

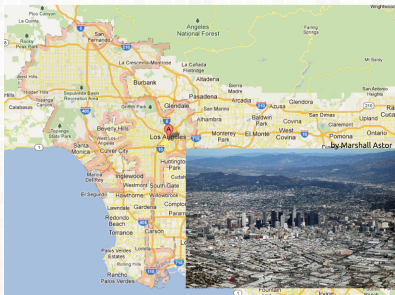
# HETEROGENEITY-PRESERVING DATA INTEROPERABILITY: METHODS AND CHALLENGES

EARTH SCIENCE ONTOLOG SESSION 3

Krzysztof Janowicz & Pascal Hitzler

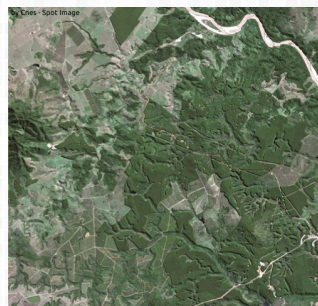
October, 2012

# TOWN OR CITY?



- **California:**  
*City*  $\equiv$  *Town*
- **Utah:**  
*Town*  $\equiv$   $<$  (*population, 1000*)
- **Pennsylvania:**  
*Town*  $\equiv$  {*Bloomsburg*}

# WHAT DEFINES A FORESTS?



|                  | <b>Min area (ha)</b> | <b>Min crown cover (%)</b> | <b>Min tree height (m)</b> | <b>Strip Width (m)</b> |
|------------------|----------------------|----------------------------|----------------------------|------------------------|
| France           | 0.05                 | 10.0                       | 5-7                        | 25                     |
| Greece           | 0.5                  | 10.0                       |                            | 30                     |
| Italy            | 0.2                  | 20.0                       |                            | 20                     |
| Papua New Guinea | 100.0                | 10.0                       | 5.0                        |                        |
| Switzerland      |                      | 20.0                       | 3                          | 25-50                  |
| United States    | 0.4                  | 10.0                       | 4.0                        | 36                     |

## TODAY'S SESSION

- Dr. **Simon Scheider** (University of Muenster, Germany) - *What does it take to interoperate? Semantic interoperability revisited in terms of human digital communication.*
- Dr. **Prateek Jain** (IBM TJ Watson Research Center) - *Ontology matching and Data Interoperability using community generate data.*
- Mr. **Ben Adams** (UC Santa Barbara) - *Semantic Similarity Measurement for Geo-Ontologies.*
- Professor **Giancarlo Guizzardi** (Federal U of Espirito Santo, Brazil) - *Formal Ontology, Ontological (Anti-)Patterns and Model Simulation.*