BIGGER IS BETTER. OR IS IT?

Lessons learned from using a Deep Neural Network on Big Data to estimate SDG Agenda 2030 Indicator 58.

Master's Thesis

Supervision:

PD Dr. Andreas Heinimann

Institue of Geography, University of Bern

Author:

Benjamin Andrea Schüpbach

Matr.No. 14-100-564

benjamin.schuepbach@students.unibe.ch

Master's Student in Geography

Institute of Geography, University of Bern

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1.4.1 Deep Neural Networks

1.4.2 YOLO & Darkflow

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1.4.4 title

1.5 Goals of this Study

Show potentials of big data in combination with machine learning for indicators of SDGs.

1.5.1 Research Questions

In the following paragraph, research questions based on the goals of this study are formulated. Research questions 1 and 1.1 are directly linked to target indicator #58 of the SDGs. Research question 2 is oriented towards the potential, overall contribution of Big Data for Sustainability.

Research Question 1:
Can georeferenced data for indicator #58 of the SDGs be generated using a Deep Neural Network on the Twitter Streaming API?

Research Question 1.1:

Are these data comparable to conventional data for indicator #58 of the SDGs in terms of quality and accuracy?

Research Question 2:

What are potentials and limitations of Big Data analyses for the monitoring of the SDGs?

2 Methods

Introduce Methods by means of a flowchart!

2.1 Harvesting of Training Images

2.2 Supervised Classification

2.3 Training ICARUS

2.4 Validation

Hilbert (2016)

3 Results

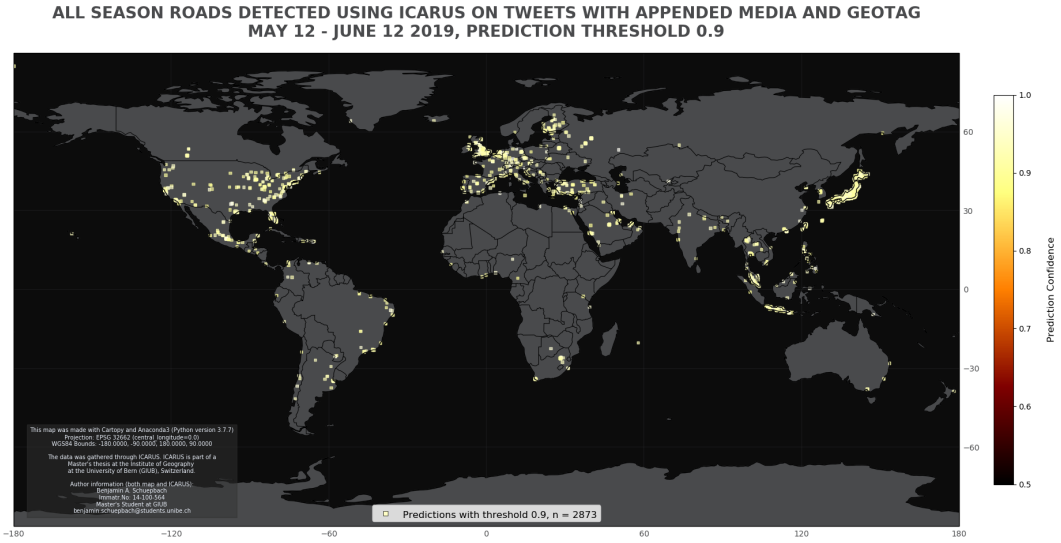

Figure 1: Figure 1: Map of Tweets where ICARUS identified AllSeasonRoads

4 Discussion

5 Conclusion & Outlook

5.0.1 title

References

Martin Hilbert. Big Data for Development: A Review of Promises and Challenges. *Development Policy Review*, 34(1):135–174, January 2016. ISSN 1467-7679. doi: 10.1111/dpr.12142.