



#### Knowledge Inventory for hydrogeology research

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 642047.

## REDIAM

**Environmental Information Network of Andalusia** 

European Inventory on Groundwater Research "EIGR"



# Concepts

Now that the European hydrogeological information has been identified, we must proceed to define how the information will be stored. KINDRA has opted to do so by creating a Geoportal

According to the INSPIRE Directive:

Geoportal → Internet Site, or equivalent, with access to spatial data services





#### Geonetwork Open Source Platform (http://geonetwork-opensource.org/)



a Geographical Information Catalogue that provides services for enquiring, locating and downloading Geographical Information

Its main advantage is its simplicity: an easy to use interface, based on OGC open standards making information web transfer alot easier.

This makes working with decentralized catalogues, from different administrations and countries a plausible option.

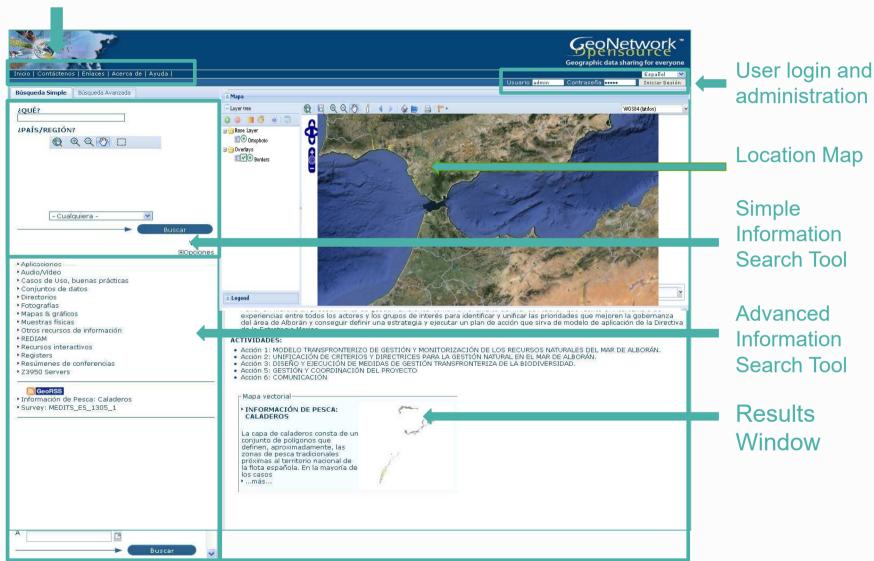


Geonetwork Opensource is a project created and funded by the United Nations' Food and Agriculture Organization - FAO.



#### Menu bar

#### A quick overview of Geonetwork





# Data Catalogue

Repository of Metadata concerning Research and Knowledge linked to Groundwater Research through Europe since 2000.

The catalogue will store information according to the ISO 19139 Metadata template, adjusted to the specifications of the HRC-SYS.

It is the one most extended format on an international level and it complies with all the INSPIRE specifications, which are precisely the ones our catalogue must follow.

Metadata describe the contents, the quality, the format and other characteristics linked to specific resources allowing users to properly identify precise information and services available as well as on how to locate them.



## Metadata

The purpose for creating metadata is to organize and maintain the information created as well as to promote the availability and the use of data.

Metadata provide the answers to Who, What, When, Where, Why and How by indicating:

- The title and overall description of the resources;
- The purpose of the resources and their usefulness;
- The date of creation of resource and, whenever applicable, the update process it is subject to;
- The geographical extension of the resource;
- The owner of the resource;
- The criteria and constraints, or restrictions, that applies to their use and exploitation;
- The quality of the resource.



## !!!!!VERY IMPORTANT!!!!

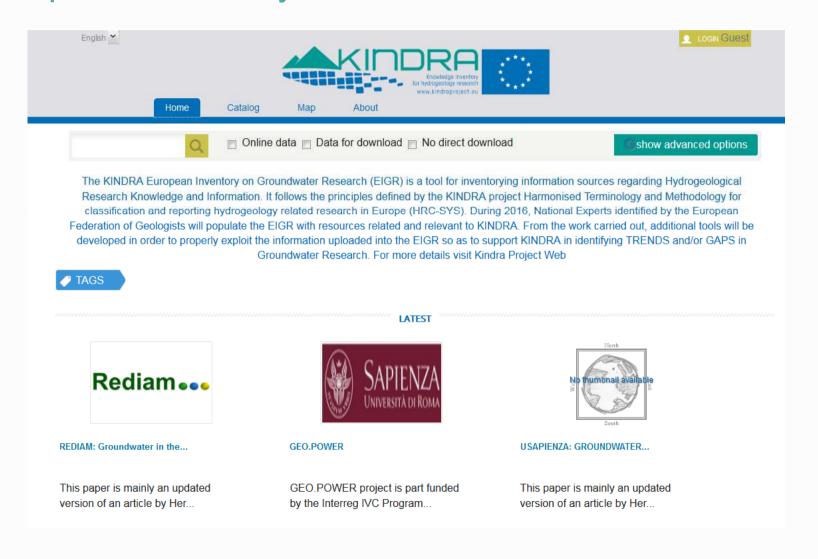
The information inserted in the EIGR must be as complete as possible.

This will allow the search engines and future user consultations to carry out thorough information analysis.

The EIGR will serve as a repository of this knowledge, and as a tool that will allow for queries and searches by selecting keywords, generating statistics, diagrams and other functions to help support the exploitation of the catalogued information.



#### European Inventory on Groundwater Research: EIGR





### European Inventory on Groundwater Research: EIGR

The inclusion of resources into the EIGR is carried out by completing a number of fields included in the EIGR Metadata template

The EIGR Metadata template is divided into four Main Sections:

- RESOURCE IDENTIFICATION INFORMATION
- DISTRIBUTION INFORMATION
- DATA QUALITY INFORMATION
- METADATA INFORMATION



The title, acronym (when applicable), abstract, the authors and their contact details.

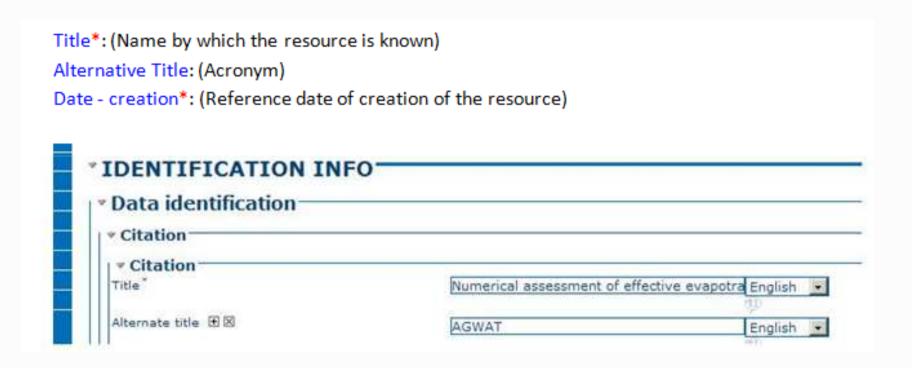
Collaborating organizations and/or programs, funding sources and amount.

Geographical extent covered as well as other relevant identification details (e.g. ISBN, ISSN) and if there are any existing legal constraints related to the resource.

In this section is where the HRC-SYS keywords and overarching categories (within Societal Challenges, Operational Actions and Research Topics) are defined for each resource.

Fields indicated by \* are to be considered as mandatory







Series: (Information concerning the series or collection to which the resource belongs to.)

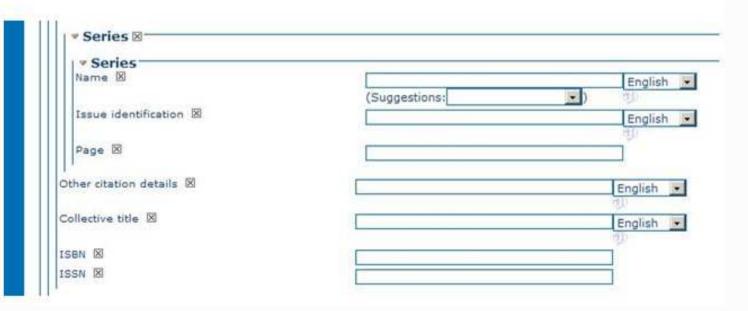
Name: (Name of the series or collection to which the resource belongs to.)

Issue identification: (Issue of the series or collection to which the resource belongs to.)

Page: (Details on which pages of the publication the resource was published.)

Collective title: (Title of the collective series or collection to which the resource belongs to.)

ISBN: (International Standard Book Number.)
ISSN: (International Standard Serial Number.)





Abstract\*: (a brief narrative summary of the content of the resource)

Purpose: (Purpose for which the resource was created)

Credit: (Recognition of the organizations or programs who contributed to the resource and/or are responsible for funding, amount of funding or total budget. The field may be included as many times as may be required according to the amount of existing organizations)

Abstract *	must be known with good accuracy: effective evapotranspiration and infiltration, especially in lowland areas were the run-off is minimal. Three different experimental plots cultivated with maize were equipped with tensiometers and soil moisture probes to monitor every day the water movement in the unsaturated zone. Other relevant parameters of the various soil layers, as
Purpose 🗵	The main goal of this study were to assess whether simple approaches to calculate the PET, like Hargreves and Turk ones, can substitute complex ones like Penman-Monteith and to assess the
Credit ⊠ 🗷	The work was financially supported by AGRI-UNIFE and ENVIREN laboratory, respectively under Contratto di
Credit ⊠ 🖹 🗑	Dr. Fabio Vincenzi Dr. Umberto Tessari and Dr. Corinne Corbau are acknowledged for their technical and
Credit ⊞⊠■	data and the Servizio Geologico Sismico e dei Suoli of Emilia-Romagna region is acknowledge



Point of contact: (Identification of the person and organization responsible of the resource)
Organization's name\*:
Contact's position:

Point of contact IN Individual name IN Nicolò Colombani English IN Organisation name IN University of Sapienza English IN Position name IN English IN English IN English IN IN INDIVIDUAL English INDIVIDUAL ENGLISH IN INDIVIDUAL ENGLISH IN INDIVIDUAL ENGLISH INDIVIDUAL ENGLISH IN IN

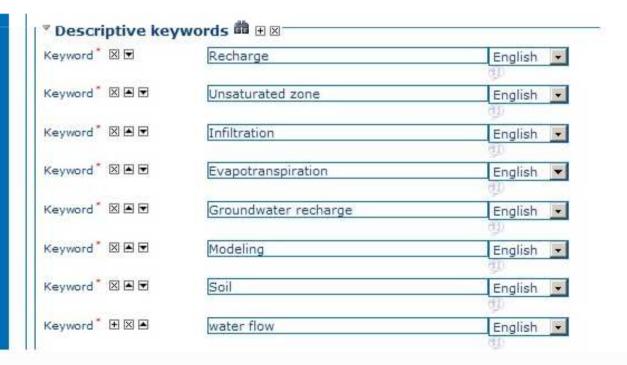


Contact Informatio	n 🗵		
Contact			
▼ Phone ⊠			
▼ Telephone	(+39) 6 4991 48	334	
Voice ⊞ Facsimile ⊞⊠	(+33) 0 4331 40	334	
Facsimile 🖽	/ <del>.</del>		
♥ Address ⊠			
▼ Address Delivery point	P.le A. Moro, 5		English •
Delivery point ⊞ City ⊠	Rome		
Administrative area 🗵			
Postal code 🗵	00185		
Country 🗵	Italy	Italy	
Electronic mail address 🖽 🗵 Electronic mail	nicolo.colomban	ii@uniroma1.it	



Descriptive Keywords\*: (The keyword value is a commonly used word, formalized word or phrase used to describe the subject. They help narrowing a full text search and allow for structured keyword search)

#### NOTE! Insertion of keyword is mandatory





Resource constraints: (Provides information about constraints that apply to the resources)

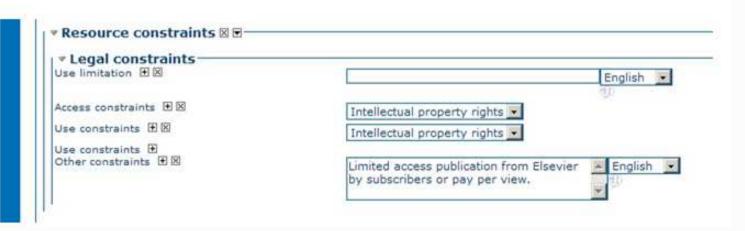
Legal constraints: (Restrictions and legal prerequisites for accessing and using the resource or metadata)

Use limitations: (Limitation affecting the fitness for use of the resource, for example if it is not apt to be employed for further research efforts due to specific conditions)

Access constraints: (Restrictions to assure the protection of privacy or intellectual property, and any special restrictions or limitations on obtaining the resource: License, Patent, Pending Patent, restricted, Trademark, Copyright)

Use constraints: (Restrictions to assure the protection of privacy or intellectual property, and any special restrictions or limitations on using the resource: License, Patent, Pending Patent, restricted, Trademark, Copyright)

Other constraints: (Other constraints or legal prerequisites for accessing and using the resource)





Topic categories\*: These are the overarching categories defined by the HRC-SYS: Societal Challenges (SCs), Operational Actions (OAs) and Research Topics (RTs). It is mandatory to classify the record individuating at least one main SC, one main OA and one main RT.





Extent: (Spatial reference of the resource)

Geographic Element: (The geographic component of the extent referring to the resource)

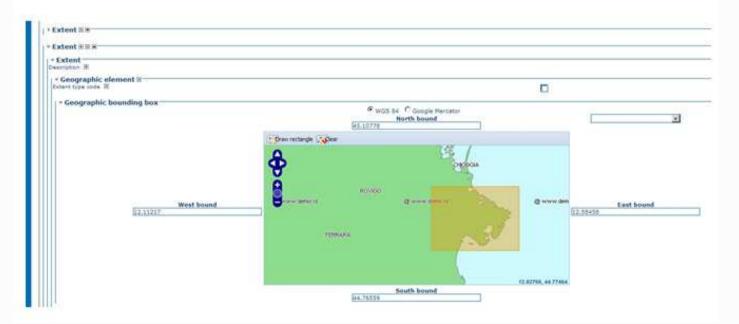
Geographic bounding box: This is the geographic position of the resource given as a bounding box where the following items can be specified:

West longitude:

East longitude:

North latitude:

South latitude:





#### DISTRIBUTION INFORMATION

This section indicate users the delivery or distribution methods available for the resource.

It describes if there are any online or physical distribution methods that exist for the resource.

Contents distributed online may be downloadable.



#### DISTRIBUTION INFORMATION

Distribution format: (Provides a description of the format of the data to be distributed)

Format\*: (Description of the availability of the resource, be it either a file, message, storage device or transmission method)

Name\*: (name of the data transfer format)

Version\*: (version of the format)





#### DISTRIBUTION INFORMATION

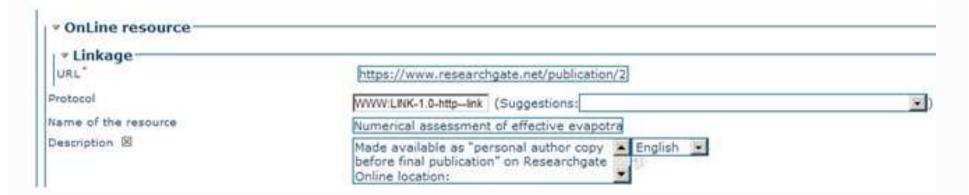
Online resource: (defines the online sources or link(s) from which the resource can be obtained)

Linkage: (Location (address) for online access using a Uniform Resource Locator (URL) address)

Protocol: (Connection protocol to be used)

Name of the resource

Description: (Detailed text description of what the online resource is/does)





Provides an overall assessment on the quality of the resources by classifying the work according to Research and Knowledge classes defined by KINDRA.

# Definition of research and knowledge classes 1 to 4. Research Class-1 Class-2 Class-3 Class-4 Articles in peer Conference Reports from Reports, data reviewed journals proceedings.

reviewed journals occuring in WoS or Scopus databases only Conference proceedings, monographs, book chapters etc. Found in Wos and Scopus extended databases (all entries)

Reports from research projects, National technical journals etc. with internal or external QA (identified by EFG experts).

Reports, data reports, popular journals, newsletters etc. with no certain QA (identified by EFG experts)



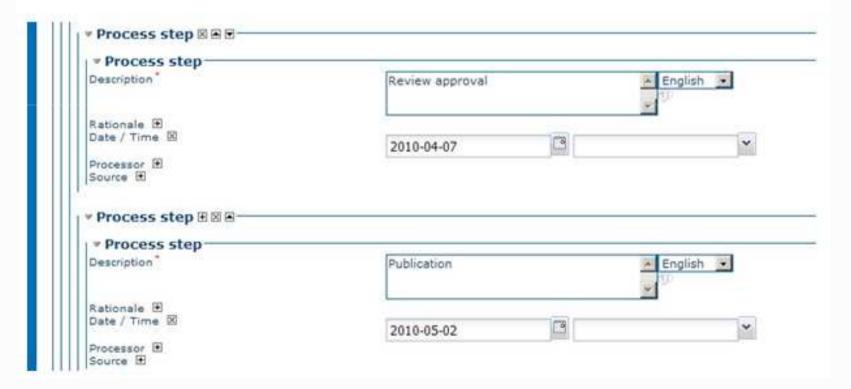
Lineage: (Information about the events and procedures to which the resource was subject)

Statement: (generic description from the resource producer's knowledge concerning the lineage)





- Process step: (Information concerning a specific event in the creation process of the resource)
- Description: (Detailed text description of the process step)





Source: (Information about the source data employed in creating the resource)

Source

Source

Description



#### METADATA INFORMATION

Overall information concerning the metadata, i.e. about the people/organization who insert the record related to the research/knowledge product.

The interface provides the exact same fields and tags to be completed as in the Resource Identification Information.

Contact: (Identification of the party responsible for the metadata information)

Individual name\*

Organization name\*:

Position name: (Role or position of the responsible person)

Role: (Function performed by the responsible party)

Contact information: (Phone and/or Fax numbers)

Address: (Street, City, Administrative area, Postal code, Country)

E-mail address:

Website:

# Thank you very much!

Have a nice day!













