Digitalization of historical Venice lagoon maps

CNR, Italy

***Abstract*—Historical maps comprise a lot of inherent information on natural environmental and anthropogenic changes. They are commonly the most important database for various spatial analyses of the land use as well as historical landscapes, urban development, influences of the economy development, toponyms changes, etc.**

***Index Terms*—historical maps, Venice lagoon, land use**

I. Introduction

This document provides a paper-style view of the Research Object (RO) "*Digitalization of historical Venice lagoon maps*"[1] generated . The RO has been created, managed and preserved via ROHub platform [1]. Please refer to [2] for a general introduction to the RO concept, to [3] for a detailed description of the RO model, and to [4] for more information about ROHub platform.

The RO is of type *"Data-centric", which represents an aggregation of related resources where data resources (e.g., datasets, documents, files) play the central role.* [2].

An overview of this RO is depicted in Figure 1. In summary, the results obtained include [3];Additionally, this RO has been enriched automatically with the following annotations:

- concepts (most frequently mentioned in the RO): *changes, analyses, development*
- domains (fields of knowledge in which the main concepts are commonly used): *hydrography, geography*
- frequent expressions (most frequently mentioned noun phrases): *land use, toponyms change*
- named entities (most frequently mentioned):
  - Places: *Venice*

II. Resources

The resources encapsulated by the RO are summarized in table I

TABLE I
Research Object Resources

name	size	type
screenshot_140.png	685.9 KB	Sketch



Fig. 1. Research Object Sketch

Acknowledgment

The Research Object was uploaded to ROHub by *Francesco De Leo*. ROHub portal development was supported by EVER-EST EU project (HORIZON 2020 grant 674907).

[1] *http://sandbox.rohub.org/rodl/ROs/historical_maps_venice_lagoon/*
[2] See RO types definitions at http://w3id.org/ro/earth-science#
[3] http://box.everest.psnc.pl/f/858d20f252/

References

[1] The Research Object Management Platform - ROHub http://www.rohub.org/.
[2] K. Belhajjame, O. Corcho, D. Garijo, J. Zhao, P. Missier, D. Newman, R. Palma, S. Bechhofer, E. García Cuesta, J. M. Gómez-Pérez, S. Soiland-Reyes, L. Verdes-Montenegro, D. De Roure, and C. Goble "Workflow-Centric Research Objects: First Class Citizens in Scholarly Discourse", Proceedings of Workshop on the Semantic Publishing, SePublica Crete, Greece 28 May 2012.
[3] Belhajjame K., Zhao J., Garijo D., Gamble M., Hettne K., Palma R., Mina E., Corcho O., Gómez-Pérez J. M., Bechhofer S., Klyne G., Goble C. "Using a suite of ontologies for preserving workflow-centric research objects", Journal of Web Semantics: Science, Services and Agents on the World Wide Web Available online 11 February 2015 ISSN 1570-8268.

[4] Palma R., Corcho O., Gómez-Pérez J. M., Mazurek, C. “ROHub - A Digital Library of Research Objects Supporting Scientists Towards Reproducible Science”. In Semantic Publishing Challenge of Proc. Extended Semantic Web Conference (ESWC) Crete, Greece 25-29 May 2014