An overview of the Consortium GLADSOILMAP supported by the LE STUDIUM Loire Valley Institute for advanced research studies (France)

To cite this version:
Dominique Arrouays, Anne C Richer-De-Forges, Budiman Minasny, Laura Poggio, Zamir Libohova, et al.. An overview of the Consortium GLADSOILMAP supported by the LE STUDIUM Loire Valley Institute for advanced research studies (France): Joining efforts between sub national, national, continental and global scale digital soil mapping of soils, soil properties and soil functions. Soil Mapping for a Sustainable Future. 2nd joint Workshop of the IUSS Working Groups Digital Soil Mapping and Global Soil Map., Feb 2023, Orléans, France. . hal-03982442

HAL Id: hal-03982442
https://hal.inrae.fr/hal-03982442
Submitted on 10 Feb 2023

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L’archive ouverte pluridisciplinaire HAL, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d’enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.
What is GLADSOILMAP?

Effective soil management requires high-resolution data on their properties. Digital Soil Mapping (DSM) is one of the major approaches for generating soil property maps over large areas at fine spatial resolution. Two projects, GlobalSoilMap and SoilGrids, aim at delivering the first global high-resolution soil property maps, the first one by a bottom-up approach (from country to globe), the latter by a top-down approach (global). Through regular meetings organized in Orléans (France), the GLADSOILMAP consortium brings together scientific leaders involved in both projects. The consortium aims at transferring methods to achieve convergence between top-down and bottom-up approaches, and to generate methods for delivering maps of soil properties. One main objective of this project is to develop methodologies to improve the accuracy of soil property forecasts and reduce their uncertainties.

The GLobAl Digital Soil MAP (GLADSOILMAP) consortium is funded by LE STUDIUM Loire Valley Institute for Advanced Studies through its LE STUDIUM Research Consortium Program. LE STUDIUM CONSORTIUM supports the creation of a team of researchers to exchange and develop new perspectives and organize one-week seminar every 6 months for two years (4 meetings in total) in the Centre-Val de Loire region, France. Travels, accommodation and meals are covered by the award. LE STUDIUM also organizes the present conference.

It aims at developing and transferring information and methods from the scientific community to (i) producers, i.e. people in charge of soil mapping so that they can improve the prediction accuracy of soil properties and decrease the associate uncertainty and, (ii) end-users, i.e. farmers, natural resource planners, modelers, policy makers, etc., so they can support their assessments and/or decisions at the relevant scales.

The Consortium partners

The consortium is lead by Dominique Arrouays (INRAE InfoSols), Orléans, France, and includes 5 main members:
- Budiman Minasny (Univ. of Sydney), Australia
- Pierre Roudier (Manaaki Whenua - Landcare Research), New Zealand
- Laura Poggio (ISRIC-World Soil Information), The Netherlands
- Zamir Libohova (USDA-National Resources Conservation Services) USA
- Vera Leatitia (Titia) Mulder (Wageningen University and Research), The Netherlands

The consortium also includes collaborators from INRAE InfoSols Orléans (France) (Anne C. Richer-de-Forge), Hocine Bourennane and Manuel P. Martin), from INRAE Montpellier (France) (Philippe Lagacherie) and from the French Geological Survey (BRGM, Orléans, France) (Guillaume Martelet, Pierre Nehlig).

Production from end 2019 to January 2023

96 papers

Networking - Co-authorship of Consortium articles at the end of 2022

A website:

https://www6.inrae.fr/gladsoilmap-consortium/