SOCIB Balearic Islands Coastal Observing and Forecasting System

SOCIB NetCDF File Naming Convention

SOCIB-Data Center Facility

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1. Introduction

The aim of this document is to describe the netCDF nomenclature composing SOCIB Data Repository. These conventions are heterogeneous and respond to the standards established by each facility. It is required to provide the netCDF files with a common nomenclature before files are disseminated in order to reduce as much as possible any potential negative impact on users and services.
A detailed description of the naming conventions (pattern, elements and scope) is provided below.
The ancillary data section is currently under construction. It contains legacy netCDF files on topography, coastline and bathymetry from beach monitoring and it is not the subject of this document.

2. Data file naming convention

2.1. Observational

The processing application (link) automatically generates the netCDF files names following the convention shown in table 1. Therefore, observational files produced at SOCIB are stored within the SOCIB Data Repository.
Depending on the SOCIB representation, instrument and platform pattern follow the convention shown in Table 2 and Table 3, respectively.

Table 1. *List of rules automatically applied for the observational naming convention.*

Element	Mandatory	Position	Description
DEPLOYMENT NUMBER	True (instrument deployment)	1	The field is generated automatically by the processing application when data are processed from a deployment. Fully down case followed by 4 digits. It shall not contain underscores ('_').

FIRST STATION DEPLOYMENT DATE	True (platform product)	2	Deployment number is generated automatically by the processing application with increasing order each time data are processed from a deployment. Fully down case followed by 8 digits representing the date(yyyymmdd). It shall not contain underscores (‘_’).
STATION NAME	True	3	Station name in fully downcase with (‘-’) as a separator to identify two or more consecutive words. It shall not contain underscores (‘_’).
INSTRUMENT NAME	True (instrument deployment)	3	Station name in fully downcase with (‘-’) as a separator) to distinguish institution (codes identified in link) and instrument type. It shall not contain underscores (‘_’).
PROCESSING LEVEL	True	3 (platform) 4 (deployment)	File versioning system in SOCIB is determined by the different processing levels applied (Table 3 of PUM_DCF_SOCIB-insitu-netcdf-user-manual).
DATE	True	4 (platform) 5 (deployment)	Starting date timestamp formatted as YYYY-MM. It shall not contain underscores (‘_’).
data_mode	Optional	5 (platform) 6 (deployment)	Indicates if the file contains real-time (rt - default), post-recovery (dt), or delayed-mode (dm) data. “data” should be separated from the data mode the underscore (‘_’).

2.1.1. Instrument Deployment

Table 2. *List of rules automatically applied for instrument deployment.*

dep[DEPLOYMENT NUMBER]_station-[LocationName]_[instrument name]_[PROCESSING LEVEL]_[YYYY-MM]_data_[data generation mode]
Example: dep0001_station-sonblanc_pib-rdi001_L1_2018-02_data_dt.nc

2.1.2. Platform Product

Table 3. *List of rules automatically applied for platform products.*

dep[FIRST STATION DEPLOYMENT DATE]_station_[LocationName]_[PROCESSING LEVEL]_[YYYY-MM]_[data generation mode]
Example: dep20160216_station-portocristo_L1_2018-02_data_dt.nc

2.1.3. Beach Monitoring Products

2.1.3.1. Bathymetries

The naming convention for bathymetries is under development. This section will be updated accordingly when available.

2.2. Operational Models

Table 2. *List of rules for the observational models naming convention.*

Element	Mandatory	Position	Description
MODEL-NAME	True	0 (wave) 1 (hydrod.)	Model name (e.g sapo, wmop) in fully downcase with ('-') as a separator to identify two or more consecutive words. It shall not contain underscores ('_').
MODEL-TYPE	True	0 (hydrod.) 2 (wave)	Model type(e.g. swan, roms) in fully downcase with ('-') as a separator to identify two or more consecutive words.

			It shall not contain underscores (‘_’).
REGION	True	1 (wave)	Area of model application (e.g mallorca) fully downcase with (‘-’) as a separator to identify two or more consecutive words. It shall not contain underscores (‘_’)
MODEL-APPLICATION	True	2 (hydrod.)	Dimensional resolution of the model (e.g. surface, 3d) fully downcase with (‘-’) as a separator to identify two or more consecutive words. It shall not contain underscores (‘_’)
DATE	True	3	Starting date timestamp formatted as YYYYMMDDdHHMMSS (wave) or YYYYMMDD(hydrodynamic). It shall not contain underscores (‘_’).

2.2.1. Wave models

[MODEL NAME]_[REGION]_[MODEL TYPE]_[YYYYMMDDHHMMSS]
Example: sapo_ib_swan_20180412000000.nc

2.2.2. Hydrodynamic models

[MODEL TYPE]_[MODEL NAME]_[DIMENSION APPLICATION]_[YYYYMMDD]
Example: roms_wmop_3d_20180331.nc