

D5.2- HETEROGENEOUS DATA FUSION



Co-funded by the Horizon 2020 Framework Programme of the European Union

DELIVERABLE NUMBER	D5.2
DELIVERABLE TITLE	Heterogeneous Data Fusion
RESPONSIBLE AUTHORS	Rob Knapen (ALTERRA)



GRANT AGREEMENT N.	731001			
PROJECT ACRONYM	AGINFRA PLUS			
PROJECT FULL NAME	Accelerating user-driven e-infrastructure innovation in Food & Agriculture			
STARTING DATE (DUR.)	01/01/2017 (36 months)			
ENDING DATE	31/12/2019			
PROJECT WEBSITE	plus.aginfra.eu			
COORDINATOR	Nikos Manouselis			
ADDRESS	110 Pentelis Str., Marousi GR15126, Greece			
REPLY TO	nikosm@agroknow.com			
PHONE	+30 210 6897 905			
EU PROJECT OFFICER	Mrs. Georgia Tzenou			
WORKPACKAGE N. TITLE	WP5 Agro-climatic and Economic Modelling Community			
WORKPACKAGE LEADER	ALTERRA			
DELIVERABLE N. TITLE	D5.2 Heterogeneous Data Fusion			
RESPONSIBLE AUTHOR	Rob Knapen			
REPLY TO	rob.knapen@wur.nl			
DOCUMENT URL	http://www.plus.aginfra.eu/sites/plus_deliverables/D5.2.pdf			
DATE OF DELIVERY (CONTRACTUAL)	31 December 2017			
DATE OF DELIVERY (SUBMITTED)	22 December 2017			
VERSION STATUS	1.0 Final			
NATURE	Demonstrator			
DISSEMINATION LEVEL	Public			
AUTHORS (PARTNER)	Rob Knapen (ALTERRA)			
CONTRIBUTORS	Rob Lokers (ALTERRA) Panagiotis Zervas (Agroknow)			
REVIEWERS	Matthias Filter (BfR)			

D5.2 | Heterogeneous Data Fusion 1



VERSION	MODIFICATION(S)	DATE	AUTHOR(S)
0.5	Pre-final version (wiki page) sent to internal review	18-12-2017	Rob Knapen (ALTERRA)
0.9	Reviewer comments incorporated (wiki page)	20-12-2017	Rob Knapen (ALTERRA)
1.0	Final Version	22-12-2017	Rob Knapen (ALTERRA)



PARTICIPANTS CONTACT Agroknow IKE Nikos Manouselis (Agroknow, Greece) Email: nikosm@agroknow.com Stichting Wageningen Research **Rob Lokers** ALTERRA (ALTERRA, The Netherlands) Email: rob.lokers@wur.nl VAGENINGEN UR Institut National de la Recherché Pascal Neveu Agronomique (INRA, France) Email: pascal.neveu@inra.fr BundesinstitutfürRisikobewertung **Matthias Filter** (BfR, Germany) Email: matthias.filter@bfr.bund.de Bundesinstitut für Risikobewertung ConsiglioNazionaleDelleRicherche Leonardo Candela (CNR, Italy) Email: leonardo.candela@isti.cnr.it **University of Athens** George Kakaletris National and Kapodistrian (UoA, Greece) Email:gkakas@di.uoa.gr University of Athens Stichting EGI Tiziana Ferrari (EGI.eu, The Netherlands) Email: tiziana.ferrari@egi.eu Pensoft Publishers Ltd (PENSOFT, Lyubomir Penev PENSOFT Bulgaria) Email: penev@pensoft.net



EXECUTIVE SUMMARY

For the domain of agro-climatic and agro-economic modelling and its research community, personas were identified and initial use cases focussing on opportunities to bring researchers from their current local, single computer and peer network based work space to a more cloud based compute and collaborative work environment, using Virtual Research Environments (VRE). On the D4Science platform a domain specific VRE has been set up to support developing the use cases of crop modelling and crop phenology estimation. The VRE already provides the core functionality for scientific collaboration and knowledge exchange, and access to compute and storage services. These will be tailored further to fit the specific needs of the use cases, e.g. to run detailed field level crop simulations and crop phenology estimations, and following data analytics using spatial and remote sensing data. Input data will mostly be derived from the AgroDataCube, a big data warehouse with relevant agronomic (open) data for The Netherlands, that will be made accessible from within the VRE. In parallel all functionality being developed will be assessed by (representatives of) the user community, which will provide further input to the project and this ongoing deliverable.

The deliverable has been created on the public space of the AGINFRA+ Wiki and can be accessed through the following link:

https://support.d4science.org/projects/aginfraplus_wiki/wiki/D52 - Heterogeneous_Data_Fusion

4