Colli Albani (Italy) InSAR Data 1992-2010

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***Abstract*—This dataset contains cumulate displacements in Ascending and Descending Line of Sights from ERS/Envisat satellites during 1992-2010 at Colli Albani (Italy), a volcanic area close to Rome.**

I. Introduction

This document provides a paper-style view of the Research Object (RO) "*Colli Albani (Italy) InSAR Data 1992-2010*"[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. Additionally, this RO has been enriched automatically with the following annotations:

- concepts (most frequently mentioned in the RO): *episode, technique, norm, signal, phase, component, Section, results, velocity, pixel, Baseline, subsets, deformations*
- domains (fields of knowledge in which the main concepts are commonly used): *physics, mathematics*
- frequent expressions (most frequently mentioned noun phrases): *phase signal, decorrelation phenomena, phase artifact, phase pattern, deformation velocity vector*
- named entities (most frequently mentioned):
  - Places: *Italy*

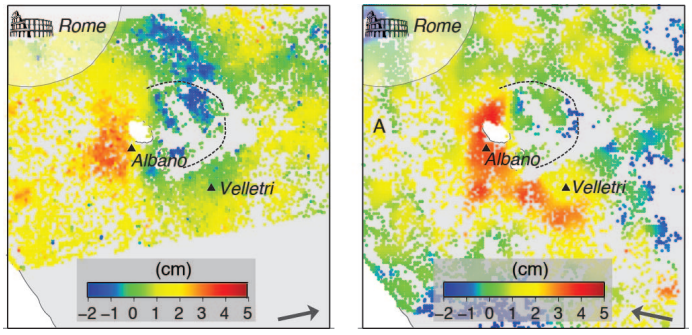

Fig. 1. Research Object Sketch

II. Resources

The resources encapsulated by the RO are summarized in table I

[1] *http://sandbox.rohub.org/rodl/ROs/Colli_Albani_InSAR_1992_2010/*

[2] See RO types definitions at http://w3id.org/ro/earth-science#

TABLE I
Research Object Resources

name	size	type
Table_1_ERS_ENVISAT_Data.xls	76.5 KB	File
method.rtf	2.6 KB	File
ASC-DSC-disp-R16.rtf	596.0 B	File
ASC-DSC-disp-R16.rtf	701.0 B	File
ASC-300-disp-R16.dat	412.0 KB	Dataset
DSC-300-disp-R16.dat	356.3 KB	Dataset
asc-dsc.jpg	224.5 KB	Sketch

A. Key Resource details

- Name: *Table_1_ERS_ENVISAT_Data.xls*
  Description: *Excel file containing the list of the ERS ENVISAT ascending and descending data used for the time-series analysis.*
- Name: *ASC-300-disp-R16.dat*
  Description: *Ascending component.*
- Name: *DSC-300-disp-R16.dat*
  Description: *Descending component.*

Acknowledgment

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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