# Data Protocols for the LIAISE field campaign with AERIS (LIAISE-DB)



Version 1: 18/03/2022

# 1 Naming convention for data files

## Naming convention

Files should be named as follows :

LIAISE\_<SITE-NAME>\_<LAB>\_<ID>\_L<N>\_<DATE>\_V<X>.<extension>

All characters should be in capital letters. Please do not put any «underscores» in the file name because this character is defined as the separator.

with

<SITE-NAME> : site name as shown in Table 1

<LAB> : name of the laboratory providing the data: please use the acronyms listed here

Name	<lab></lab>
Centre National de Recherches Météorologiques	CNRM
Université des lles Baléares	UIB
UK Met Office	UKMO
Wageningen University and Research	WUR
Centre d'Etudes Spatiales de la BIOsphère	CESBIO
Forschungszentrum Jülich	JFZ
Czech-Globe	CGLOBE
Laboratoire de Météorologie Dynamique, Ecole Polytechnique	LMD
Laboratoire d'Aérologie	LAERO

Technische Hochschule Ostwestfalen-Lippe	THOWL
Hohenheim University	HOHENHEIM
National Aeronautics and Space Administration, Goddard Space Flight Center	NASA
Institute of Agrifood Research and Technology	IRTA
University of Barcelona	UBARCELONA
Meteorological Service of Catalonia	SMC
Polytechnique University of Catalonia	UPC
Delft University of Technology	TUD
Utrecht University	UU
Observatori de l'Ebre	OSEBRE

<ID> : field describing the type of parameters contained in the file and eventually the data frequency if the same dataset is available with several sampling frequencies. Use an explicit name for users who are not used to instruments.

Avoid using only the name of the instrument. In any case, the names of the instruments should be in the metadata.

example :

<DATE> : date :

AAAAMMJJ : for daily files

AAAAMM : for monthly files

AAAAMMJJ-HHMM : for hourly files

<LN> : level of data processing

L0 : Digital or physical counts from sensors and instruments. No correction or processing is done.

L1 : Simple or detailed physical parameters. Verification of the integrity of the files. Processing with an automatic treatment. This information should permit the user to judge the acquisition quality of the instrument and to identify possible malfunctions. Spatial or temporal resampling possible.

L2 : Geophysical parameters. Automatic or semi-automatic processing with standard or optimized parameters. Data controlled and validated by an expert or an expert code. Spatial or temporal resampling possible.

L3 : Synthesized geophysical parameter. The final data is a combination of different data sources.

<VX> : dataset version.

Please note, the Metadata in the files must be in English.

### Examples of file names:

LIAISE\_LA-CENDROSA\_CNRM\_MTO-1MIN\_L2\_20210715\_V1.nc corresponds to CNRM daily meteorological data at a 1 minute frequency for the CENDROSA site, processing level 2, version 1.

LIAISE\_LA-CENDROSA\_CNRM\_RS-ascent\_L2\_20210722-1600\_V1.nc corresponds to CNRM radiosonde ascent profile from the 22th, July at 16:00 UTC for the LA-ENDROSA site, processing level 2, version 1.

# Table 1 : Names and geographical positions of the platforms. Note that for Boldu, there are multiple stations and only the coordinates for an alfalfa field near the center of the network is shown here.

Name	Latitude (°)	Longitude (°)	Altitude (m)	
BOLDU	41.715833	0.988333	256	
ELS-PLANS	41.590111	1.029363	334	
IRTA-CORN	41.619079	0.875333	244	
IRTA-APPLE	41.617640	0.871966	246	
IRTA-ET0	41.618207	0.871924	245	
IVARS-LAKE	41.682018	0.946951	230	
IVARS-NORTH	41.68594	0.94592	238	
IVARS-SOUTH	41.67906	0.94898	235	
LA-CENDROSA	41.69336	0.92841	240	
PREIXANA	41.59373	1.07250	354	
VERDU	41.595278	1.127222	412	

(altitudes from *Google Earth*)

## 2 AERIS metadata sheets

The guidelines for filling in AERIS metadata sheets are shown below.

## **INFORMATION Section**

#### Dataset name

Specify the same name as the data files up to the date

**LIAISE\_**<SITE-NAME>\_<LAB>\_<ID>\_L<N>

#### **Spatial Extent/location**

The site locations are given in Table 1.

#### Platform

There may be names in the catalog that refer to the same type of platform. Consistency in platform types will make it easier to find data. Here are some suggestions :

Туре	AERIS Name
Ground stations (in-situ or remote)	In Situ Land-based Platforms → Ground-based Observations
UAV	Aircraft → UAV
Radiosoundings	Balloons/Rockets → Radio sondes

#### Instruments :

- There may be names in the catalog that refer to the same type of instrument.
- The chosen names will facilitate the search by instrument.
- Here are some suggestions (not exhaustive) for choosing a name :

Туре	AERIS Name
Temperature sensors	Temperature/Humidity Sensors - >Temperature Sensors
Pressure sensors	Pressure/Height Meters → Pressure Sensors

Humidity sensors	Temperature/Humidity Sensors ->Humidity Sensors
Soil temperature	Probes $\rightarrow$ Soil temperature probe

#### **Contacts :**

Fill in the contacts for at least 3 roles: "Principal investigator", "Resource provider", "Point of contact" (data provider)

1 person can have more than 1 role.

Note: For CNRM, « Organisation's name » indicate the recommended name for publications: « CNRM, Université de Toulouse, Météo-France, CNRS, Toulouse, France »

#### Milestones

Fill in the PUBLICATION DATE because it is mandatory to create a DOI

#### Ask for DOI

In order to request a DOI, you have to click on the upper button (see the image below) and to send a mail to <u>francois.andre@obs-mip.fr</u> or <u>damien.boulanger@obs-mip.fr</u>



#### Other information

Feel free to add other metadata if they can be useful for users.

## **DOWNLOAD Section**

Fill in the "Data Access Manager" part as follows, so that the data will not be public until the end of the embargo. The data will be accessible to registered participants only.

#### **Data Access**

Specify the type of access of this dataset.

There are 4 access types. The last one is with the embargo.

#### **Opensearch links**

Fill in the opensearch links with this address : https://services.aeris-data.fr/campaigns/dataset/v1\_0

This information will make the link between the metadata information and the folder on the ftp and will allow the downloading of datasets.







https://services.aeris-data.fr/campaigns/datase... 🖍 👘 🎽

+ ADD OPENSEARCH LINK

# 3 Data deposit

The data files should be uploaded to the AERIS FTP server:

sedur.sedoo.fr (port 22)

• Note that port 21 is generally the default (in many ftp applications), so please be careful to specify port 22.

Please contact Axel (<u>axel.roy@meteo.fr</u>) or Guylaine (<u>guylaine.canut@meteo.fr</u>) for the User name and Password which will be communicated by mail.

Deposit the data in a repository following the structure name\_of\_datasheet\_uuid created with the name of the metadata sheet and the uuid in the interoperability section. There are some examples below.

RESET Q SEARCH     Full text search		Your downloads 🛓 Results found: 4 CO	•	Axel 6•
<ul> <li>Sites</li> <li>Instruments</li> <li>Parameters</li> </ul>	*	Fiche de test IMIE LIAISE_CENDROSA_CNRM_LIDARwindcube_TKE_L2 IMIE	LIAISE_CE KE_L2	ENDROSA_CNRM_LIDARwindcube_T
🍄 Levels	~	LIAISE_CENDROSA_CNRM_RS-ascent_L2	FAIR Principles	FAIR Principles
🖋 Platforms	~	LIAISE_CENDROSA_CNRM_RS-descent_L2	Uuid Metadata API	FAIR principles ( <u>https://en.wikipedia.org/wiki/FAIR_data</u> ) stress the need for automatic data and metadata handling mechanisms. This tab shows the different
Projects	~	LINE	Catalogue API	ways in which the principles are implemented for this dataset.
<ul> <li>Temporal extents</li> <li>Spatial extents</li> </ul>	~			This metadata sheet is identified by the following persistent identifier : d71927a6-8c7e-4f8b-8b2c-90d984763ec6

#### **Examples:**

The directory *LIAISE\_*<*SITE-NAME>\_*<*LAB>\_*<*ID>\_L*<*N>\_uuid* contains the files named : *LIAISE\_*<*SITE-NAME>\_*<*LAB>\_*<*ID>\_L*<*N>\_*<*DATE>\_V*<*X>.*<*extension>* and for dataset :

LIAISE\_CENDROSA\_CNRM\_RS\_L2\_a5403106-755e-46d2-a2d1-c35bb4352c3c contains for example the LIAISE\_CENDROSA\_CNRM\_RS-ascent\_L2\_\*\_V1.nc files