



the ecosystem

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<https://www.eurobioimaging.eu/>



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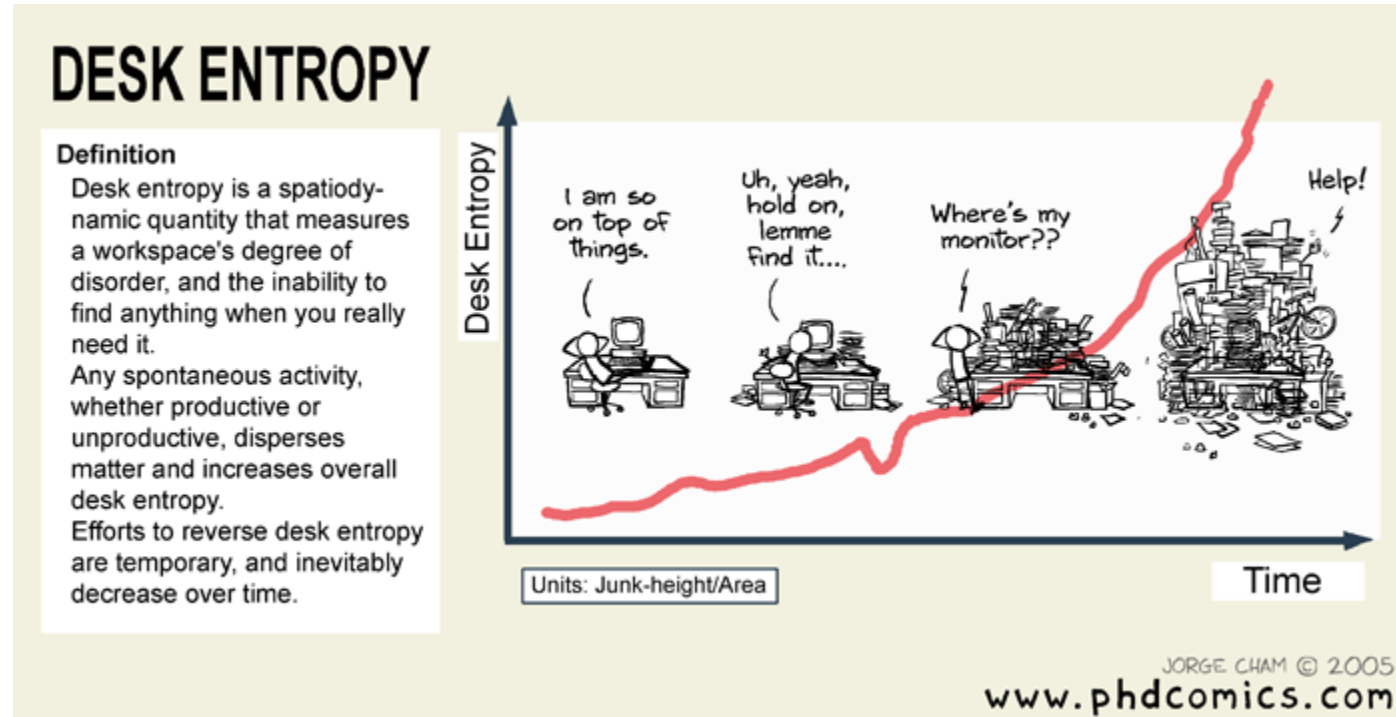
Not just data sharing, also good RDM!

Having a standard on how to name and document files allows you

- Find and understand your new and old data like
- Get your colleagues, PI/students to work on the same things without extra explanation
- Analyse quicker
- Share with others

Beauty of BIDS? It's a community standard and much more

<https://bids.neuroimaging.io/>



https://phdcomics.com/comics/archive_print.php?comid=575

Preparing data with BIDS



Brain Imaging Data Structure v1.7.0

Brain Imaging Data Structure v1.7.0

The BIDS Specification

Introduction

Common principles

Modality agnostic files

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Website

The Brain Imaging Data Structure

The Brain Imaging Data Structure (BIDS) is a simple and intuitive way to organize and describe data.

This document defines the BIDS specification, which provides many details to help implement the standard. It includes the core specification as well as many extensions to specific brain imaging modalities, and increasingly also to other kinds of data.

If BIDS is new to you, and you would like to learn more about how to adapt your own datasets to match the BIDS specification, we recommend exploring the [BIDS Starter Kit](#). Alternatively, to get started please read [the introduction to the specification](#).

For an overview of the BIDS ecosystem, visit the [BIDS homepage](#). The entire specification can also be [downloaded as PDF](#).

Preparing data with BIDS

BIDS Validator v1.9.2

Select a **BIDS dataset** to validate

No file chosen

Options:

☐ Ignore Warnings

☐ Ignore NIfTI Headers

☐ Skip Subject Filename Consistency Check

Note: Selecting a dataset only performs validation. Files are never uploaded.

Biomedical and biological

Modality specific files

Magnetic Resonance Imaging

Magnetoencephalography

Electroencephalography

Intracranial

Electroencephalography

Task events

Physiological and other
continuous recordings

Behavioral experiments (with
no neural recordings)

Genetic Descriptor

Positron Emission
Tomography

Microscopy

Derivatives

BIDS Derivatives

Common data types and
metadata

Microscopy

Support for Microscopy was developed as a [BIDS Extension Proposal](#).

Please see [Citing BIDS](#) on how to appropriately credit this extension when referring to it in the context of the academic literature.

Microscopy datasets formatted using this specification are available on the [BIDS examples repository](#) and can be used for practical guidance when curating a new dataset.

Further Microscopy datasets are available:

- In PNG format: [data_axondeepseg_sem](#)
- In OME-TIFF format: [Broca's Area Light-Sheet Microscopy](#)

Microscopy imaging data

Template:

Table of contents

Microscopy imaging data

File formats

Modality suffixes

Filename entities

Microscopy metadata (Sidecar
JSON)

Device Hardware

Image Acquisition

Sample

Chunk Transformations





Example of sidecar JSON file
(*_<suffix>.json)

Required Samples file











Recommended Participants data


Photos of the samples (*_photo.
<extension>)

Biomedical and biological

 BIDS-animal-ephys   

File Edit View Insert Format Tools Add-ons Zotero Help See new changes

     100% ▾ Normal text ▾ Slabo 27px ▾ - 11 + **B** *I* U A     ▾  ▾



BIDS Extension Proposal 032:

Animal electrophysiology (ephys)

version 0.3.0

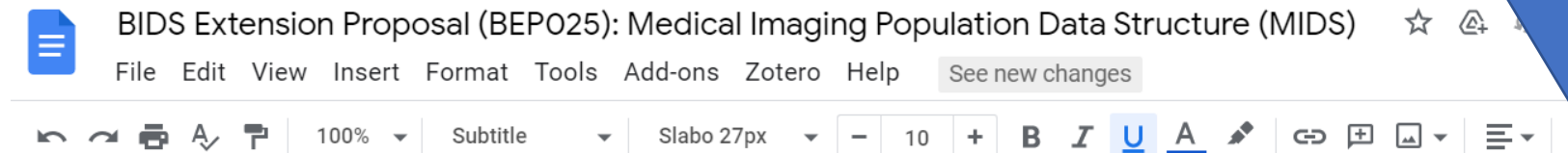
Extension moderators/leads:

- Sylvain TAKERKART (sylvain.takerkart@univ-amu.fr)
- Julia SPRENGER (julia.sprenger@univ-amu.fr)

Official link to this document: <https://bids.neuroimaging.io/bep032>

The list of contributors can be found [here](#). Please enter your name at the end of the document when you contribute.

Biomedical and biological



BIDS Extension Proposal 25 (BEP025): Medical imaging data structure extended to multiple modalities and anatomical regions

version 0.2.0

Extension moderator/lead: Jose Manuel Saborit saborit_jostor@externos.gva.es & Maria de la Iglesia
delaglesia_mar@gva.es

This document contains a draft for the MIDS-BIDS data structure. It is a community effort to define a generalized version of BIDS. MIDS pretends to include standards in data / metadata storage for the field of **Population Imaging**. This is a working document in draft stage and all comments are welcome.



Check what is going on with BIDS and what people say about it

The website <https://bids.neuroimaging.io/>

The YouTube channel https://www.youtube.com/channel/UCxZUcYfd_nvVWAbzRB1tlw

The talks and slides <https://osf.io/yn93h/>

Prepare BIDS data

The specification <https://bids-specification.readthedocs.io/en/stable/>

Get some converters <https://bids.neuroimaging.io/benefits.html#converters>

Get started

- the starter kit <https://bids-standard.github.io/bids-starter-kit/>
- BIDS data examples <https://github.com/bids-standard/bids-examples>

The validator <https://github.com/bids-standard/bids-validator>

- in your browser <https://bids-standard.github.io/bids-validator/>
- in your terminal `npm install -g bids-validator` or `pip install bids_validator`

Work with BIDS data

In Matlab <https://bids-matlab.readthedocs.io/en/latest/index.html>

In Python <https://bids-standard.github.io/pybids/>

Get BIDS Apps <http://bids-apps.neuroimaging.io/>

Contribute

<https://github.com/bids-standard>

C. Pernet v1. 25-02-2021

Converters:

Tools to take source data into BIDS (agreed data formats and metadata)

BIDS grabbers and apps:

- Tools to automatically grab, document, query an existing BIDS dataset
- Automated analysis specific tools

<https://bids.neuroimaging.io/>

The background of the header section features two grayscale images of human brains, one on the left and one on the right, facing each other. They are rendered in a realistic, textured style.

Brain Imaging Data Structure

A simple and intuitive way to organize and describe your neuroimaging and behavioral data.

[ABOUT](#)

[NEWS](#)

[BENEFITS](#)

[SPECIFICATION](#)

[GET STARTED](#)

[GET INVOLVED](#)

[GOVERNANCE](#)

[ACKNOWLEDGMENTS](#)

About BIDS

Neuroimaging experiments result in complicated data that can be arranged in many different ways. So far there is no consensus how to organize and share data obtained in neuroimaging experiments. Even two researchers working in the same lab can opt to arrange their data in a different way. Lack of consensus (or a standard) leads to misunderstandings and time wasted on rearranging data or rewriting scripts expecting certain structure. With the Brain Imaging Data Structure (BIDS), we describe a simple and easy to adopt way of organizing neuroimaging and behavioral data.