MASTER

Multiple Aspect Trajectory Management and Analysis

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Consortium

10 partners (6 EU, 1 Canada, 3 Brazil) in blue the overlapping partners with SEEK

European academic

- CNR, Consiglio Nazionale delle Ricerche, IT
- UNIVE, Ca' Foscari University Venice, IT
- UPRC, University of Pireaus Research Center, GR
- UVSQ, University of Versailles Saint-Quentin , FP
- HUA, Harokopio University of Athens, GR

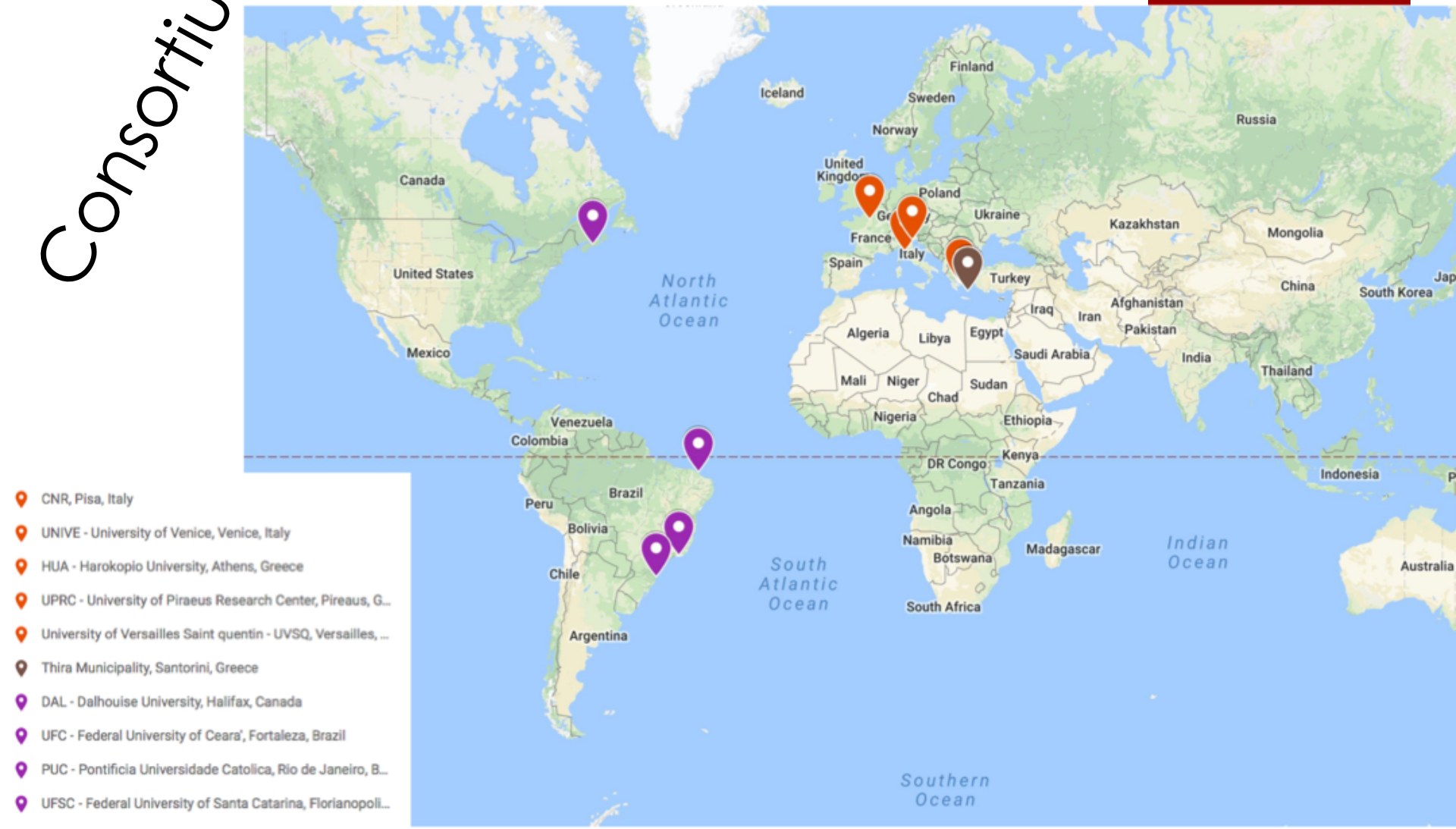
European non academic

- Thira, Municipality of Thira, GR

International academic

- UFSC, Federal University of Santa Catarina BR
- UFC, Federal University of Ceará , BR
- PUC, Pontificial University of Rio de Janeiro, BR
- DAL, Dalhouise University , CA

Consortium


CNR, Pisa, Italy
UNIVE - University of Venice, Venice, Italy
HUA - Harokopio University, Athens, Greece
UPRC - University of Piraeus Research Center, Pireaus, G...
University of Versailles Saint quentin - UVSQ, Versailles, ...
Thira Municipality, Santorini, Greece
DAL - Dalhouise University, Halifax, Canada
UFC - Federal University of Ceara', Fortaleza, Brazil
PUC - Pontificia Universidade Catolica, Rio de Janeiro, B...
UFSC - Federal University of Santa Catarina, Florianopoli...
Canada
United States
Mexico
Venezuela
Colombia
Peru
Brazil
Bolivia
Chile
Argentina
North Atlantic Ocean
South Atlantic Ocean
Southern Ocean
Iceland
Finland
Sweden
Norway
Russia
United Kingdo
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Indian Ocean
Indonesia
Australia

Research Program

From raw trajectories to holistic trajectories

Spatio-temporal trajectories do not properly represent the richness and complexity of the data.

Many different contextual **aspects** can be exploited to enrich the spatio-temporal data.

Holistic trajectories: *enrichment of the application-dependent aspects of trajectories from heterogeneous and multidimensional data.*

Raw trajectory

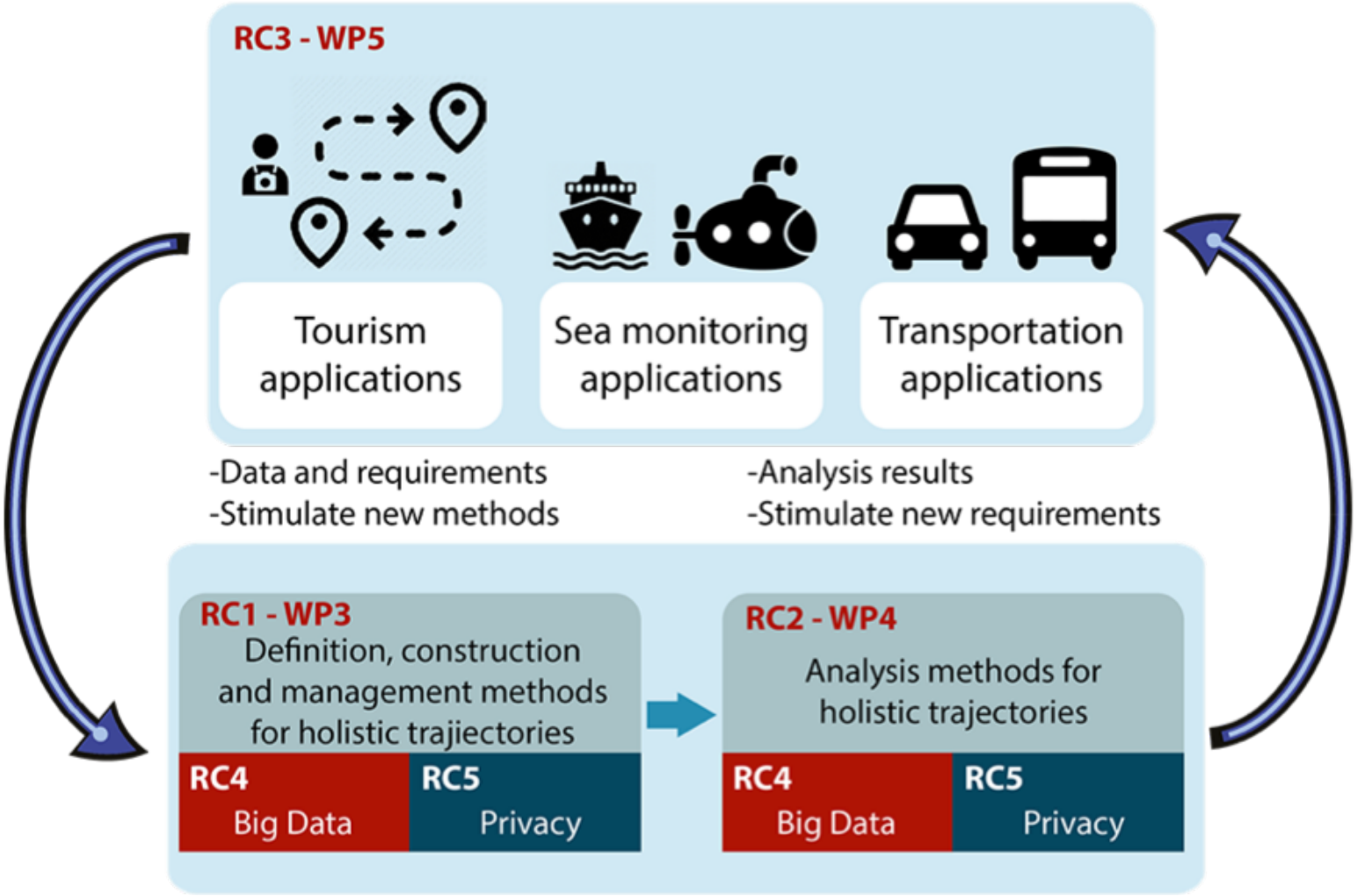
Holistic trajectory

Credits to Vania Bogorny (UFSC)

Research challenges in holistic trajectories

Research questions	Challenges
How can we create and **manage** holistic trajectories?	We need methods for **building semantically rich trajectories** from heterogeneous and multidimensional data.
How can we **infer** interesting knowledge?	We need data analysis methods capable of taking into account the different aspects of holistic trajectories. Specifically: **similarity** analysis, **clustering**, **graph** analysis, **prediction** and **recommendation**.
Which **applications** may benefit from the analysis of holistic trajectories?	We study the impact of the holistic trajectories analysis methods into the **tourism, sea monitoring** and **public transportation domains**.
How to preserve the **privacy** of the individuals?	We need methods based on the **privacy-by-design** principle
How can we deal with the **Big Data** characteristics?	Storage and analysis methods with emphasis on **efficiency** and **large scale data management**.

MASTER - The Concept



Web site and Social Media

- http://www.master-project-h2020.eu
- Facebook: Master Project H2020
- Twitter: Master Project H2020