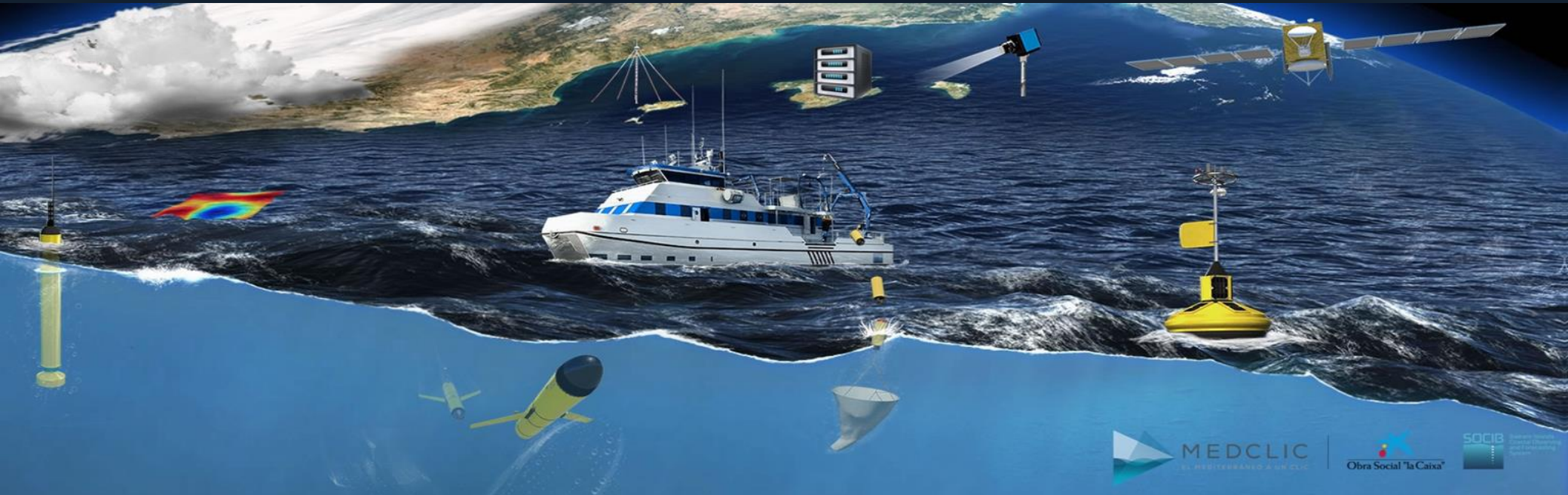


## New SOCIB Data Catalog REST API



Juan Gabriel Fernández

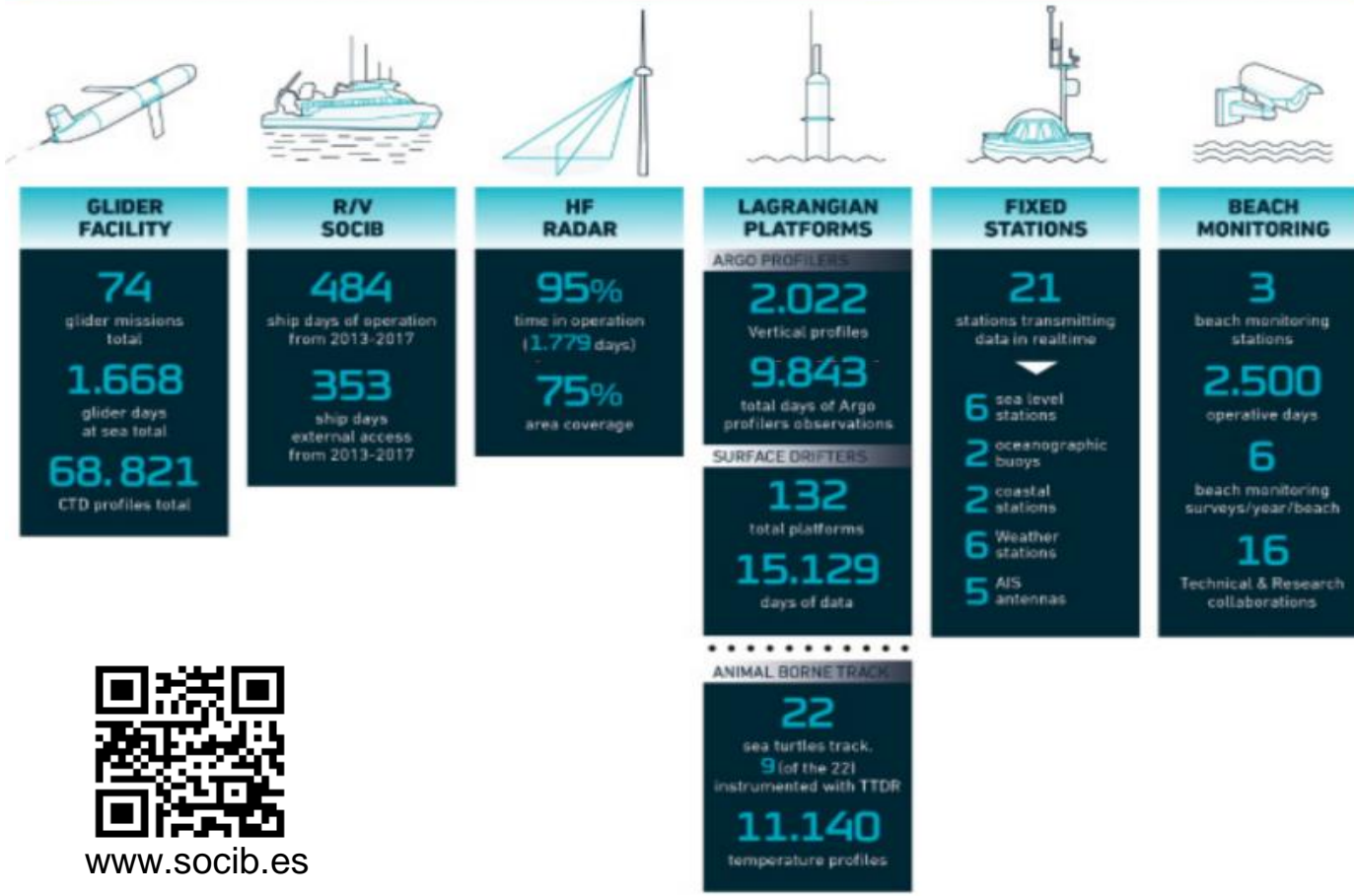
# Summary

- **What is SOCIB and role of Data Center**
- **Data repository: THREDDS**
- **New SOCIB API overall description**
- **API in detail with examples**
- **Technologies and methodologies**
- **Use cases and related products**

# What is SOCIB?

## Balearic Islands Coastal Observing and Forecasting System

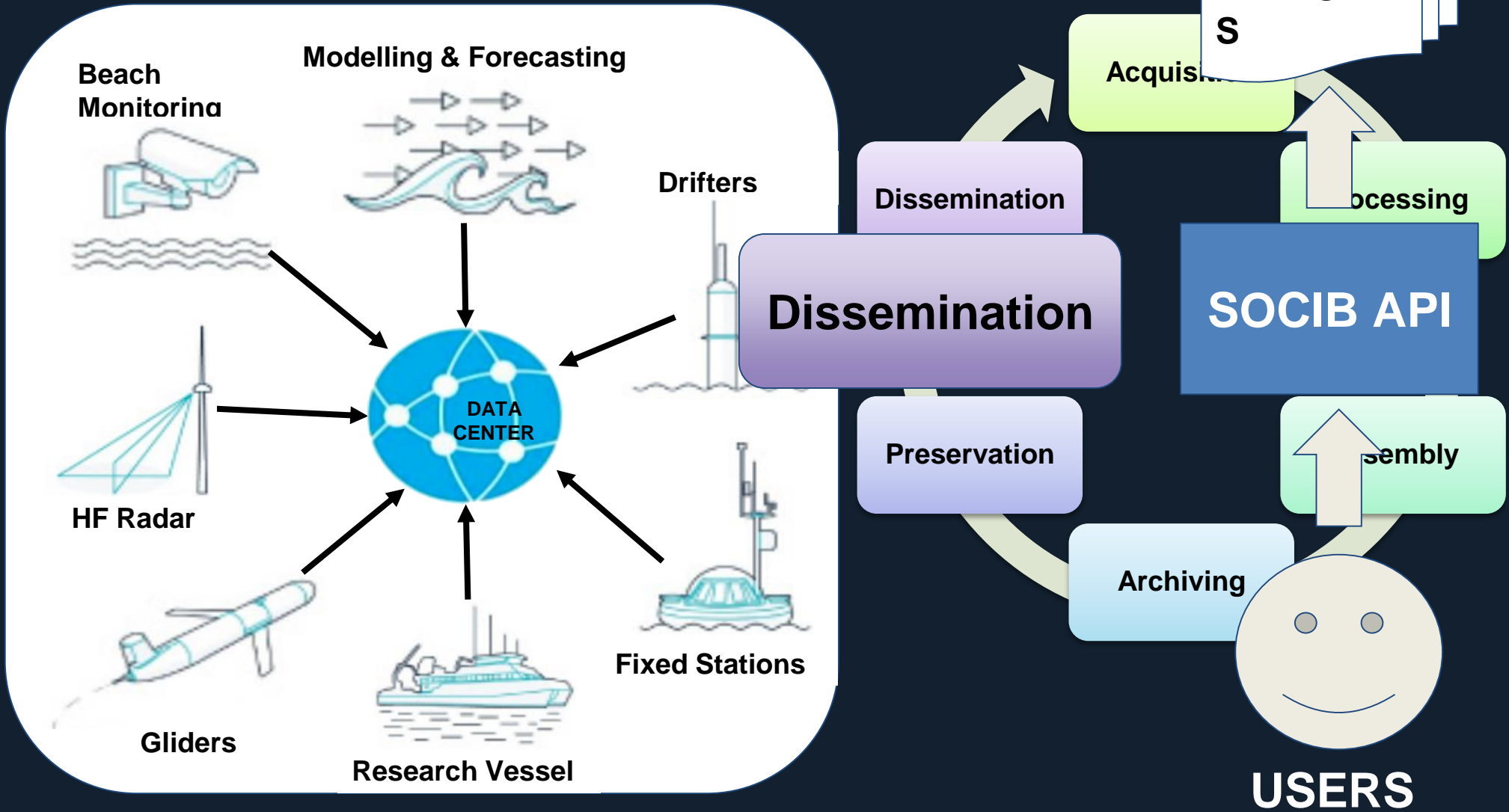
### Observing Facilities



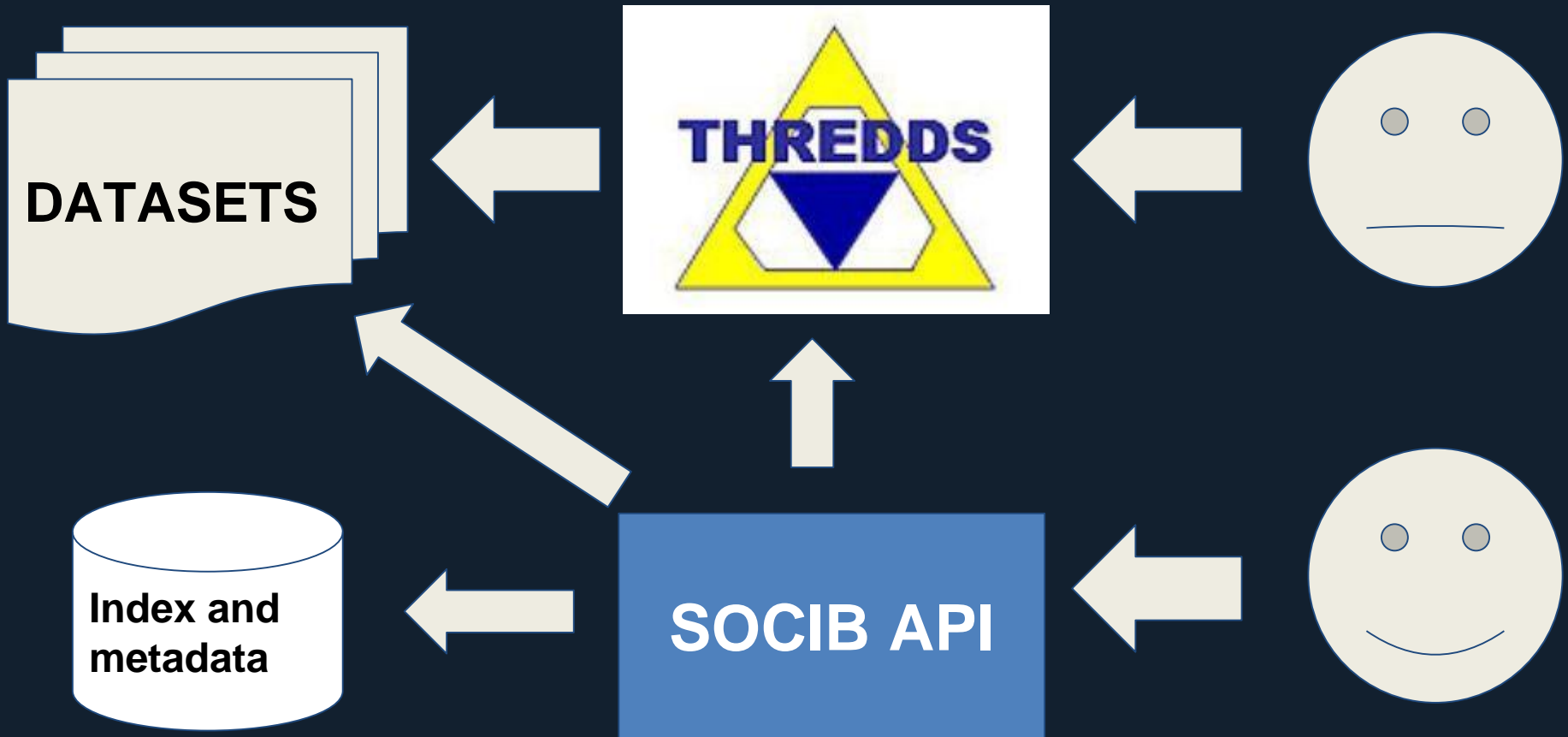
### Forecasting Facilities



# Data Center Facility



# Data repository: THREDDS catalog



# SOCIB Data Catalog API

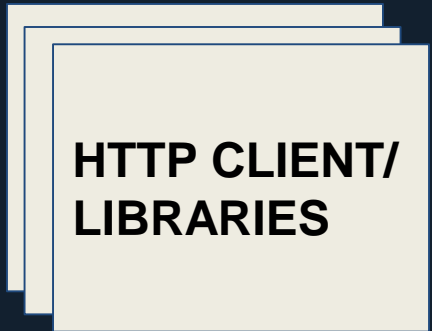
REST API



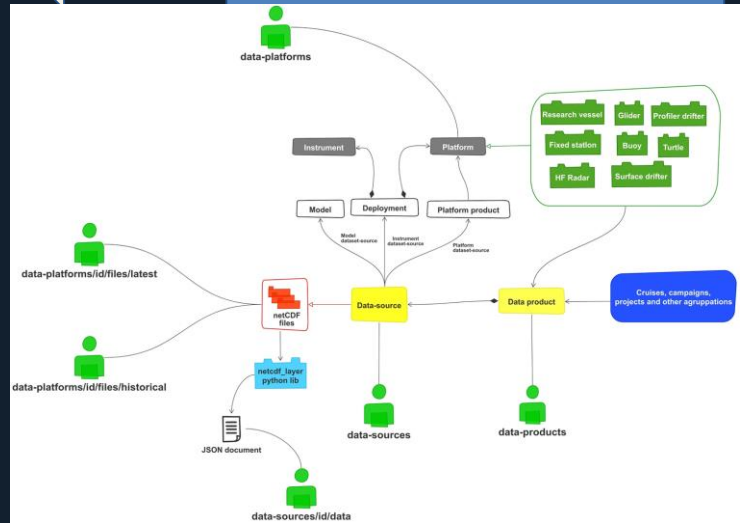
DATASETS

SOCIB Data Catalog

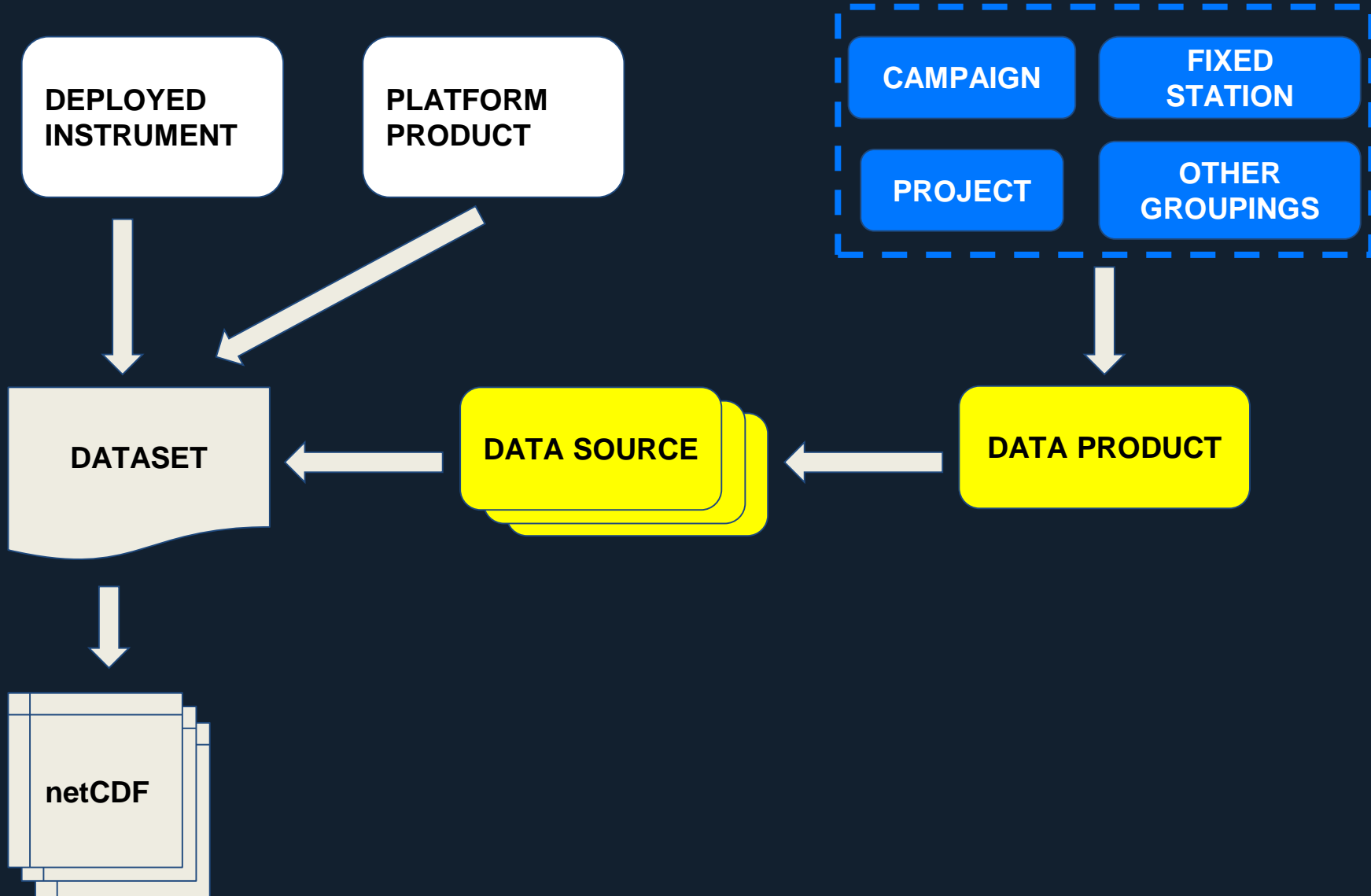
SOCIB API



HTTP CLIENT/  
LIBRARIES



# API Data Model (simplified)





# Data Sources endpoint detail

- [api.socib.es/data-sources](https://api.socib.es/data-sources)
- [api.socib.es/data-sources/{id}](https://api.socib.es/data-sources/{id})

## HOW WE CAN ACCESS THE FILES

### METADATA

DEPLOYMENT

INSTRUMENT

PLATFORM

VARIABLES

FEATURE  
TYPES

BOUNDING  
BOX

### FOR EACH ENTRY (FILE)

OPENDAP

JWEBCHART

DOWNLOAD

DAPP

THREDDS  
CATALOG

LW4NC2

WMS

PROFILE  
VIEWER



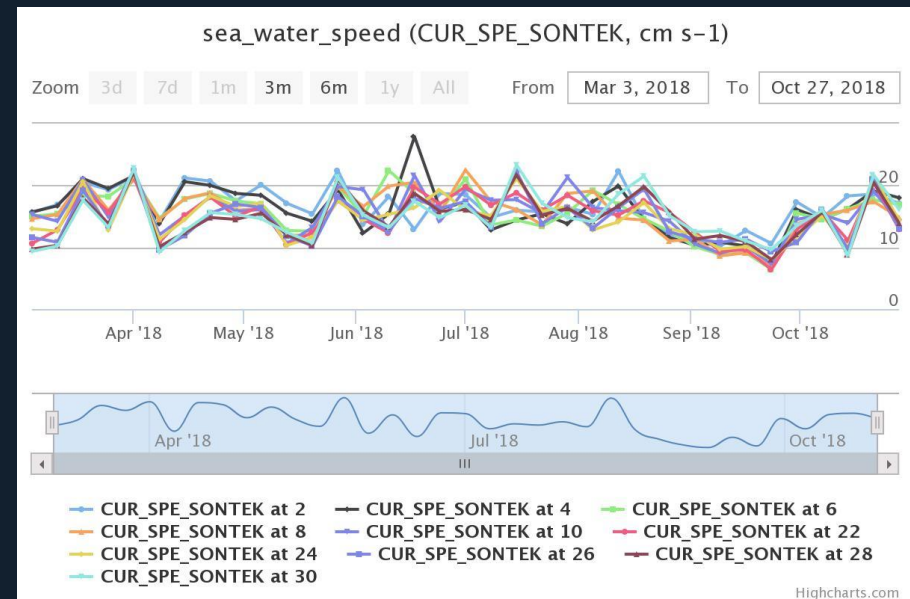
# Data endpoint detail

- [api.socib.es/data-sources/{id}/data](https://api.socib.es/data-sources/{id}/data)

## RETRIEVING THE DATA ARRAYS

[api.socib.es/data-sources/423b242b11/data/?max\\_qc\\_value=2&standard\\_variable=sea\\_water\\_speed&initial\\_datetime=2018-03-01T00:00:00&end\\_datetime=2018-10-28T23:59:59&processing\\_level=L1&resample\\_rule=1w&resample\\_how=max](https://api.socib.es/data-sources/423b242b11/data/?max_qc_value=2&standard_variable=sea_water_speed&initial_datetime=2018-03-01T00:00:00&end_datetime=2018-10-28T23:59:59&processing_level=L1&resample_rule=1w&resample_how=max)

**CURRENT PROFILER  
DEPLOYED IN A MOORED  
BUOY AT PALMA BAY**

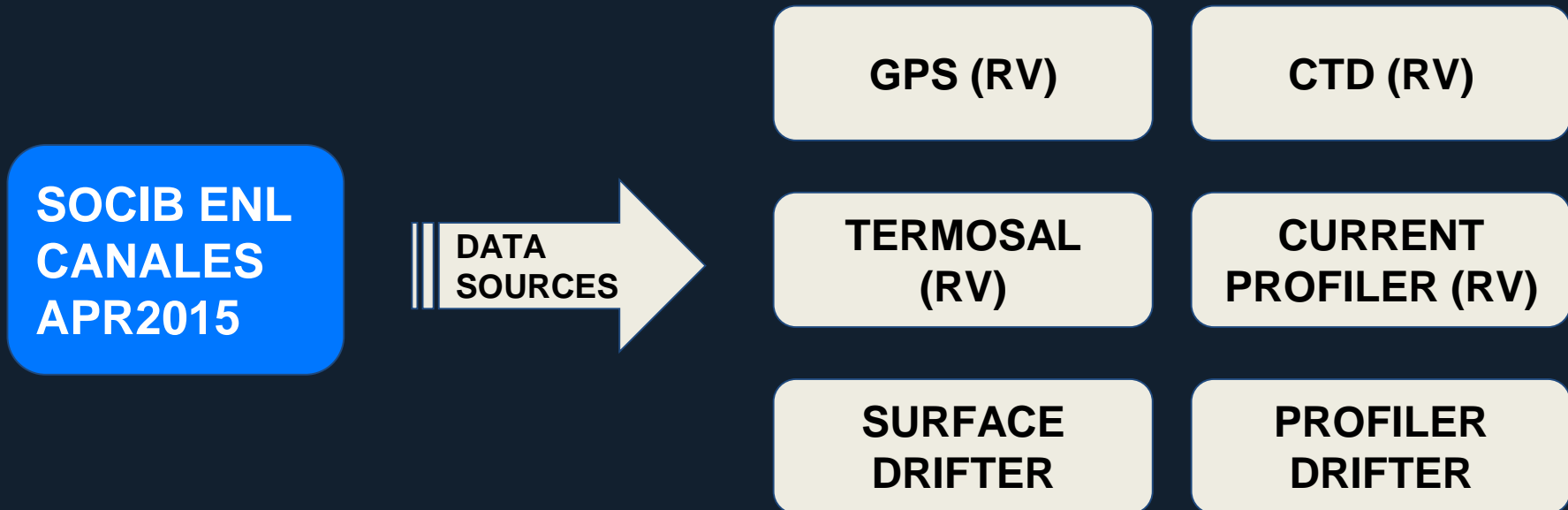


## Data Products endpoint detail

- [api.socib.es/data-products](https://api.socib.es/data-products)
- [api.socib.es/data-products/{id}](https://api.socib.es/data-products/{id})

DATA PRODUCTS ARE GROUPINGS OF DATASETS

[api.socib.es/data-products/socib-enl-canales-apr2015](https://api.socib.es/data-products/socib-enl-canales-apr2015)



## Data Platforms endpoint detail

- [api.socib.es/data-platforms](https://api.socib.es/data-platforms)
- [api.socib.es/data-platforms/{id}](https://api.socib.es/data-platforms/{id})
- [api.socib.es/data-platforms/{id}/files/latest](https://api.socib.es/data-platforms/{id}/files/latest)
- [api.socib.es/data-platforms/{id}/files/historical](https://api.socib.es/data-platforms/{id}/files/historical)

WHICH FILES CONTAIN THE DATA IN A  
SPECIFIC PERIOD OF TIME

WHICH FILES CONTAIN THE LATEST DATA

[api.socib.es/data-products/socib-enl-canales-apr2015](https://api.socib.es/data-products/socib-enl-canales-apr2015)

## Methodologies

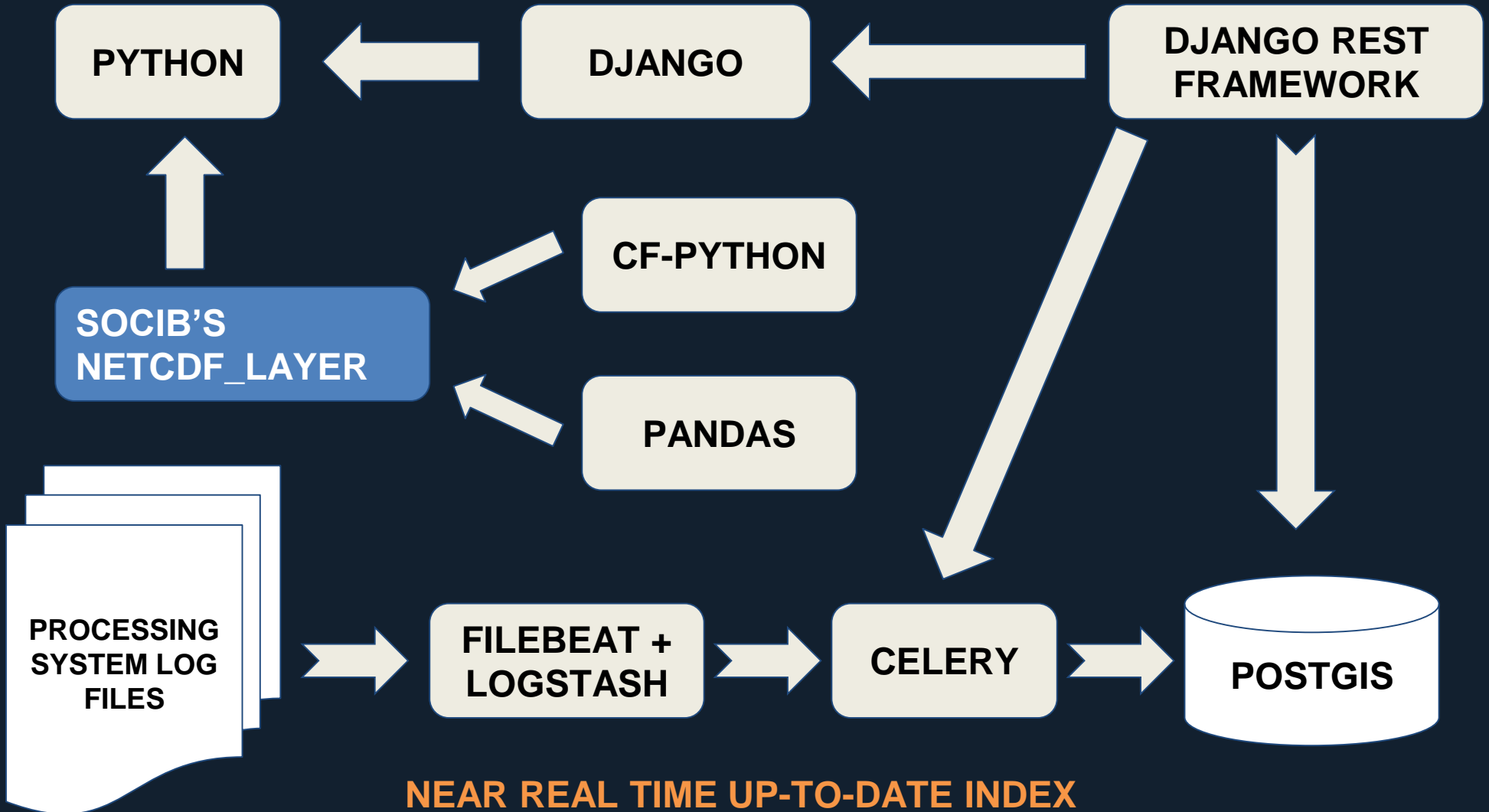


[api.socib.es](https://api.socib.es)

[/data-sources/5961a15c40/data](https://api.socib.es/data-sources/5961a15c40/data)

[/data-products/socib-enl-canales-apr2015](https://api.socib.es/data-products/socib-enl-canales-apr2015)

# Technologies



## Use cases and related products



IT expert



Data scientist

<http://api.socib.es/home>

- Data Catalog: [apps.socib.es/data-catalog](https://apps.socib.es/data-catalog)
- Landing page of SOCIB DOI system
- Data integration with CMEMS

THANKS!!

Questions?