SERAD
CNES Service for Data Referencing and Archiving

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■ **SERAD**
  - **Service for Data Referencing and Archiving**

■ **will allow CNES to build a centralized repository structure that**
  - **collects, stores and disseminates information and metadata on all Data that are under CNES responsibility**

■ **The objective for CNES is to better handle and to improve the access to his data patrimony.**

■ **=> to identify all data which are relevant and to verify whether these data are properly archived**
  - **if not, then, to proceed to the archiving of these data.**

- **SERAD mission**
- **CNES background**
- **Functional definition**
- **Tools**
- **Definition of a minimal metadata model**
- **Open points / To do**

- **To constitute and maintain an open and centralized metadata repository of all data that are under CNES responsibility**

- **To archive data when necessary**

- **To survey the data production centres in order to guaranty the long term preservation of these data even if (critical case) one of these centres has to be closed.**

- **This system will be built upon existing generic tools that will be customized**

  - **BDMS which is a kind of clearing house not limited to geographic information, but able to handle data from any thematic**
  - **SIPAD-NG which is a generic tool allowing to give a full access (with search criteria) to (nearly) any kind of archived data**

cnes

■ **For 40 years, in CNES, a big number of space missions have been producing a huge amount of data (hundreds of To).**

■ **This data constitutes a valuable heritage that must be preserved because many of them are :**

- **unique when related to an event that will never happen again or in a very long time**
  - Halley comet period is 76 years !
- **integrated in long cycles of observations**
  - including cycles climate change observation
- **mandatory to prepare future missions**
  - GAIA take benefits from HIPPARCOS experience
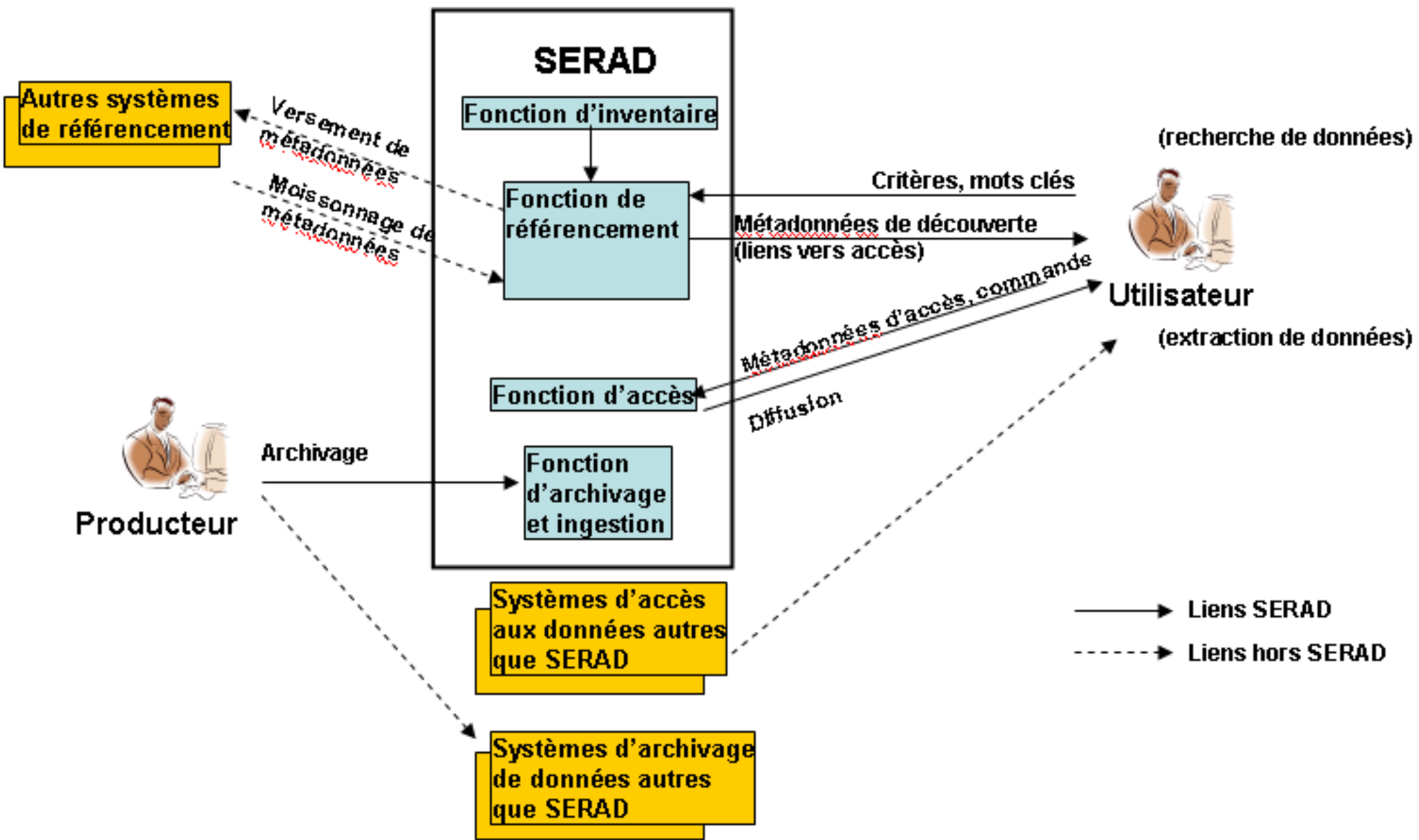
- **Referencing function**
  - allows the user to search data of interest through the discovery metadata, using criteria (interests) and keywords.
  - returns to the user the metadata for its selection.
    - These metadata contain descriptive information of potentially interesting data,
    - and the link to the data access function.
  - will also broadcast, harvest other systems of referencing, as the IDN for example.
- **Access function**
  - allows users to order data.
  - Its control is done using metadata access (on temporal criteria for example).
  - Other services can be provided at that time (processing format for example).
  - The access function allows the controlled release of data to the user.
- **Archiving and ingestion functions**
  - allows archiving data from a producer and ingestion of metadata access in the SIPAD-NG catalogue.
- **Inventory function**
  - provides an exhaustive inventory of the candidate data for referencing.

- **The overall mechanism of referencing and archiving CNES data from CNES is based on ::**

- **TdB (Tableau de bord) which is a tool allowing to help SERAD management**

- **BDMS (Bureau des Métadonnées et des Services),**
  - ◆ **The BDMS is a referencing tool (clearing house) installed on the CNES Information System Direction machines.**
  - ◆ **It will provide an accurate description of the data sets and services that can be associated to them,**

- **SIPAD-NG (Système d'Information, de Préservation et d'Accès aux Données Nouvelle Génération)**
  - ◆ **generic tool for data management, which can operate in different contexts. It implements the full OAIS model.**

SIPAD-NG is a generic tool for data archive management. It implements the full OAIS model
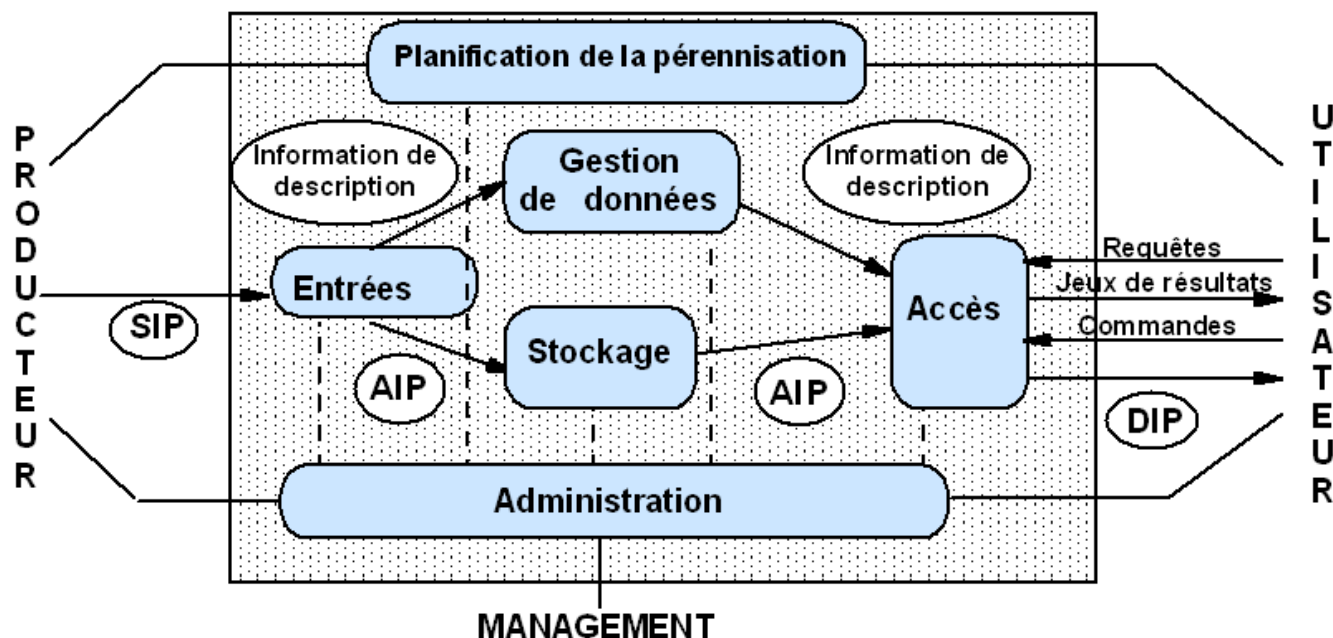
SIP = Submission Information Package / *Paquet d'information à verser*
AIP = Archival Information Package / *Paquet d'informations archivé*
DIP = Dissemination Information Package / *Paquet d'informations diffusé*

AVISO
CNES Data Center

Start page

You are connected as: public

DATA SELECTION
By navigation
License

SERVICES
Documents

USER
Registration
or:
Login
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Ok

HELP
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RELATED LINKS
AVISO Start Page

This server gives access to CNES altimetry products
i.e. L0 to L2 products computed within the SSALTO ground processing segment for:

TOPEX/POSEIDON JASON SPOT5 ERS OSTM/JASON2 ENVISAT

Registration: you must be registered to order products (item Registration in the left menu). Nevertheless, access to the description of most of the available products even if you are not logged in (item Data selection navigation in the left menu).

CENTRE DE DONNEES DE LA PHYSIQUE DES PLASMAS

You are connected as : public

You are here : Start page

Data
.:. Choose Data
> By navigation
> By keywords and criteria
> By quicklooks
.:. My Selection
> View selection
> Reset selection
.:. My workspace

Services
.:. Documents
.:. Event tables
.:. Orbit viewer

User
.:. Authenticate
Login or email
Password
Ok
.:. Registration
.:. License
.:. Contact

→ To consult the catalog: no authentication is needed, just use the left menu.
→ To order products: authentication is needed (see the 2 ways of connection hereafter).

PUBLIC DATA
- STEREO / SWAVES (Quicklooks),
- DEMETER (Quicklooks),
- CLUSTER (Summary Parameters),
- WIND,
- ULYSSES,
- INTERBALL,
- Swedish VIKING Mission,
- ARCAD-3,
- ISEE3/ICE,
- GEOS,
- EISCAT,
- Geomagnetic indices

TO ORDER PUBLIC DATA
You just need an e-mail @
1. - Click on the Authenticate link in the left menu,
   - Enter a valid e-mail address twice in the Access to public data panel.
2. An activation code is immediately sent at this e-mail address.
3. Enter the activation code (needed just once).
4. 😊 You are now connected 😊
5. From now on, simply log in by giving the same e-mail address as login and password in the left menu.

PRIVATE DATA
- STEREO / SWAVES (High Resolution data & Averaged data),
- DEMETER (Numerical data),
- CLUSTER (High Resolution data),
- DOUBLE-STAR

TO ORDER PRIVATE DATA
You need to be fully registered
1. Complete the registration form (Registration link in the left menu).
2. Your request must be validated by the Administrator before you can log in.
3. The login & temporary password will be sent by e-mail.
4. You will be asked to modify this password at your first connection.

CNRS INSU cnes

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http://internetdev-ci:9050 - Geographic areas - Mozilla Firefox

Define geographic areas

Current selection: -80.0 90.0 -180.0 180.0
Remove area from selection
(Remove the default value if necessary)
Validate your selection Cancel

You can define a geographic area:

→ either by filling the following fields (please, note that the selected area on the map below will not be simultaneously modified):
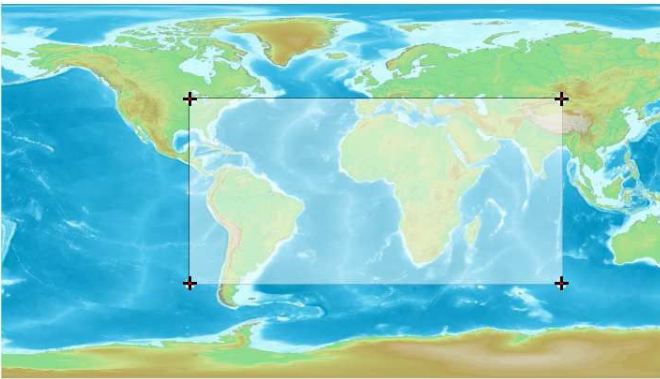
Northern edge : 45
Western edge : -90   Eastern edge : 90
Southern edge : -45

→ or by selecting a rectangle area (with the 4 black crosses) in the map hereafter:

Zoom: 200% 150% 100% 75%

Terminé

MERCATOR
OPERATIONAL OCEANOGRAPHY

Mercator Archive Products Server (MAPS)
~ Best estimates standard grid products ~

You are here: Start page

Data Selection
By navigation
> License

User
Registration
or:
Login
Password
Ok

Help
Online help
Contact

Related links
Mercator website
Access to all products
Operational systems
Info on standard grid products

This server gives access to t
products

These products are summaries of produ

Registration: you must be registered
(item Registration in the left menu)
description of operationnal systems ar

cnes CNRS Ifremer IRD METEO FRANCE SHOM

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1 - Data selection using keywords
Select operational system(s), then geographic area(s), and oceanic parameter(s)

System name	Geographic coverage	Oceanic parameters
PSY1V2R1	Arctic	2D Barotropic height
PSY2V1	Global Ocean	2D Barotropic streamfunction
PSY2V1R1	Indian Ocean	2D Mixed layer depth with density as reference criterion
PSY2V2R1	Mediterranean Sea	2D Mixed layer depth with temperature as reference criterion
PSY2V2R2	Mediterranean and Black Seas	2D Sea ice thickness
PSY3V1R1	North Atlantic	2D Sea ice zonal velocity
PSY3V2R1	North Pacific	2D Sea surface height
	North and Tropical Atlantic	2D Surface downward solar heat flux
	South Atlantic	2D Total net heat flux
	South Pacific	2D Water flux
	Southern Ocean	2D Windstress eastward component Tx
	Tropical Atlantic	2D Windstress northward component Ty
	Tropical Pacific	2D sea ice fraction
		2D sea ice meridional velocity
		3D Meridional velocity
		3D Salinity
		3D Temperature
		3D Vertical diffusion coefficient
		3D Zonal velocity

2 - Selection Criteria

Start date (YYYYMMDD) : 2002/05/22 → Stop date (YYYYMMDD) : 2007/11/27
Geographic areas - -80.0 90.0 (N -180.0 (W 180.0)
Modify
0 ↔ Depth range ↔ 5500

Submit Reset

→ Result
No object found.

■**BDMS is a tool** **which aims at allowing users to discover that a datasets of its center of interest exists.**

  ◆ **This tools is based on the ISO19115 standards.**

  ◆ **This standards is dedicated to Geographic Information.**

   • It will then be profiled and enriched in order to be able to fit the needs of all thematic.

   • This metadata model enrichment will be based on the thematic classification and interview work

Definition of a minimal metadata model

■ **This work includes the definition of:**

- ◆ **Classification**
  - The objective is to define the centers of interest which are representative, discriminating and consistent to the terminology of the future users. This required a precise classification job of all the science thematics. This has been done thanks to the contribution of all CNES thematic responsible from the CNES Programmes Direction. This work is also done with the help of the C-S company

- ◆ **Thesaurus**
  - The goal is to have an ordered list of keywords recognized by communities of users in order:
    – To speak a common language understandable to those communities,
    – to be interoperable with other systems, precisely target datasets.
  - This work is conducted in parallel with the classification of science thematics. It is a difficult exercise which will be expanded over time, data sets that will be introduced gradually in the SERAD, and from elements collected so far (thesaurus CNES, ...). This work is conducted with the support of CS-SI

- ◆ **Exhaustive list of missions**
  - The goal is to have an exhaustive list of CNES missions, and to be able to decide what to do with the datasets. These missions are also integrated in the classification tree
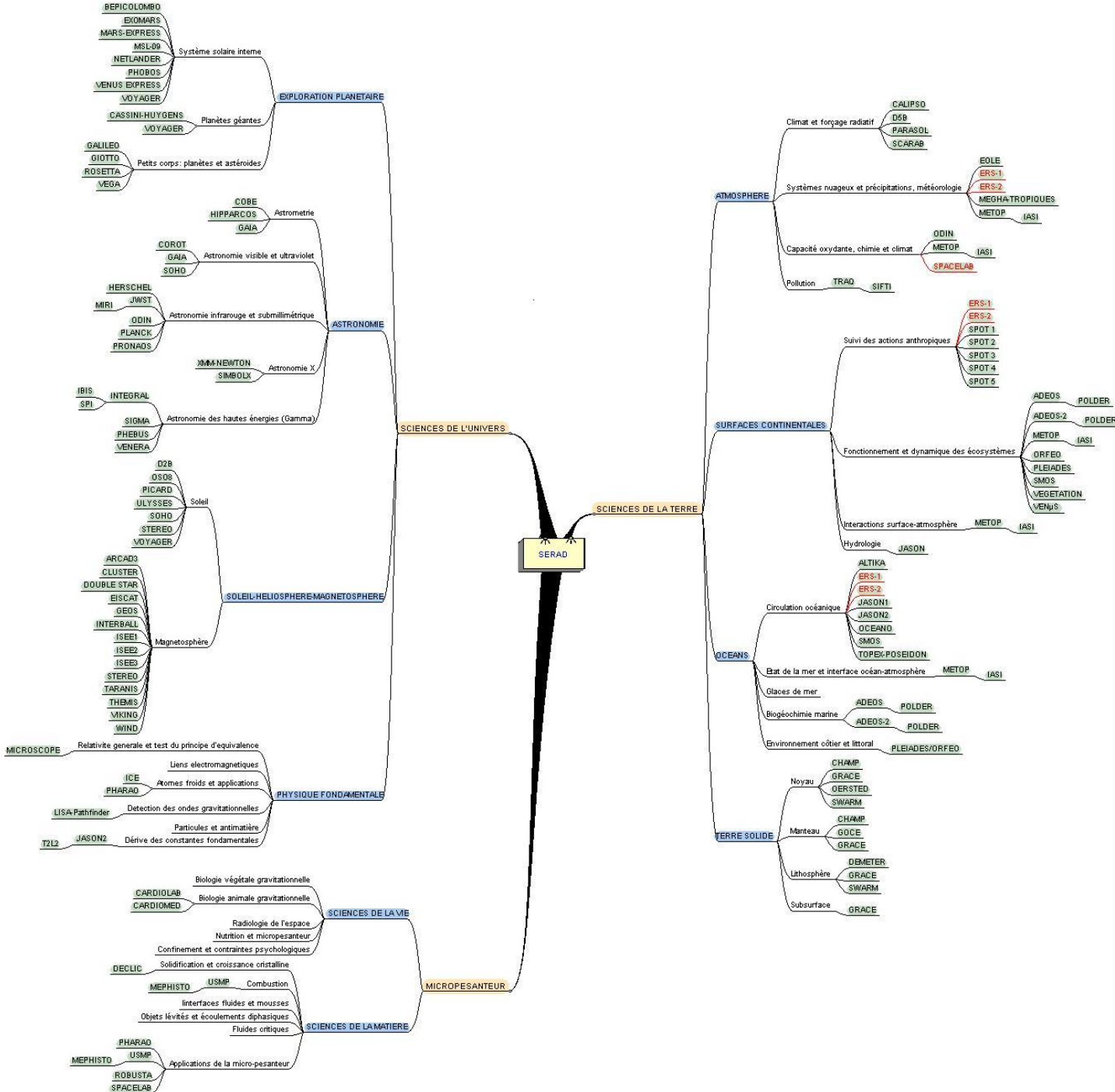
■**Choice for the tools and their integration**

■**CEOS : ho to be referenced by IDN through harvesting**

■**Finalization of CNES data policy**

■**Planning**

  ◆ **Opening in early 2012**

  ◆ **In 2009/2010**

  • Choice of the tools & system implantation

  ◆ **2011**

  • SMOS : Qualificatin