MAKSWELL

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Regional poverty measurement as a prototype for modern indicator methodology

Workpackage 3

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Shift of focus from national to regional level

The reduction of poverty is one of the EU's top priorities. Poverty and inequality indicators have primarily been estimated at the national level (EU-SILC data). As a large share of the EU's budget is directed to its cohesion policy, a closer look at European regions is needed. Accordingly, accurate regional estimates for indicators are needed and the respective statistical methodology has to be developed.

Deliverable 3.1

- Introduction (UT)
- Indicators for measurement of poverty and well-being (UT / PISA / ISTAT / DESTATIS / CBS)
- Overview of data and methodologies (current methods in use) (UT / PISA / ISTAT / DESTATIS / CBS / HCSO)
- Summary and discussion (UT)

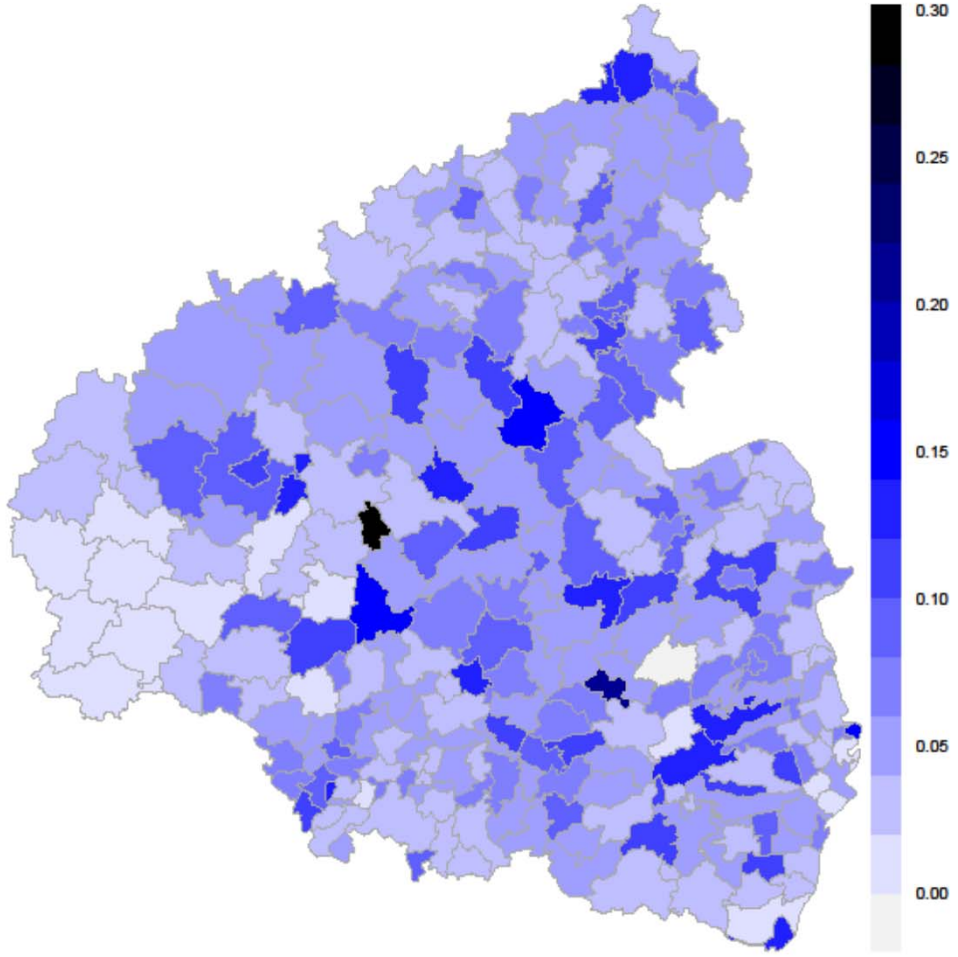
Border statistics for the Greater Region

- Aim: Estimating social indicators on LAU1 level for the Greater Region
- Focus: Border statistics
- Integrated approach over country boarders
  - Can we see boarder effects on poverty?
  - How can we see them?
  - Example: Effect of proximity of Luxembourg city on Trier ARPR
  - Can we use the observed effects for improving statistical models?
  - What specific requirements have to be met when using international data in small area modeling?
- Here: ARPR for LUX, SAL, and RLP

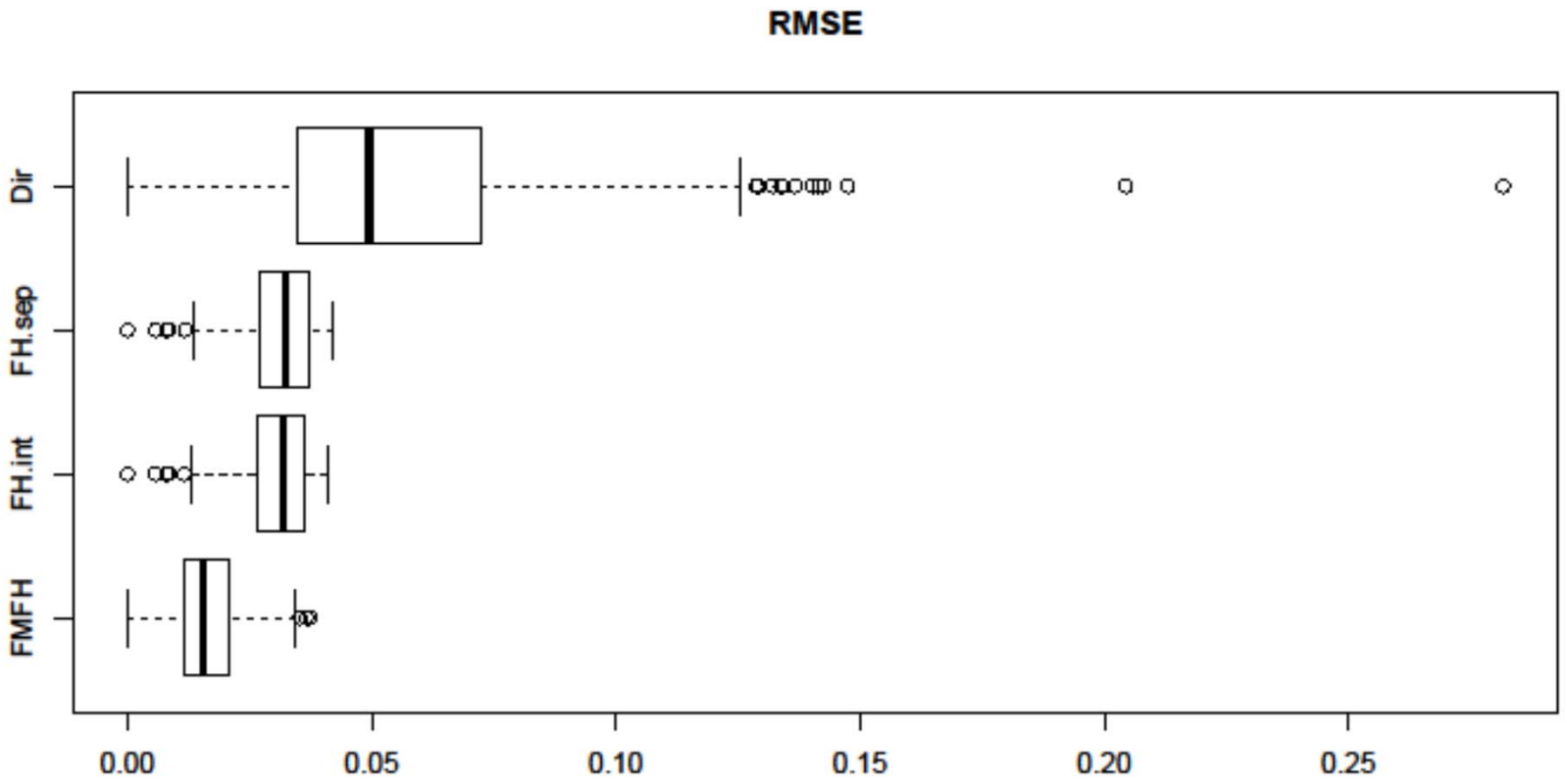
Data

- ARPR:
  - Luxembourg:
    Household Budget Survey
    (cumulated over three years)
  - RLP and SAL:
    Microcensus (classified incomes)
- Covariates
  - Luxembourg: (still) very limited selection on LAU1
  - RLP and SAL: rich indicator set

APRP on LAU1 level: RRMSE

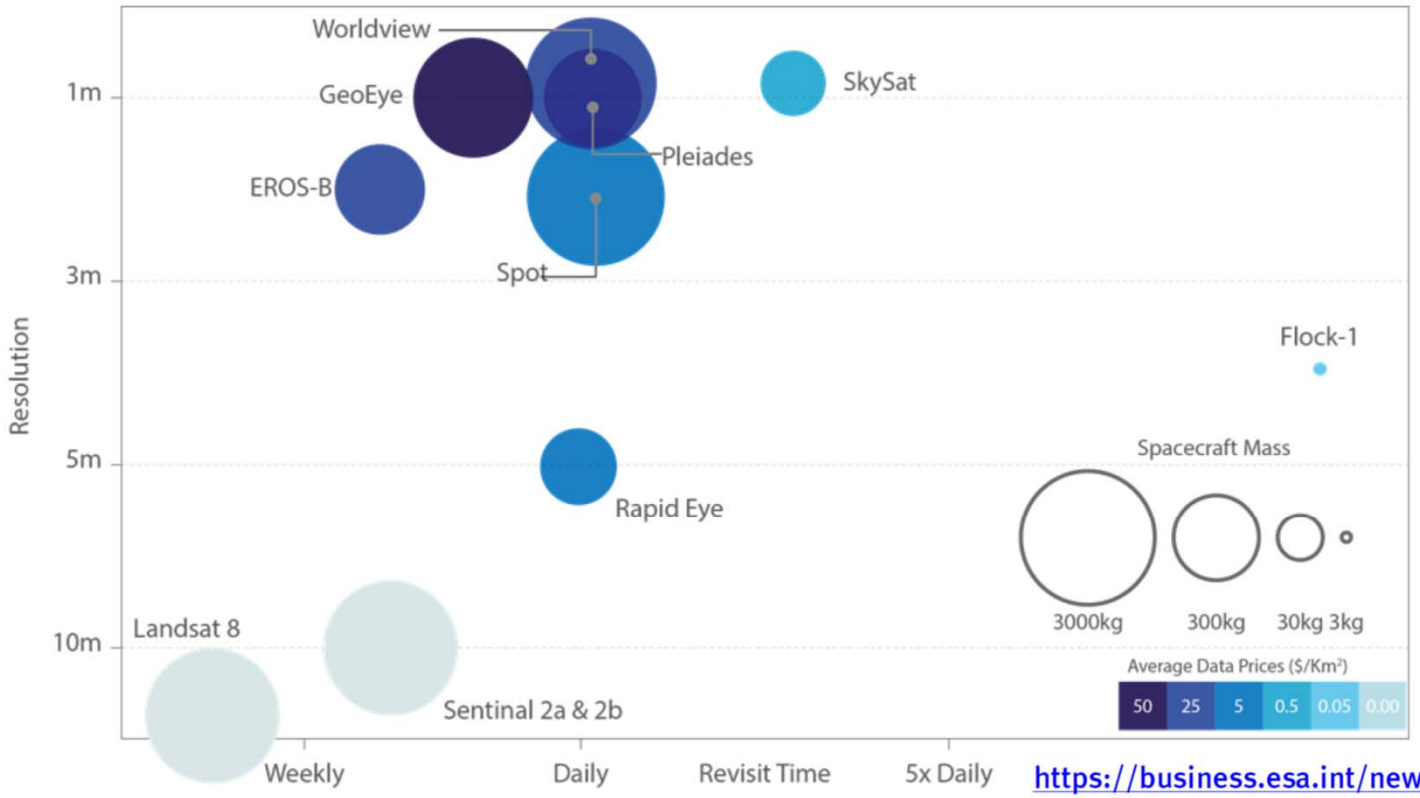


ARPR: Precision of estimators



Deliverable 3.2

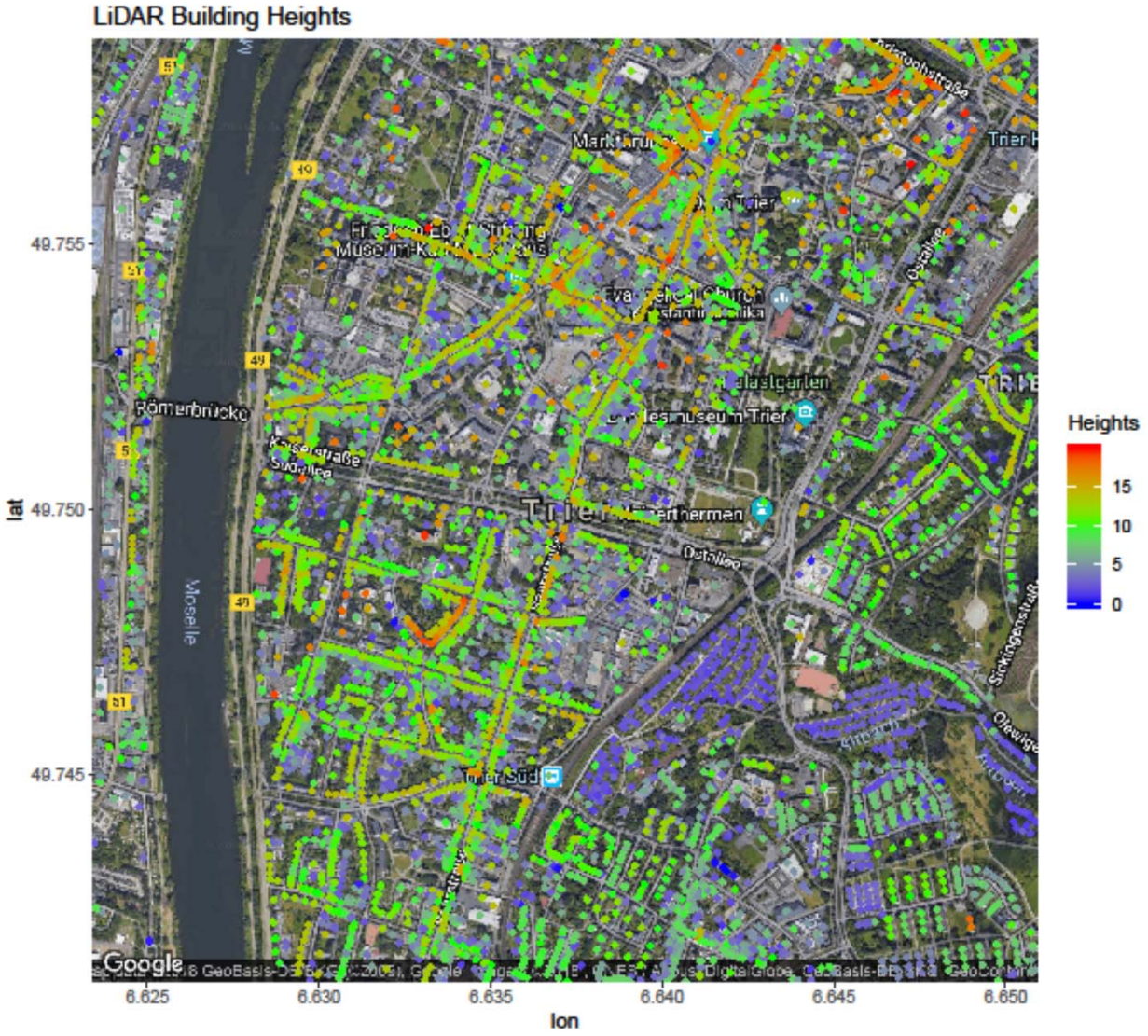
- Introduction (UT)
- Applications
  - Use of scanner data for regional price indices (PISA / ISTAT / SOTON)
  - Use of remote sensing data for measuring poverty and well-being (UT / CBS / DESTATIS)
- Advanced methods for future use (UT / PISA / ISTAT / DESTATIS / CBS)
- Best practice recommendations for future use (UT)



https://business.esa.int/newcomers-earth-observation-guide

Properties of Remote Sensing Data: Spatial resolution

Source: BKG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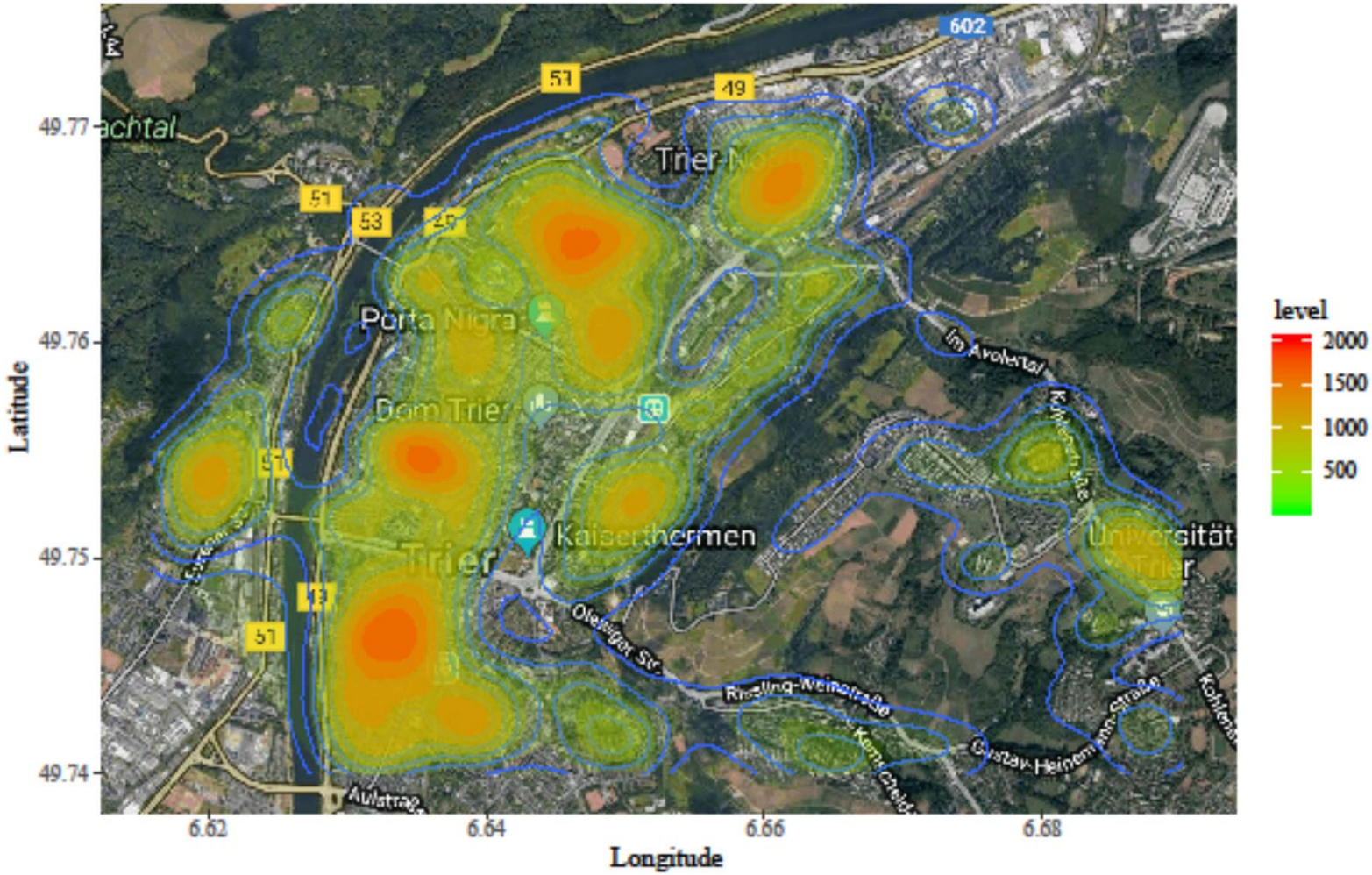
Römerbrücke
Mosel
Trier
Trier Süd
Google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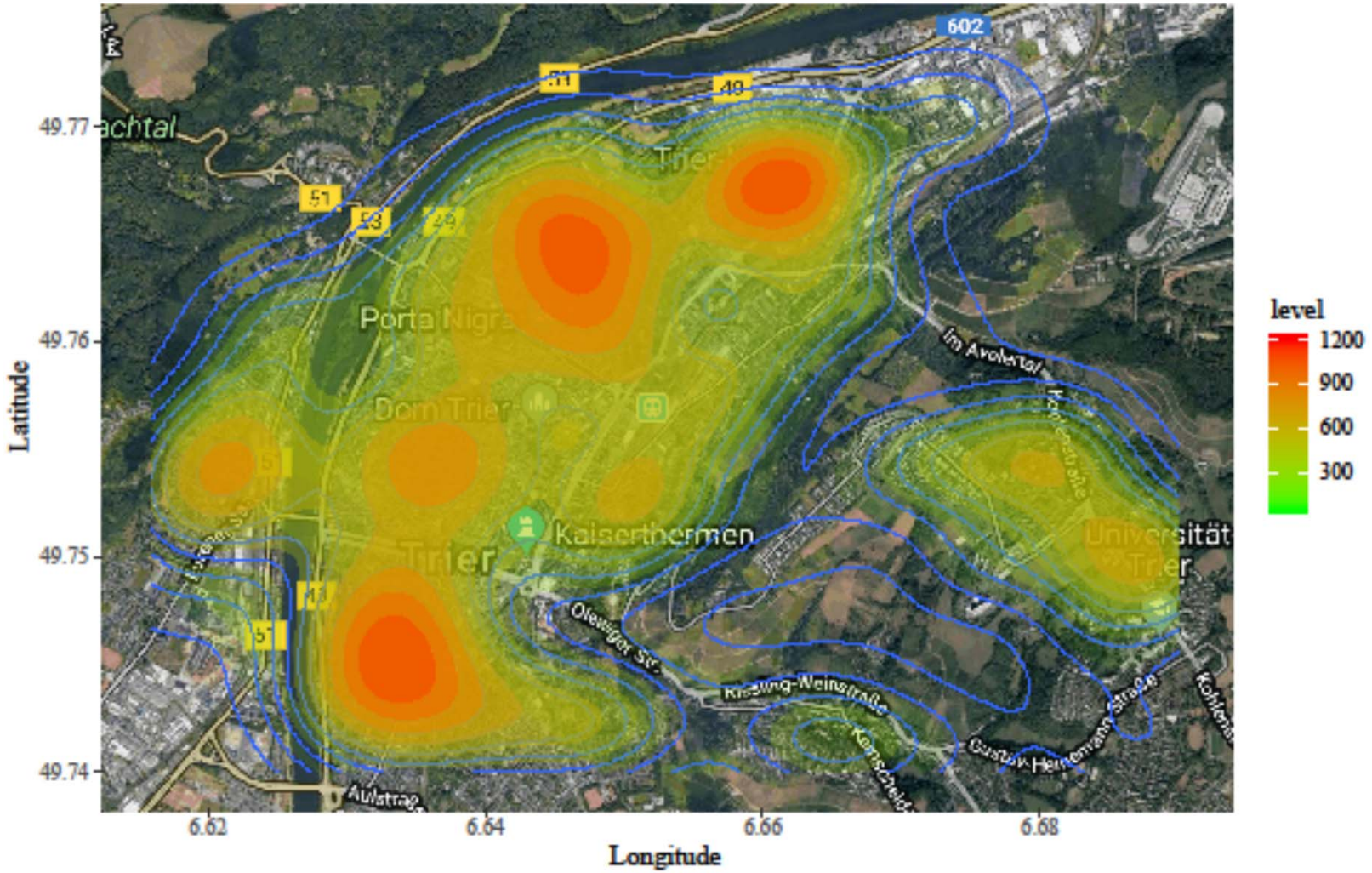
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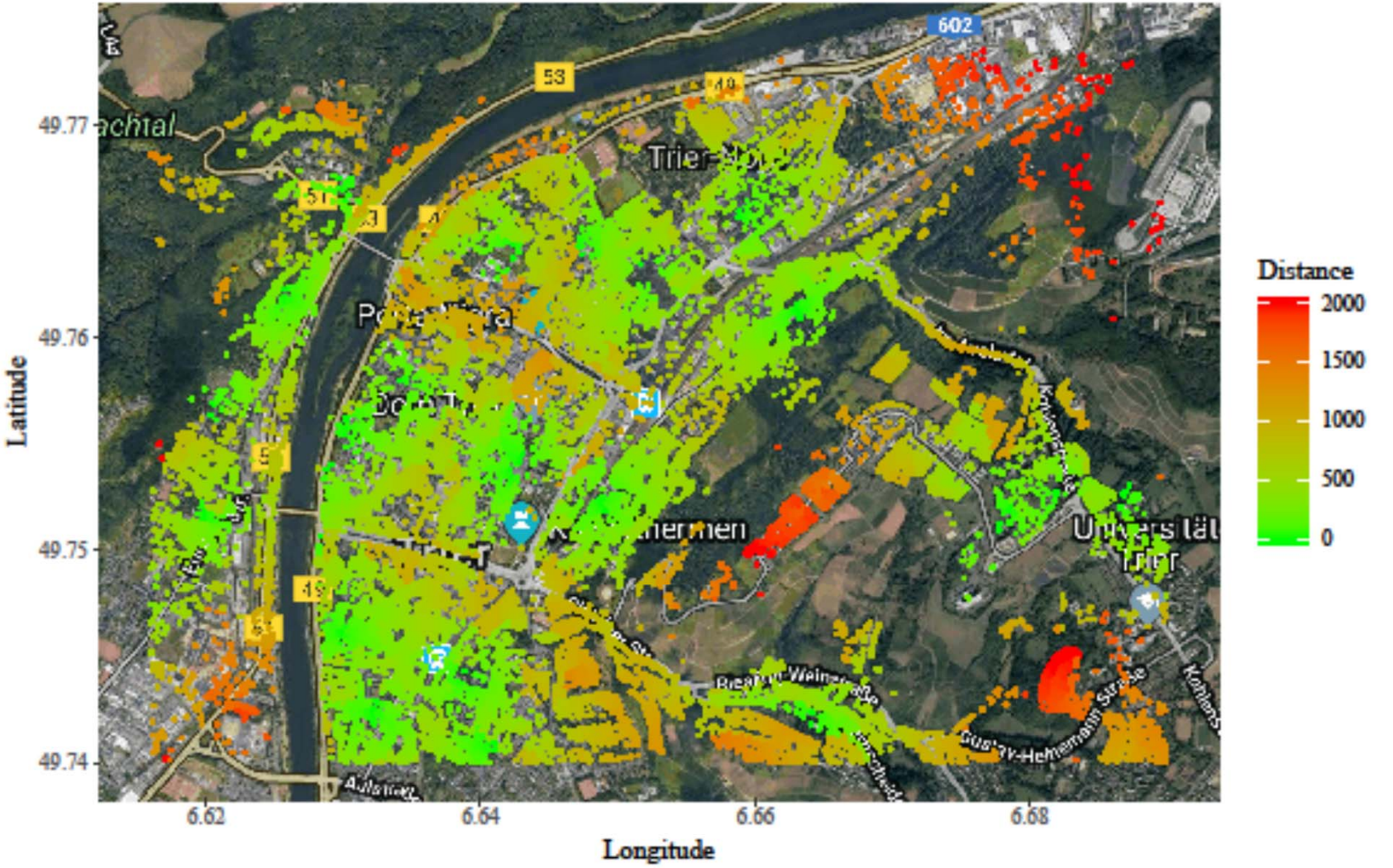
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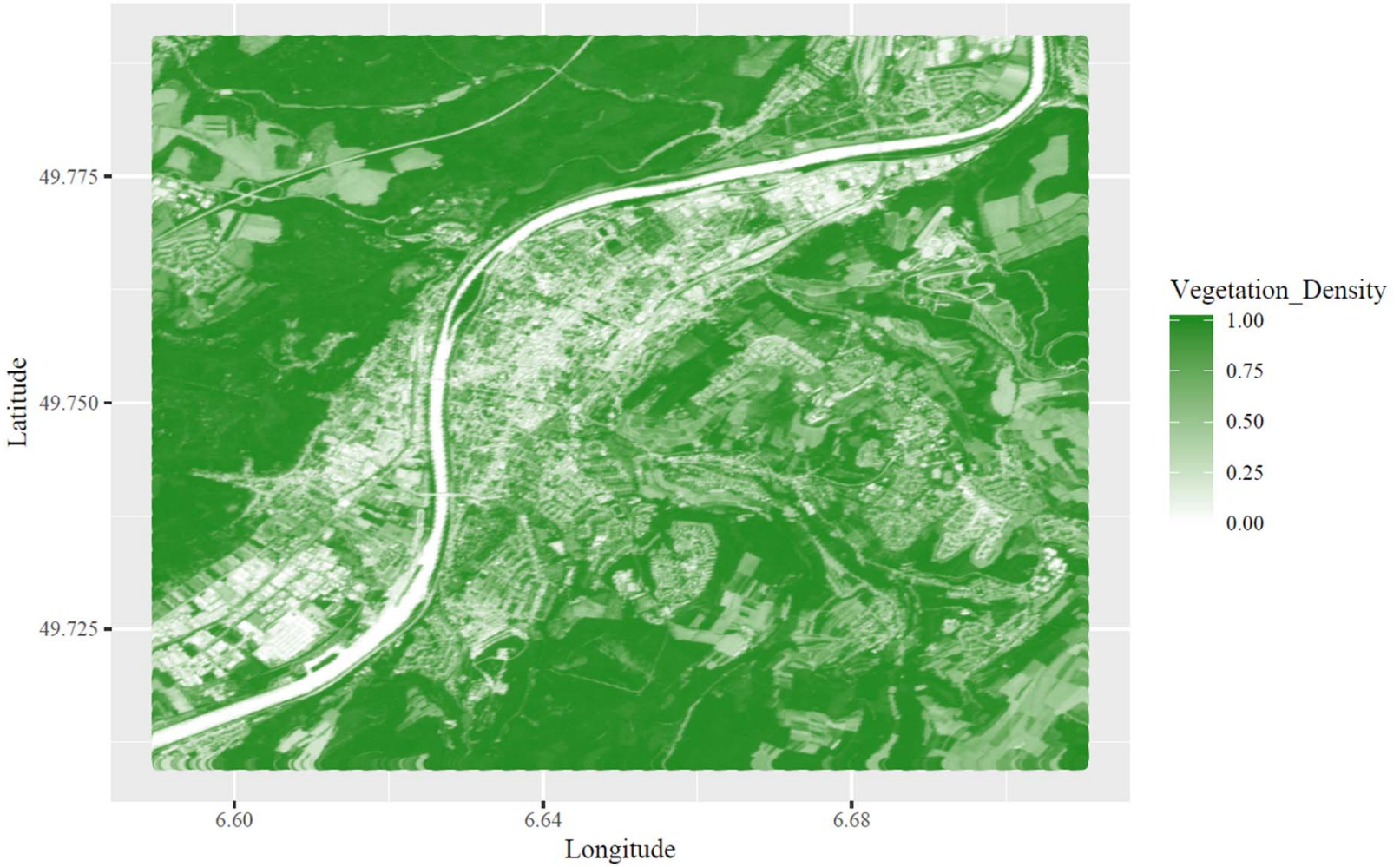
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0.50
0.25
0.00

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Thank you for your attention!