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From the field to the database: a user-oriented approach to promote cyber-curating of scientific continental drilling cores

Cécile Pignol, Elodie Godinho, Bruno Galabertier, Arnaud Caillo, Karim Bernardet, Vanessa Tosello, Laurent Augustin, Christian Crouzet, Isabelle Billy, Gregory Teste, et al.

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From field to database : a user-oriented approach to promote cyber-curating of scientific continental drilling cores



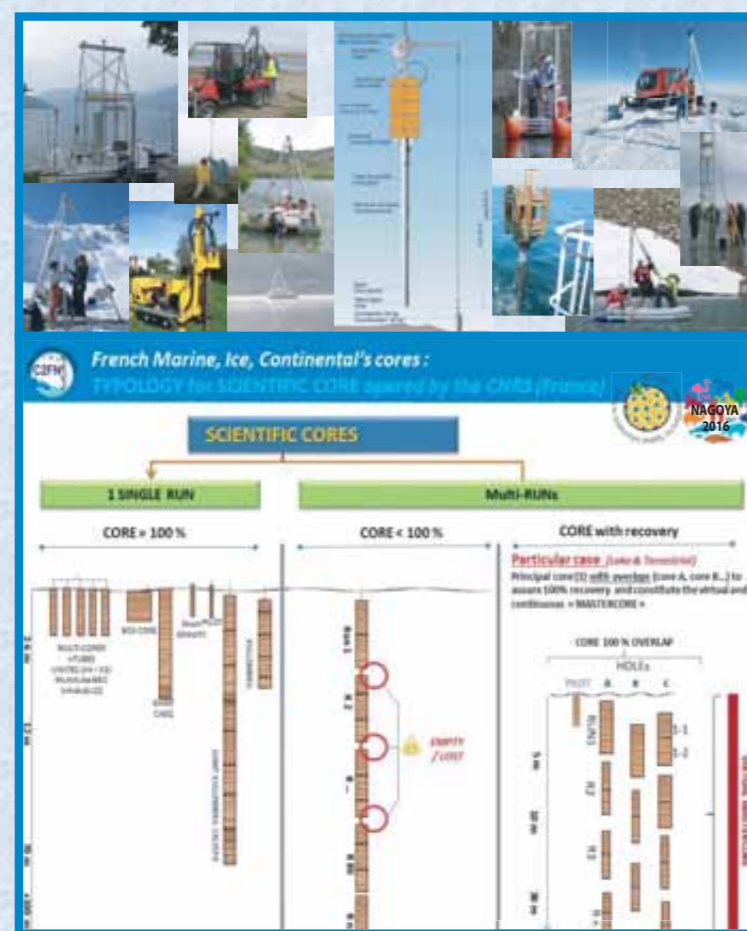
Cécile Pignol (1), Elodie Godinho (2), Bruno Galabertier (1), Arnaud Caillio (4), Karim Bernardet (2), Vanessa Tosello (8), Laurent Augustin (2), Christian Crouzet (6), Isabelle Billy (5), Gregory Teste (7), Eva Moreno (9), Xavier Crosta (5), Jérôme Chappellaz (7), Michel Calzas (3), Denis-Didier Rousseau (10), and Fabien Arnaud (1).

(1) EDYTEM, Université de Savoie Mt Blanc, CNRS, 73370 Le Bourget du Lac (Cécile.Pignol@univ-savoie.fr),
 (2) C2FN - DT INSU, CNRS, Bréguillon 83500 La Seyne sur Mer,
 (3) C2FN - DT INSU, CNRS, Bâtiment IPEV 29280 Plouzané,
 (4) OASU, EPOC Université de Bordeaux, CNRS, 33615 PESSAC,
 (5) EPOC, CNRS, Université de Bordeaux, Saint-Hilaire, 33615 PESSAC,
 (6) ISTERRE, Université de Savoie, CNRS, 73370 Le Bourget du Lac,
 (7) LGGE, Université Joseph-Fourrier, CNRS, 38400 St M.-d'Hères,
 (8) IFREMER - SISMER - 29280 Plouzané,
 (9) IMH-NH - Laboratoire de Géologie, 43 rue Buffon 75005 Paris,
 (10) CNRS - Inst. Nat. des Sciences Univers, 3 rue Mich.-Ange, 75016 PARIS

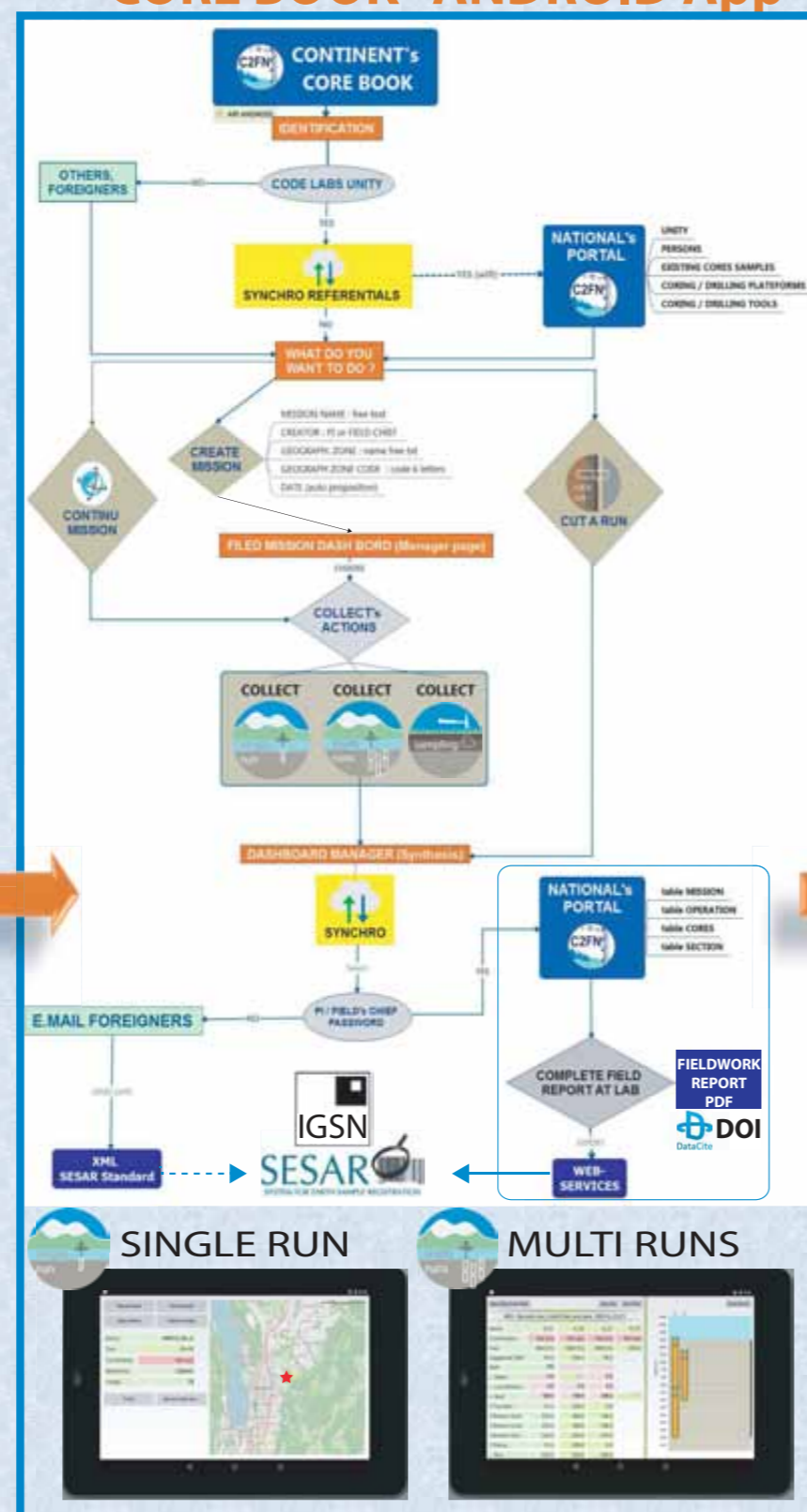
CLIMCOR national initiative aims at developing French facilities for scientific coring and drilling. It concerns indiscriminately ice, marine and continental samples. As part of this initiative, we initiated a reflexion about core curating and associated coring-data management. We hence aim at conserving all metadata from fieldwork in an integrated cyber-environment which could evolve toward laboratory-acquired data storage in the future. In that aim, our approach was conducted through a close relationship with field operators as well laboratory core curators in order to propose user-oriented solutions.

This project respects interoperability's standards and persistent's identifiers (DOI, IGSN, ISO19115/139).

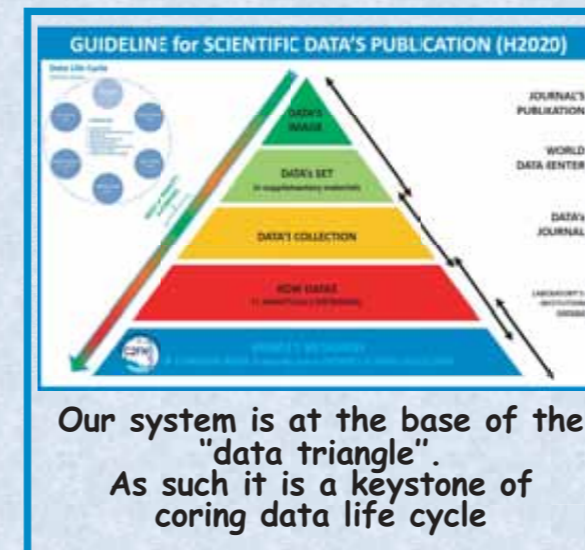
FIELDWORK



USER-ORIENTED "CORE BOOK" ANDROID App



The mobile application "Core book" is the first stone of the building. It allows the captation of coring meta-data directly on the field. It was developed in close collaboration with field operators in order to bring them a real support on the field and skip the fastidious step of feeding a database.



Automatically feeds

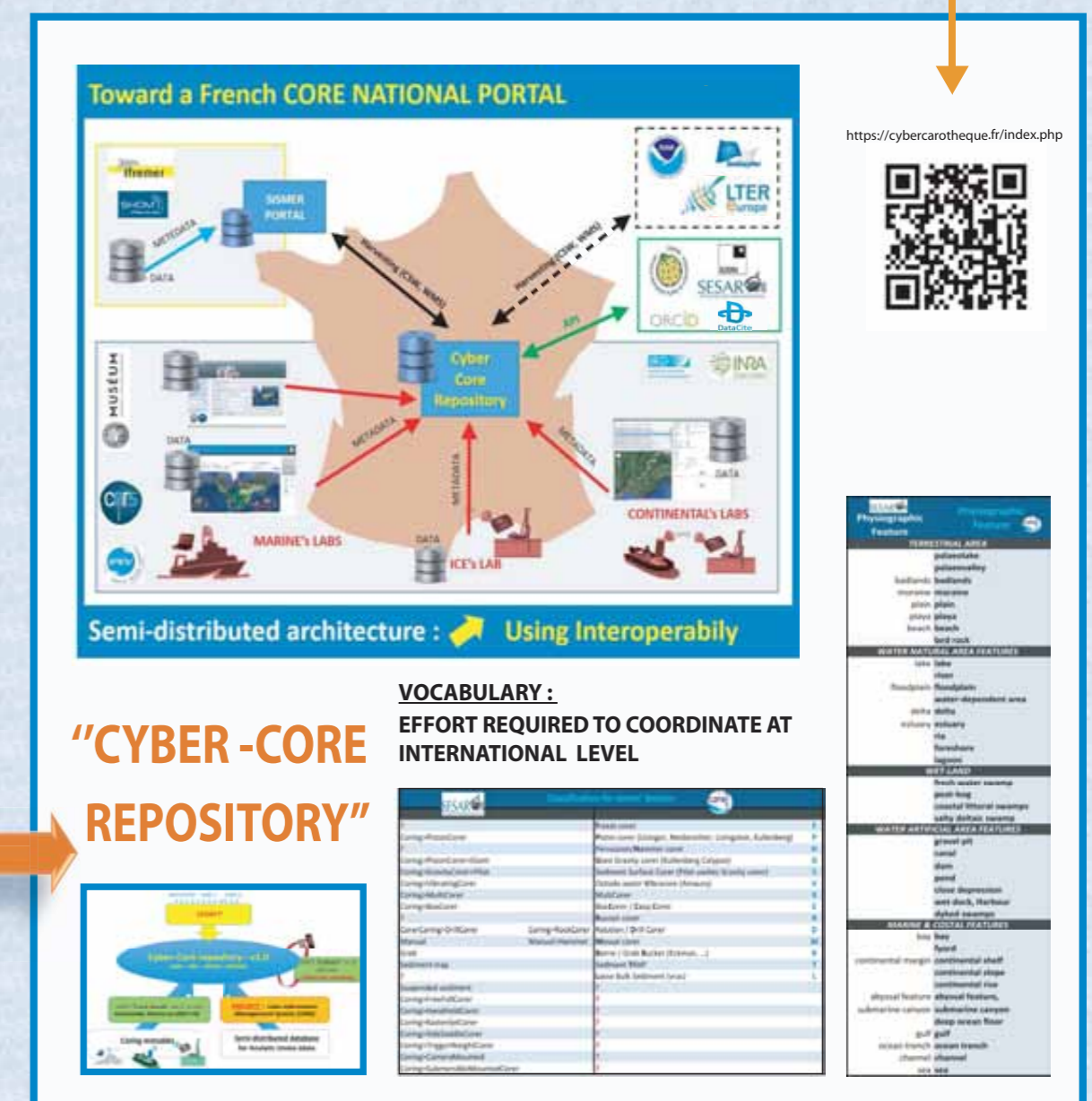
The national web portal "Cyber core repository" aims at gathering all metadata from any scientific coring operated by French teams.

Once gathered, the information are standardised and international persistent unique identifiers are attributed :

- DOI by campaign (by Datacite)
- IGSN for samples (by SESAR).

The metadata standard respects the European directive INSPIRE for cataloguing ISO 19115 / 19139

METADATA WEB PORTAL



"CYBER-CORE REPOSITORY"

Next steps :

- Continue to disseminate new practices and interest in our community, 'from the field to the labs'
- Integrate international databases and catalogues (NOAA's IMLGS, LThER-e DEIMS)
- Running LThER project : publishing selected reference data using Linked Open Data (Concept of the 'Retro-observatory')

To get the coresand to provide curation... ..of the best quality...