



Motivation

App

Process

Campaign

Results

Results

Lessons

Contact

FotoQuest Go

A citizen science tool for
in-situ land use and land
cover monitoring

Presenter: Steffen Fritz - fritz@iiasa.ac.at

Inian Moorthy, Tobias Sturn, Dilek Fraisl, Mathias Karner,
Juan Carlos Laso Bayas, Linda See, Ian McCallum

International Institute for Applied Systems Analysis





Motivation

- Improving the quality of Earth Observation-based Land Use & Land Cover maps/products
- Uncovering the potential of citizen science and earth observation to improve the way we see, map and understand the world
- Lowering cost of in-situ (ground-based) data collection methods, while promoting environmental stewardship





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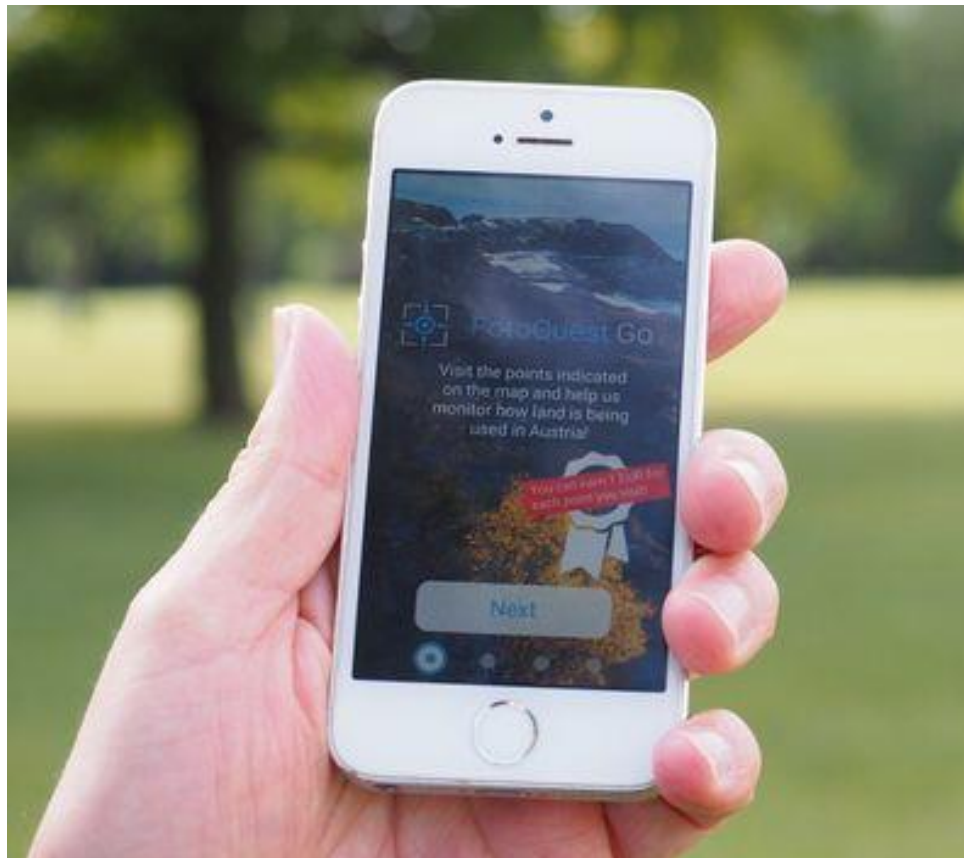
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Mobile App

Mobile application for in-situ data collection to promote community-based LULC monitoring and awareness. Campaign in Austria!





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FotoQuest Go Process

Step 1

Step 2

Step 3

Step 4

Step 5

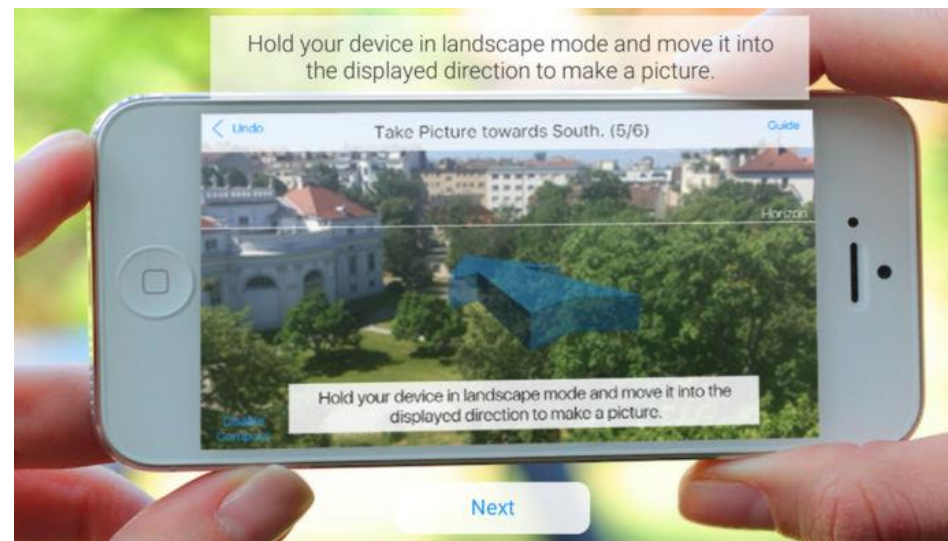
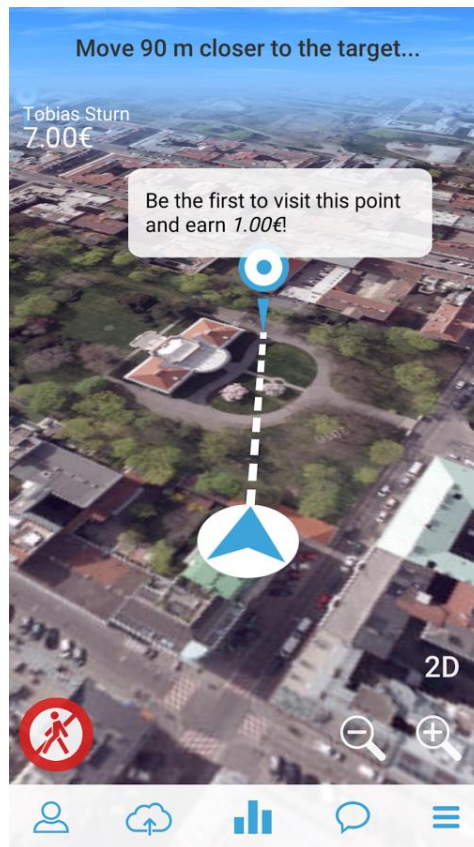
Navigate to Location

Take photos

Answer questions

Submit for QA

Feedback to contributor



Photos in 4 cardinal directions plus target location itself





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- Quality control & assurance process
- Feedback to contributors via app & email
- Monetary incentive of 1€ per point

User Survey

Contribute to science	4.7
Strong interest in project	4.6
Enjoy being outdoors	4.5
Discover new landscapes	4.3
Enjoy using the app	4.2
User friendly app	4.1
Excited about rewards	4.1

11 weeks



100+
Contributors



912+
Quests



4560+
Photos

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FotoQuest User

Surveyor

North



East



South



West



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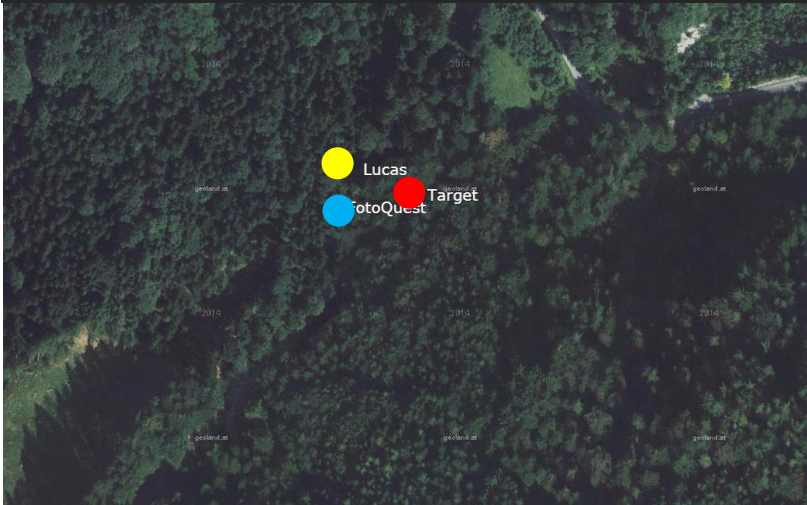
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Forest target



FotoQuest user closer to target



 Target

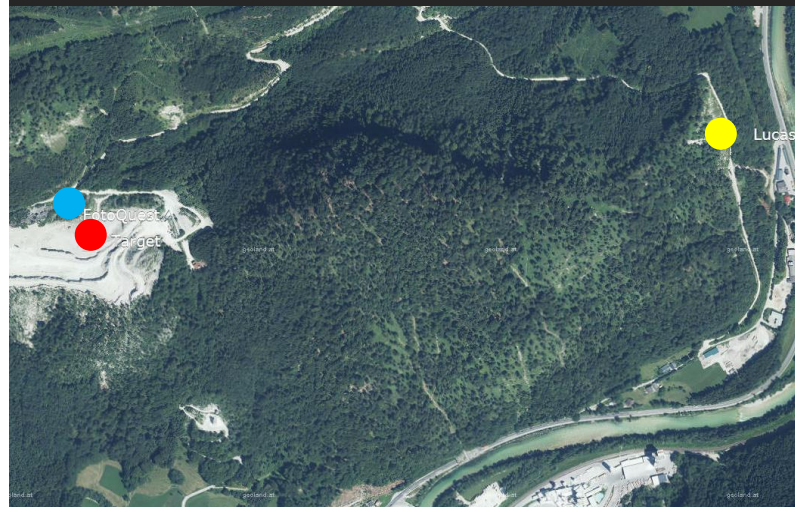
 Surveyor

 Fotoquest

Water target



FotoQuest user closer to target





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Lessons

- Near-real time **quality control** improves data quality
- Near-real time **feedback** is connected to user **learning**
- Fotoquest GO can provide **complementary dataset to LUCAS** surveys
- Contributors are interested in **science** and **being outdoors**
- Ongoing efforts to **evaluate data quality**, and **comparison to LUCAS**
- Ongoing efforts to improve app **user friendliness**



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