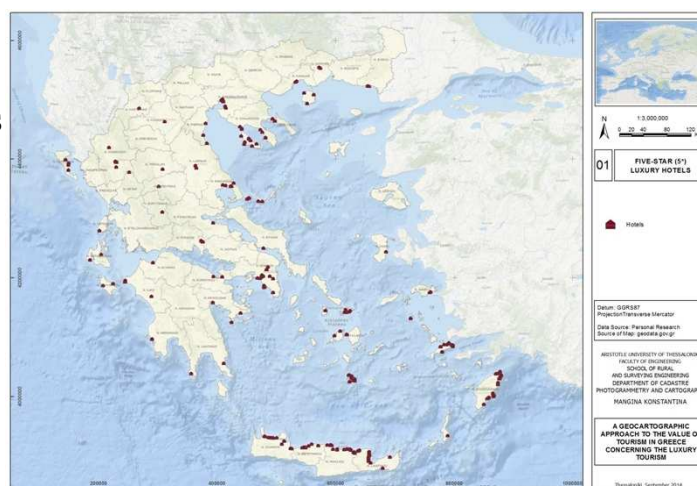


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Geographical Analysis

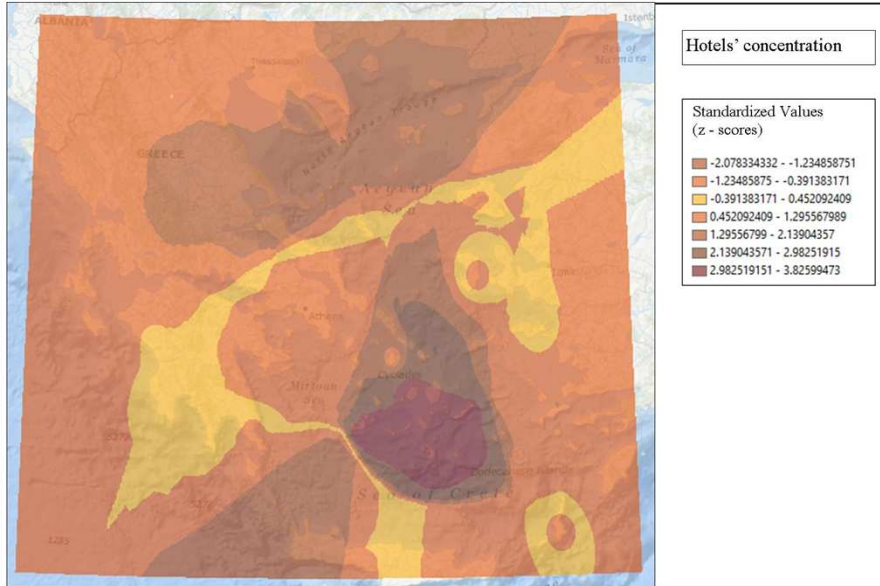
- 282 luxury hotels
- 45251 rooms
- 193 euros per night



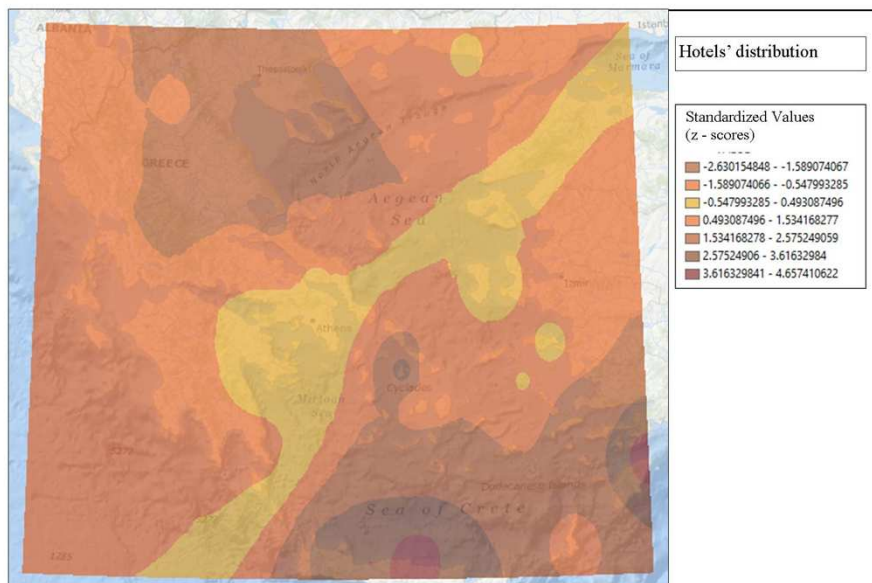
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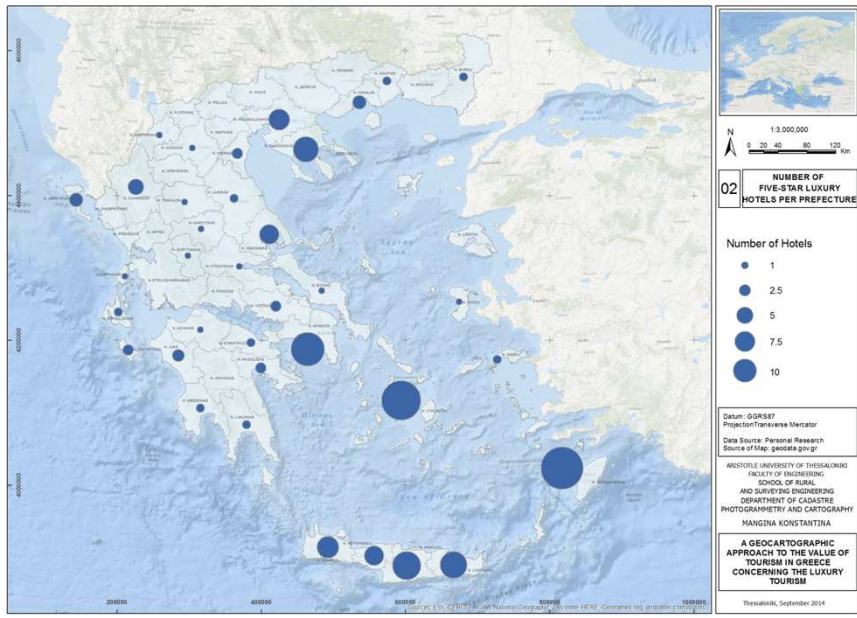
Geographical Analysis



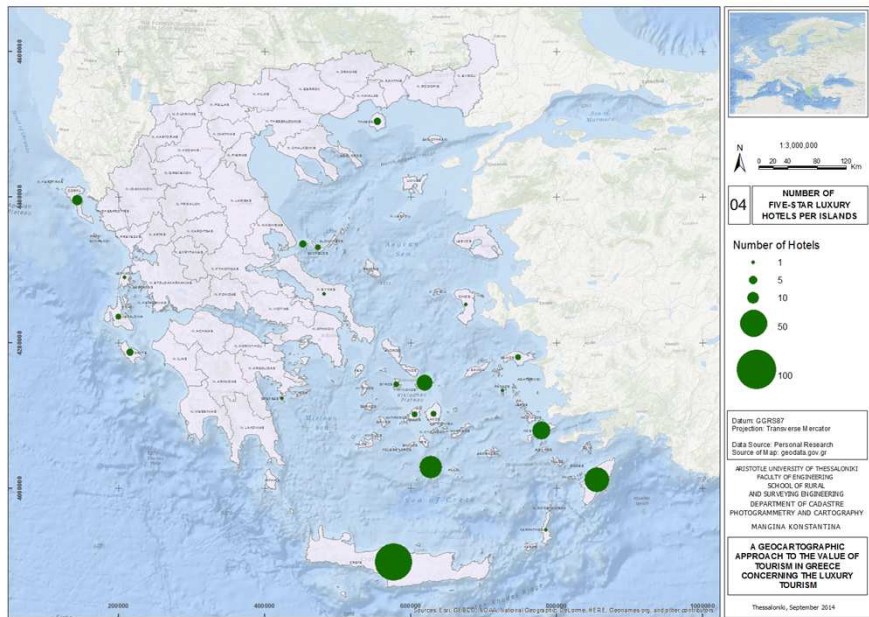
Geographical Analysis



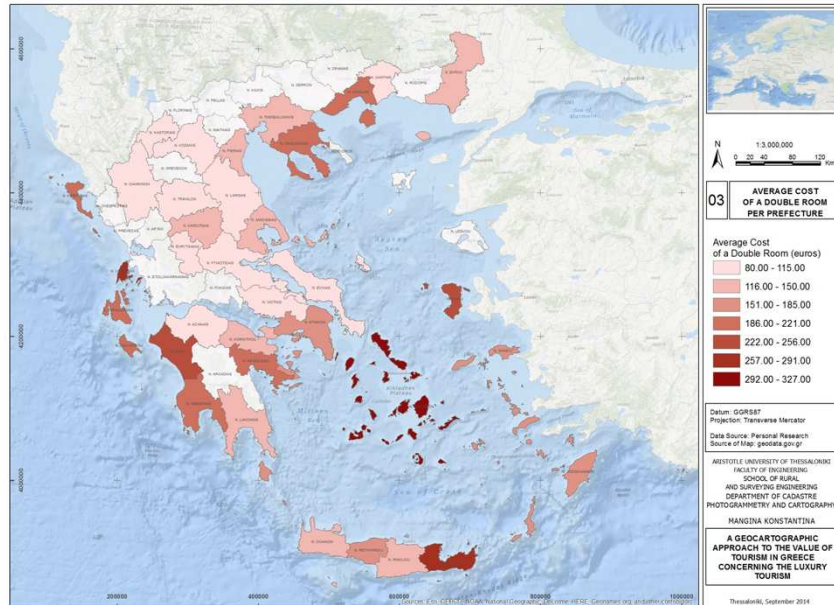
Prefectures



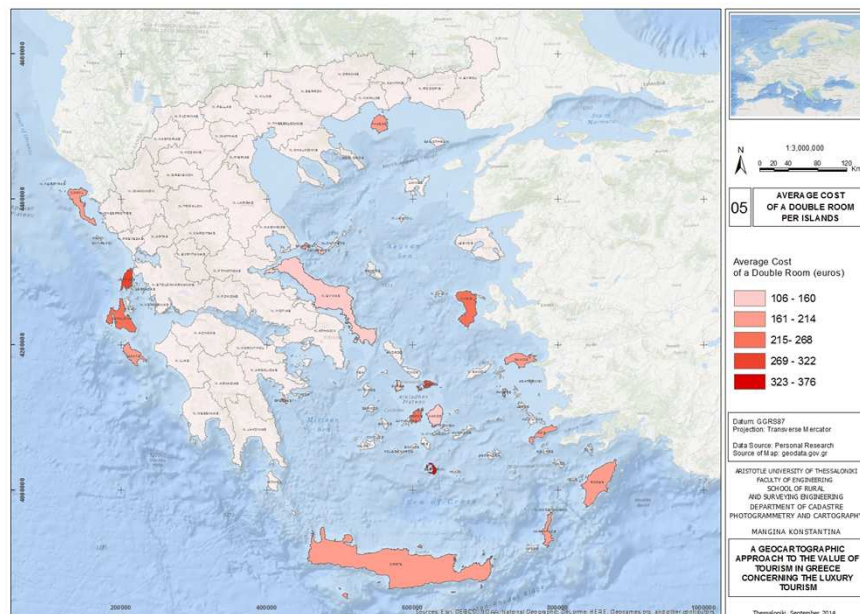
Islands



Prefectures



Islands



Economic Analysis

Three alternative economic scenarios

- Optimistic scenario – 100% occupancy
- Basic scenario – 80% occupancy
- Pessimistic scenario – 60% occupancy

Calculation of hotel's revenues

- Average accommodation cost
- Number of rooms
- Operation period

Market value

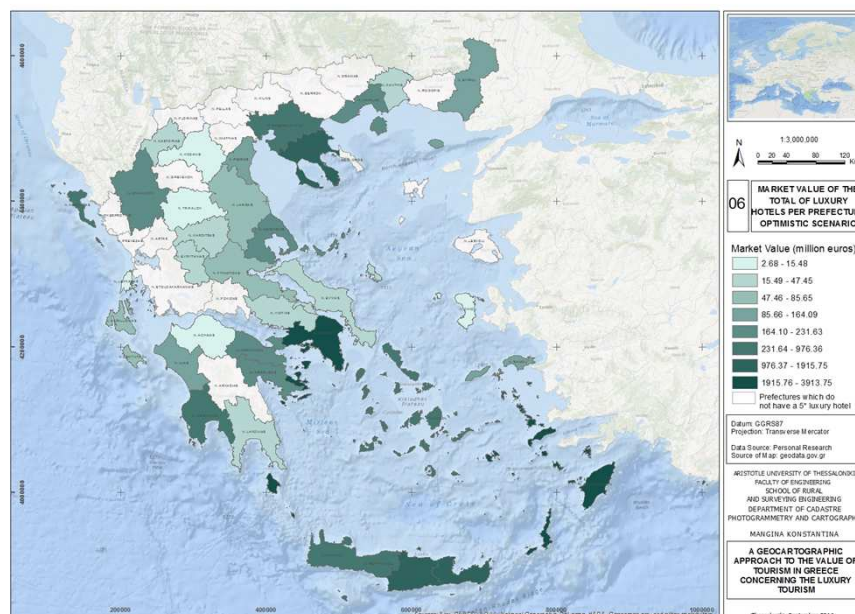
- Annual income
- $V=I/Y$



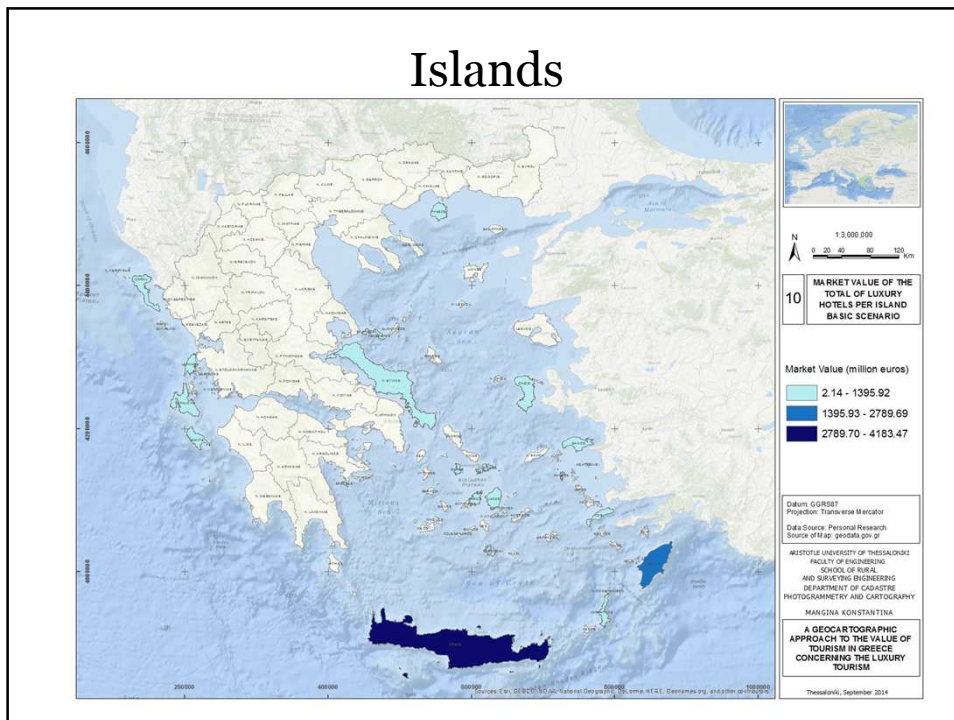
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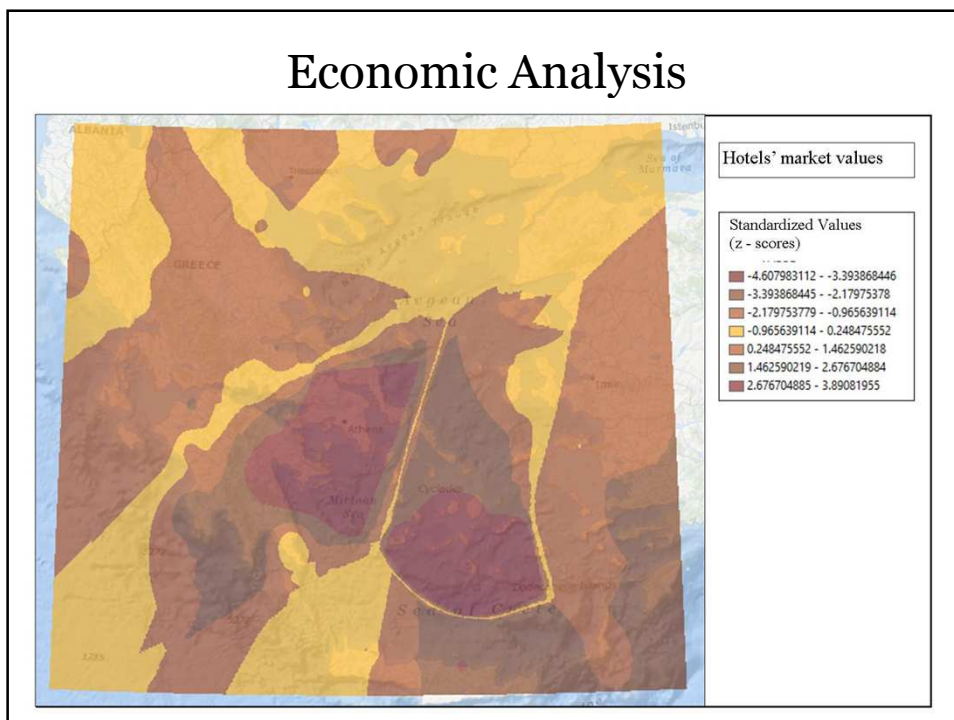
Prefectures



Islands



Economic Analysis



Statistical Analysis

	Variables	Code Name	
Independent	Market Value of the hotel - Basic scenario	Estim_value (Constant)	
Dependents	→ ISO Certification	ISO	12 factors
	→ Green Key Certification	Green_key	
	→ Greek Breakfast Certification	Greek_breakfast	
	→ Seaside hotel	Seashore	6 included
	→ Distance from the city center	Dist_center	
	→ Distance from the nearest airport	Dist_airport	
	→ Parking	Parking	
	→ Number of rooms	No_rooms	
	→ Average accommodation cost	Average_room_price	6 Excluded
	→ Operation period in months	Operation_period	
	→ Operation period in days	Operation_days	
→ Hotel's occupancy	Hotel_occupancy		



Statistical Analysis (2)

Model	Unstandardized Coefficients		t	Sig.	Collinearity Statistics	
	B	Std. Error			Tolerance	VIF
(Constant)	-3458717.08	287735.48	-12.02	0.00		
→ Hotel_occupancy	119.10	6.39	18.64	0.00	0.14	7.08
Operation_days	11451.15	734.88	15.58	0.00	0.81	1.24
No_rooms	5888.38	997.98	5.90	0.00	0.14	7.00
Average_room_price	2951.83	685.68	4.30	0.00	0.55	1.82
→ Green_key	528691.55	183345.70	2.88	0.00	0.88	1.13
Greek_breakfast	-586585.52	280810.70	-2.09	0.04	0.98	1.02



Statistical Analysis (3)

Model	t	Sig.
ISO	-0.46	0.645
Seashore	-0.95	0.342
Dist_center	-0.56	0.576
Dist_airport	-1.84	0.067
Parking	1.48	0.140
Operation_period	-1.73	0.085

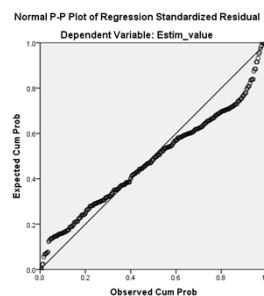
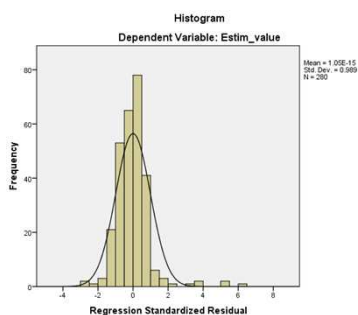


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Statistical Analysis (4)

R	R ²	Adjusted R ²	Std. Error of the Estimate	Durbin-Watson	Model Significance
0.968	0.936	0.935	903721.968	1.764	0.000

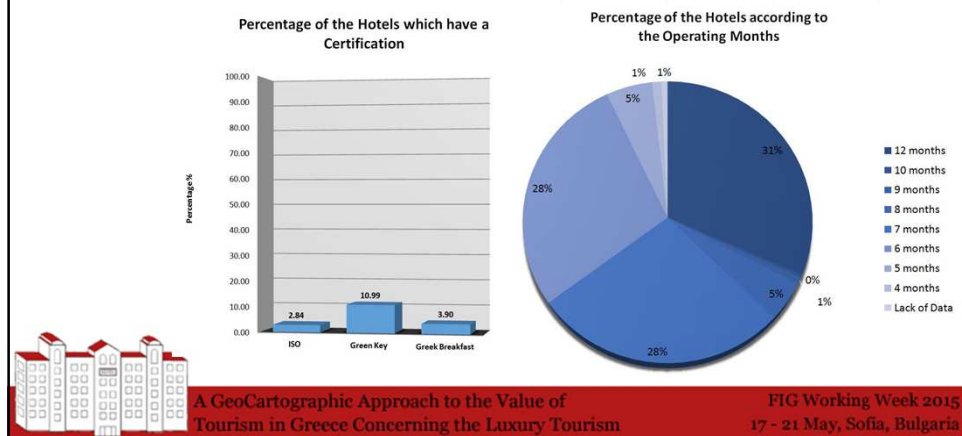


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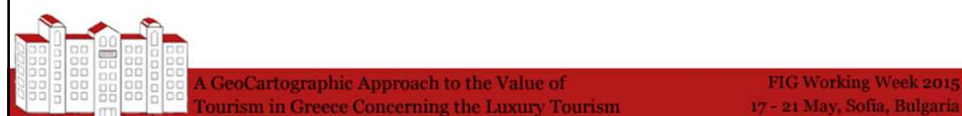
Conclusions

- The majority of the luxury hotels is located in the islands of Greece
- The majority of them does not belong to a hotel group and does not have any certification



Conclusions (2)

- Market value of the luxury 5* hotels of Greece : around 18 billion euros
- The feasibility of investing in the expansion and the creation of new accommodations needs further investigation
- Investments in modernization and improvement of hotels' facilities (e.g. environmental policy) are needed



Results

Country's tourism profile is provided

Creation of geodatabase with all 5* luxury hotels, their features and their market values

Server



Results (2)

Link

- <http://155.207.21.1/fmaps/volt/>

Name

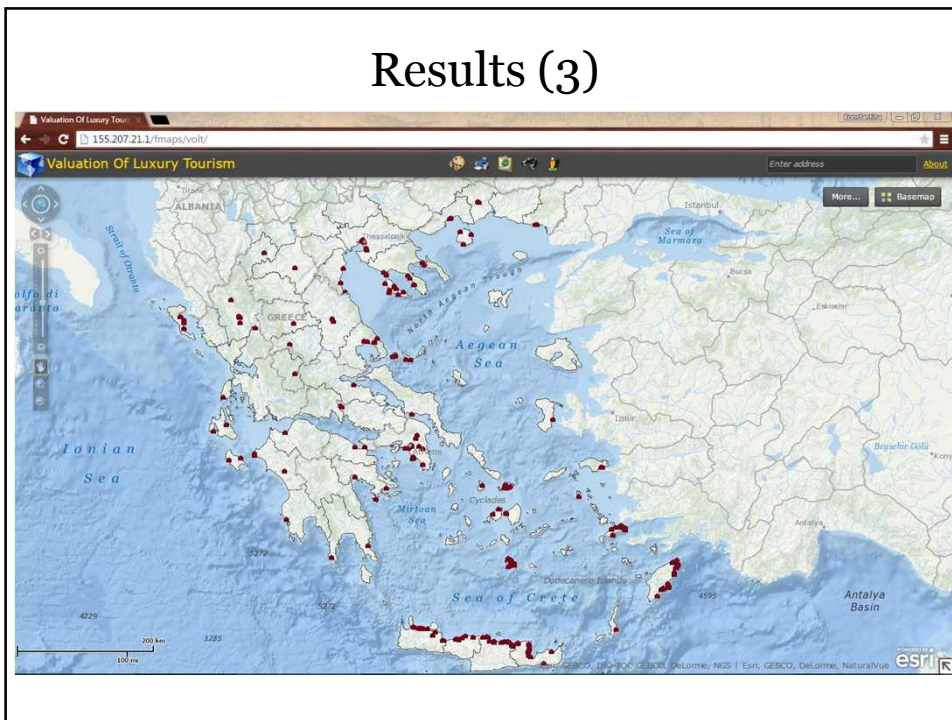
- Valuation Of Luxury Tourism (VOLT)

Tools

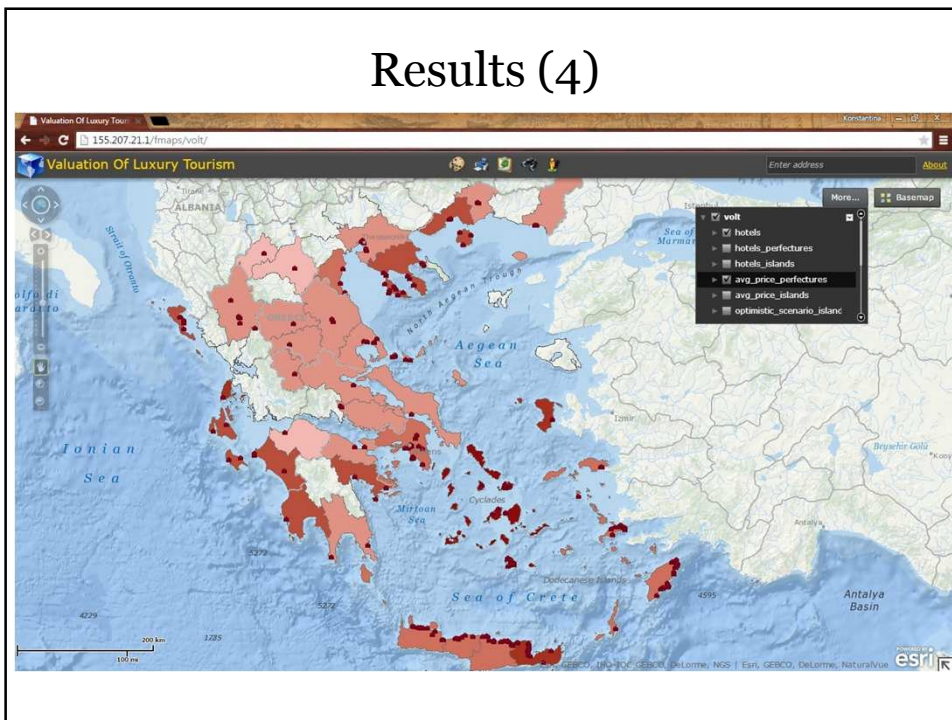
- Choose the features
- Choose a basemap
- Legend
- Draw
- Print



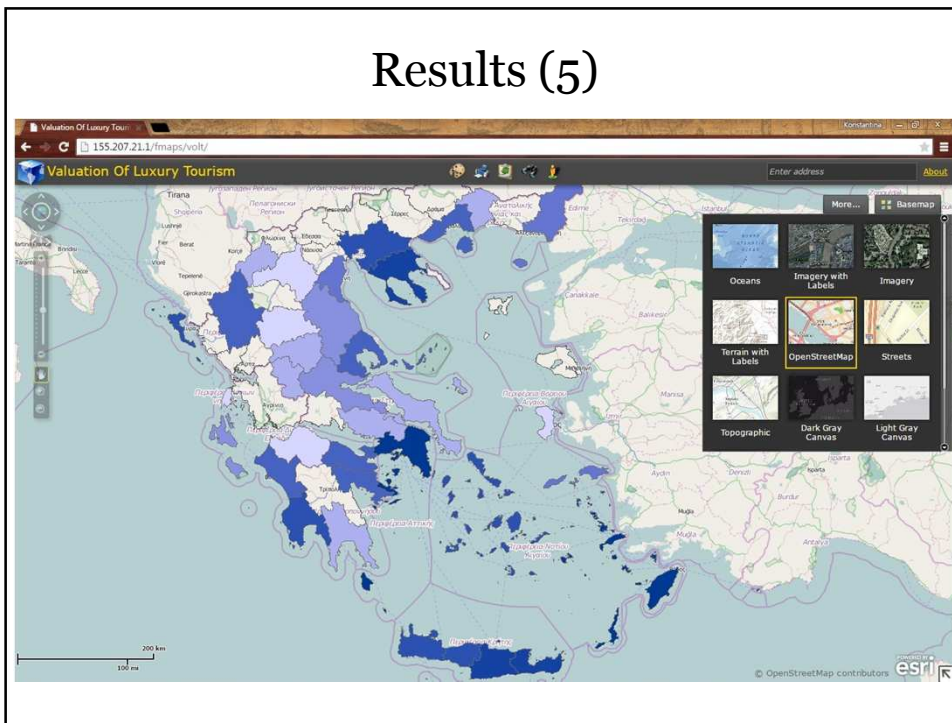
Results (3)



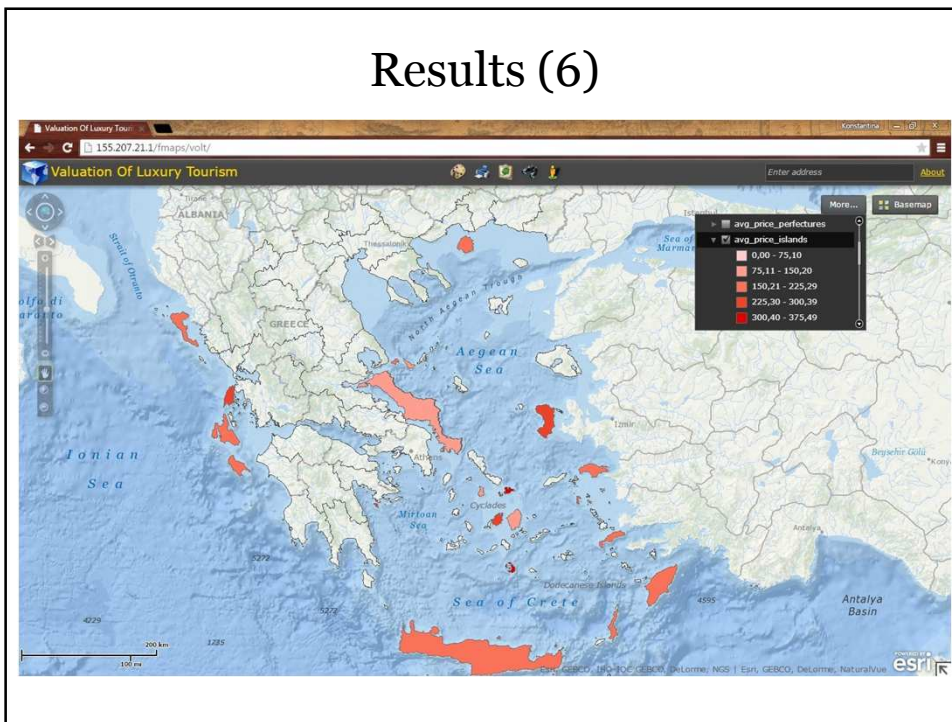
Results (4)



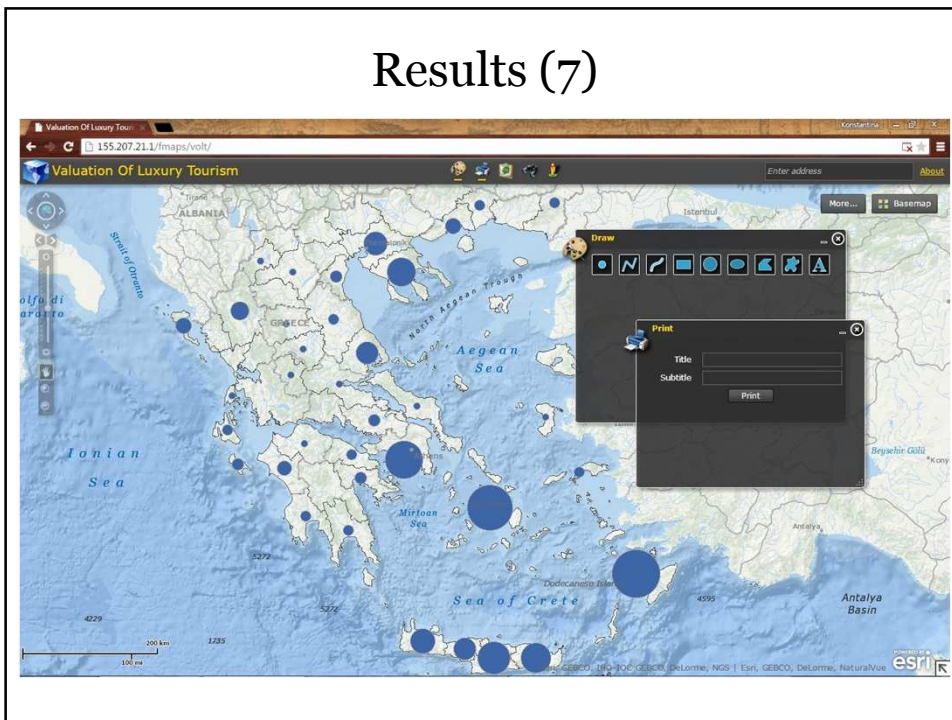
Results (5)



Results (6)



Results (7)



Thank you.

Questions ?



**Konstantina Mangina
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