

EURO-CARES

EXTRATERRESTRIAL SAMPLE CURATION DATABASE: BASIC CONCEPTS

Luigi FOLCO¹, John. R. BRUCATO², Andrea MENEGHIN², Maurizio GEMELLI¹
& the EUROCARES Consortium

¹Dipartimento di Scienze della Terra, Università di Pisa, Via S. Maria 53, I-56126 Pisa, Italia
(luigi.folco@unipi.it)

²INAF - Osservatorio Astrofisico di Arcetri, L.go E. Fermi 5, 50125 Firenze, Italy

WP3 - Facilities and Infrastructure

Aim of the talk:

- to describe and discuss the basic concepts of the searchable sample database that will be used in EUROCARES

General purpose of the database:

- to collect - and partly make available to the public – information about the curated samples
- efficient management of the samples inside the curation and their distribution to the scientific community

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Sample categories:

1. Pristine samples (extraterrestrial and ... analog samples - to be discussed)
2. Aliquots and preparates for staff training, handling and analytical procedure testing, classification purposes, and allocation to external laboratories
3. Allocated and returned aliquots and preparates
4. Residual masses of pristine samples

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Electronic database

A dedicated software will be created as a logbook to track and document all the actions performed on the (sub)samples inside EUROCARES and in external laboratories

Data sets

Information will be stored inside the software, according to a number of data sets:

1. Identification (e.g., labeling, origin, imaging, state of matter, mass)
2. Classification (e.g., structural, compositional)
3. Preparation (e.g., type of prepare/mount, prepare/mount description and imaging)
4. Location (e.g., sample container/location in the facility)
5. Allocation (e.g., requested samples, location outside the curation facility, research purposes & methods , duration of the loan/donation, expected results)
6. Documentation (e.g. internal/external data and reports, scientific publications)
7. Public (selected data on-line, e.g. sample description and availability for research)

Procedures/actions

All these information will be obtained and documented during the following procedures/actions:

- Cataloguing (identification, location)
- Classification (to be meant as preliminary/basic classification)
- Pre-Delivery (preparation and allocation)
- Post-Delivery (check of returned samples for research, storage)



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**Designing the EUROCARES searchable database:
a number of valuable examples ...**

<http://hayabusao.isas.jaxa.jp/curation/escuc/index-j.html>

<http://curator.jsc.nasa.gov/bboard.cfm>

Marco Polo-R data base proposal (Brucato et al.)

Medusa – Misasa: <http://dream.misasa.okayama-u.ac.jp/>

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Keywords

simple
searcheable
flexible
user-friendly (intuitive; help tool)
dedicated staff
guidelines
homogeneity
non-nominal landing: databasing may start at landing site
back up
security
any others?

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Designing the EUROCARES searchable database: Requirements/questions (few examples)

1. Sample analogs in a separate/mirror facility/database?
2. Detailed description of the actions per lab (sample preparation, type of analyses, conditioning for storage)
3. Definition of a nomenclature protocol (entry #, year, mission, parent body, sample container ... probably mission-specific for ET samples).
4. Definition of a sample request (procedure and) form
5. Definition of the data to be made publicly available (on-line, newsletters).
6. Do we need to conform to international standards?
7. Public (on-line) catalogue by mission? parent body?
8. Reminder: database dedicated to the monitoring of laboratory cleanliness.

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Grab File Edit Capture Window Help

Stardust Sample Catalog

curator.jsc.nasa.gov/stardust/catalog/index.cfm

nasa stardust sample allocation

CURATION | Stardust

LUNAR METEORITE **STARDUST** GENESIS COSMIC DUST MICROPARTICLE IMPACTS HAYABUSA

Home → Stardust Cometary And Interstellar Samples At NASA Astromaterials Curation

Email comments or suggestions

Catalog Information Search Catalog Cometary Samples Interstellar Samples Stardust Sample Catalog

Sample Information

Details Sample Notes Photos Related Documents

Inventory Details for Sample C2088,0

Sample Number: C2088,0 Sample Status: Extracted

Alternate Names: Parent:

Sample Description: Cometary Aerogel Tile

Allocation Status: Available Location Type: JSC Location

Subsamples of Sample C2088,0

Sample Name	Description
C2088,1,169,0,0	Cometary Keystone With Specimen(s) Microforklift

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XYZ

Aerogel and other samples except foils

X = C – Cometary; I – Interstellar

E – Extraction (never in a tray)

F – Fragment (Origin unidentifiable; loose piece in spacecraft or on the ground).

M – Miscellaneous (dirt, water, air samples, etc.)

H – Hardware (spacecraft hardware)

W – Witness Materials

Y = Tray Number (1, 2, or 3)

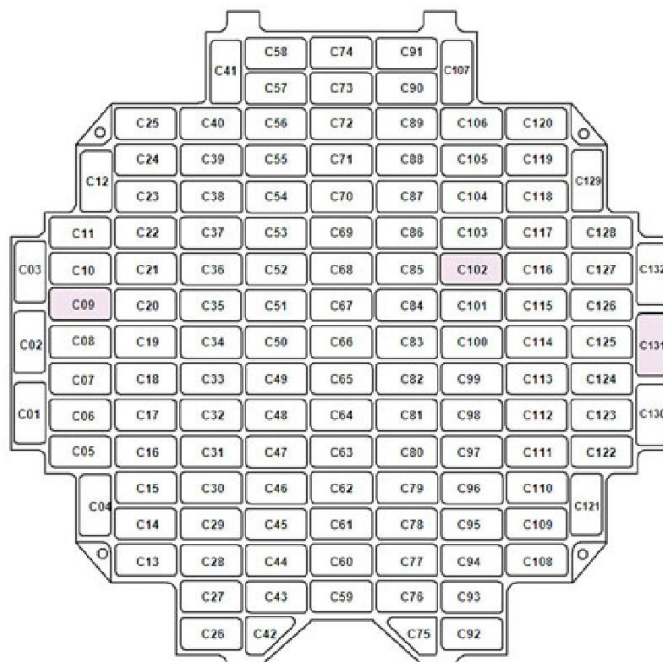
Z = Cell Number (001 - 132)

Examples:

C2009

C2102

C2131



C1 – Cometary Tray (Backup)

C2 – Cometary Flight Tray

C3 – Cometary Tray (Backup)

I1 – Interstellar Flight Tray

I2 – Interstellar Tray (Backup)

I3 – Interstellar Tray (Backup)

Nomenclature for Impact Features in Aerogel Cell

Aluminum Foil Nomenclature

