👋 Welcome!

Contributing to EDITO Datalab

Learn how to contribute your knowledge to **EDITO Tutorials** .

🎯 What We'll Go Over

✅ How to become a contributor to EDITO tutorials

✅ Create a shareable tutorial

✅ Share it publicly via **GitHub**

✅ Launch it on **EDITO Datalab**

✅ Register it using `tutorials.json`

✅ Submit a **merge request**

All this is also covered in EDITO Datalab Documentation.

Get an Account on EDITO

🌐 Become a Beta Tester:

Sign up here

✉ Receive an Email:

You will receive an email from the developer team with further instructions.

🔑 Sign up to Mercator Ocean GitLab:

Create your account

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Contribute to the Tutorials Content Repository

🔗 Access Repositories:

Once your account is created, you will be added as a developer to the following repositories:

- Service Playground Repository

- Process Playground Repository

- Tutorial Content Repository

4

🧱 I have a new tool/script to share

✅ For example, I've written a tutorial in `.Rmd` :

- It explains how to use a tool or perform a task

- Includes **Markdown** text and **R code chunks**

- Shows plots, tables, or results inline

- Has some interactivity/user interaction

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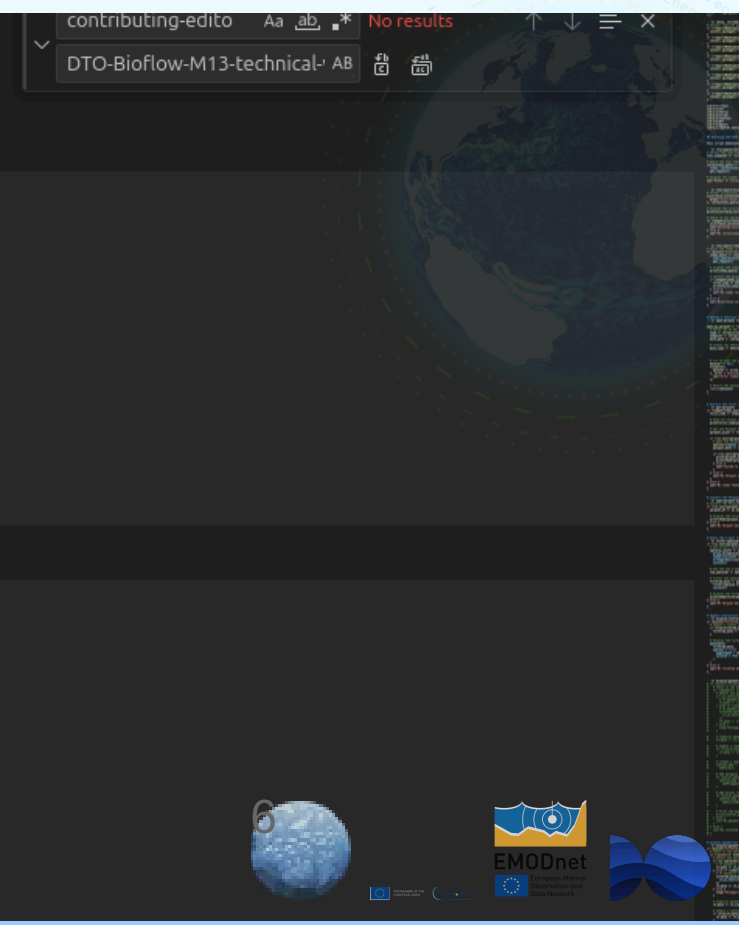
🧱 Example: My Tutorial on Accessing EDITO STAC

Here in this repository

/add_tutorial/my_stac_r_tutorial/stac_r_tutorial.Rmd

```r
## Querying the STAC API

This script demonstrates how to query a STAC API and download data.

Run Chunk | Run Above
```{r stac-query-collections}
# Define the root STAC API endpoint
stac_endpoint <- "https://api.dive.edito.eu/data/"

# Query the root STAC API to get collections
collections_query <- stac(stac_endpoint) %>%
  rstac::collections() %>%
  get_request()

# Display the number of collections
cat("Number of collections:", length(collections_query$collections), "\n")
```

Run Chunk | Run Above
```{r stac-query-occurrence}
# Filter collections with 'occurrence' in their name or description directly
occurrence_collections <- Filter(function(collection) {
  grepl("occurrence", collection$title, ignore.case = TRUE)
}, collections_query$collections)

# Display the occurrence collections
print(occurrence_collections)

# Check if any matching collections were found
if (length(occurrence_collections) > 0) {
  occurrence_collection <- occurrence_collections[[1]]$id
```

📂 Recommended Folder Structure

- Not mandatory but on EDITO we need applications that are resilient and understandable for everyone

- Include a good README.md makeareadme.com

- Data and other assets separate

```
my_stac_r_tutorial/
├── stac-r-tutorial.Rmd
├── data/
├── docker-compose.yml(*optional)
└── README.md
```
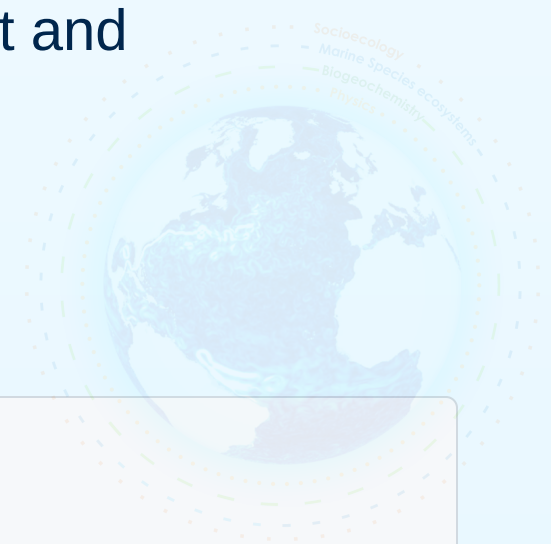
🌐 Create a Repository on your GitHub

- Go to github.com

- Click **New repository**

- Set it to **Public**

A demonstration on YouTube

Creating Your First GitHub Repository and Pushing Code Youtube

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💻 Push Your Local Code to Your Github

```
# Initialize Git in your local directory (if not already initialized)
git init
# Add all files to the staging area
git add .
git config user.name username
git config user.email usermail@mail.com
# Commit the changes
git commit -m "Initial commit"
# Add the remote origin
git remote add origin https://github.com/username/stac-r-tutorial.git
# Push the changes to GitHub
git branch -M main
git push -u origin main
```

Creating Your First GitHub Repository and Pushing Code Youtube

⚙ **Make your deployment URL**

EDITO Services

Access the Service Configuration

- Choose a service from the Service Catalog appropriate for your Tutorial
- ex. R Studio, Jupyter-python

Add Your GitHub Repository

- In the `GIT` section add the url to your tutorial's github repository in the Repository field

Set Resource Limits

- In the resources section, adjust CPU and memory limits as needed
- e.g., `1600m` for CPU, `5Gi` for memory

Save Configuration and Test your tutorial

Save the Configuration

- Click **Save** to store your settings.

Copy the URL in your browerdeployment_url

- This is the link used to deploy your service and clone your github into the service

Launch the Service

- Use the **Launch** button to start the service with your configuration.

Test Your Tutorial

- Verify that the service clones your github, and your tutorial can be run

- Does it install the right packages?

- Does it produce the output(s) you expect?

11
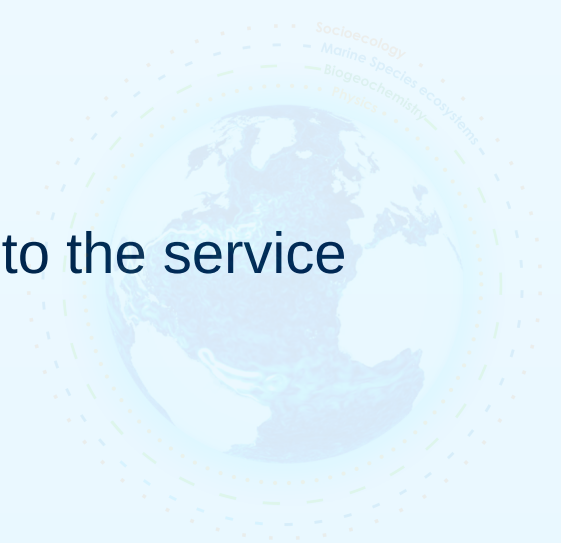
Configuring EDITO Service
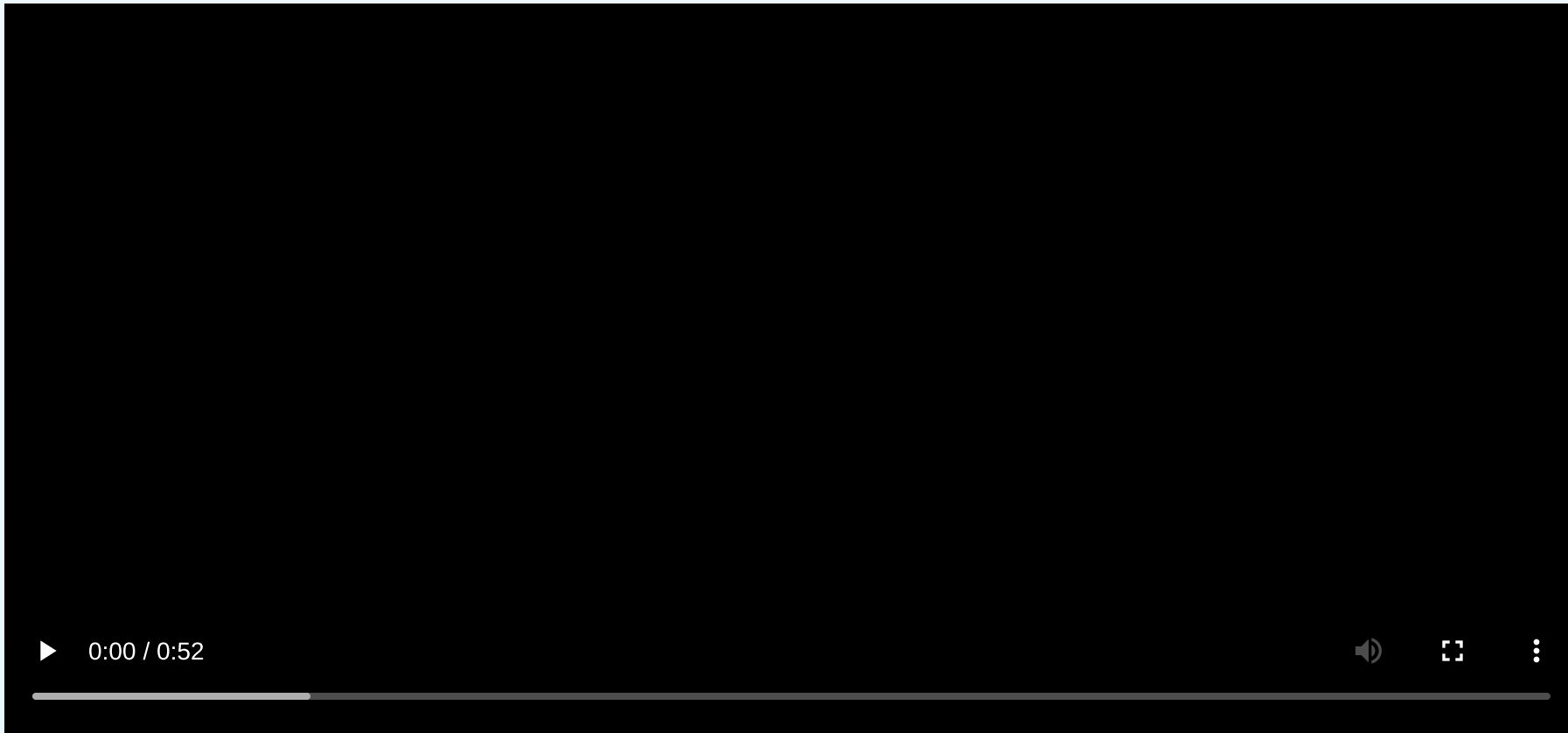
Tutorials respository and the tutorials.json

In order to add our tutorial to the EDITO tutorials we need to add it to the `tutorials.json` list

https://gitlab.mercator-ocean.fr/pub/edito-infra/edito-tutorials-content/tutorials.json

We will clone this repository and add our tutorial to this list, using the the template provided in the README
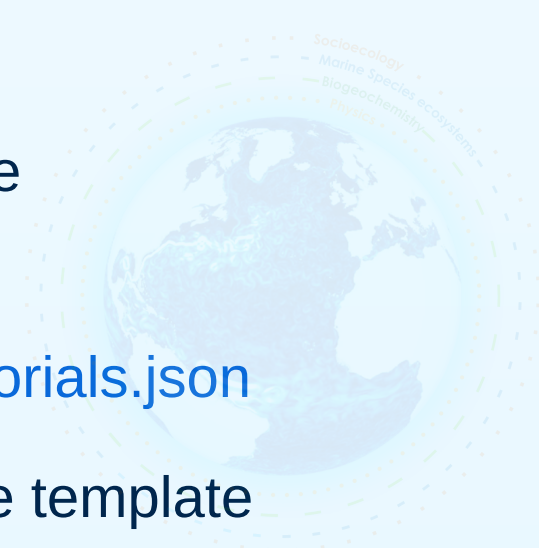
🛠️ Clone the Tutorials Repository to your Local PC

🌐 EDITO GitLab Tutorials:

https://gitlab.mercator-ocean.fr/pub/edito-infra/edito-tutorials-content

📂 Clone the Repo:

```
git clone https://gitlab.mercator-ocean.fr/pub/edito-infra/edito-tutorials-content.git
```
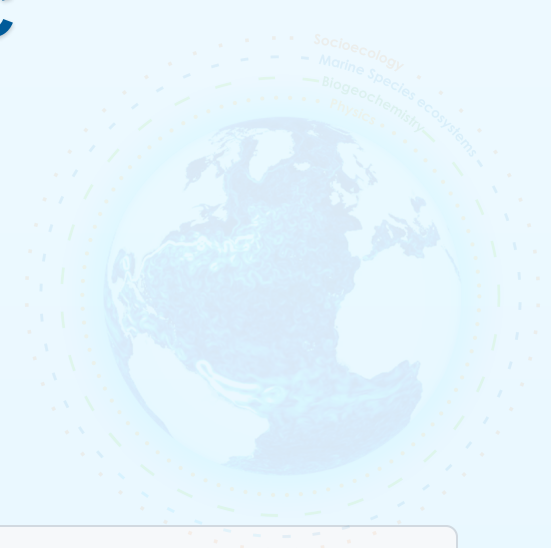
Cloning EDITO Tutorials Content

🛠️ Make a new branch

🌿 **Create a New Branch**:

```
git checkout -b my-new-tutorial-branch
```

📤 **Push the New Branch**:

```
git push origin my-new-tutorial-branch
```

Make branch

17

Add your tutorial to 'tutorials.json'

🔗 Deployment URL from previous step

```json
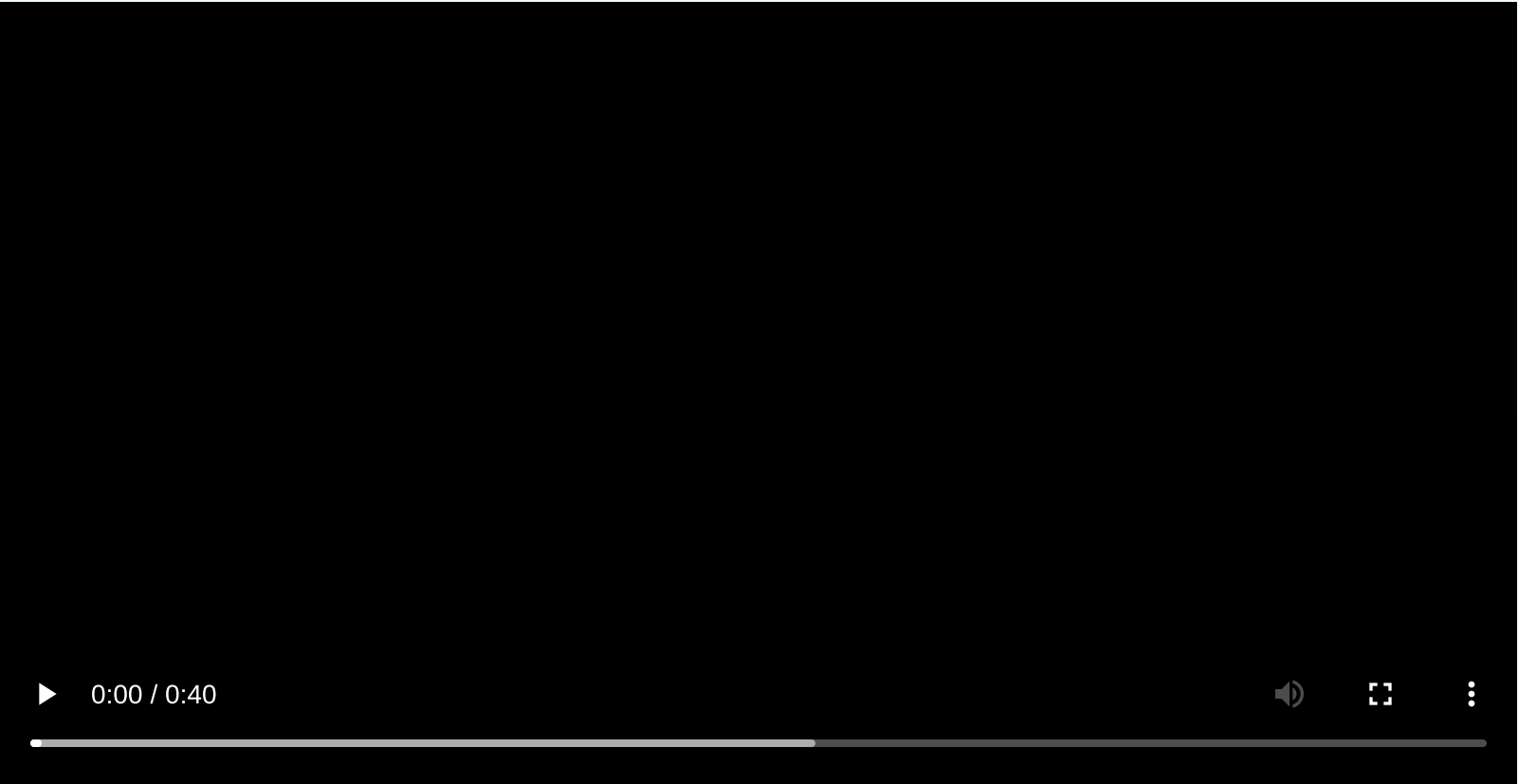{
    "name": {
        "en": "My New Tutorial"
    },
    "abstract": {
        "en": "A short description of your tutorial"
    },
    "authors": [
        "The authors and contributors"
    ],
    "types": [
        "types": [
            {
                "en": "Tutorial"
            }
        ],
    "tags": [
        "create",
    ],
    "category": "training courses in data science",  // "What-If applications", "Focus applications", "training courses in data science"
    "imageUrl": "https://www.edito.eu/wp-content/uploads/2023/09/favicon.png",
    "articleUrl": {
        "en": "https://github.com/username/stac-r-tutorial", // Your github
    }
    "deploymentUrl": "https://datalab.dive.edito.eu/mydeployment.configuration.git.resources.etc"// DEPLOYMENT URL FROM PREVIOUS STEP
    // parts: []
}
```

18

Adding to tutorials.json

Ex. A tutorial on accessing data via STAC in R and how to subset ARCO data.

▶ 0:00 / 1:04   🔊 ⛶ ⋮
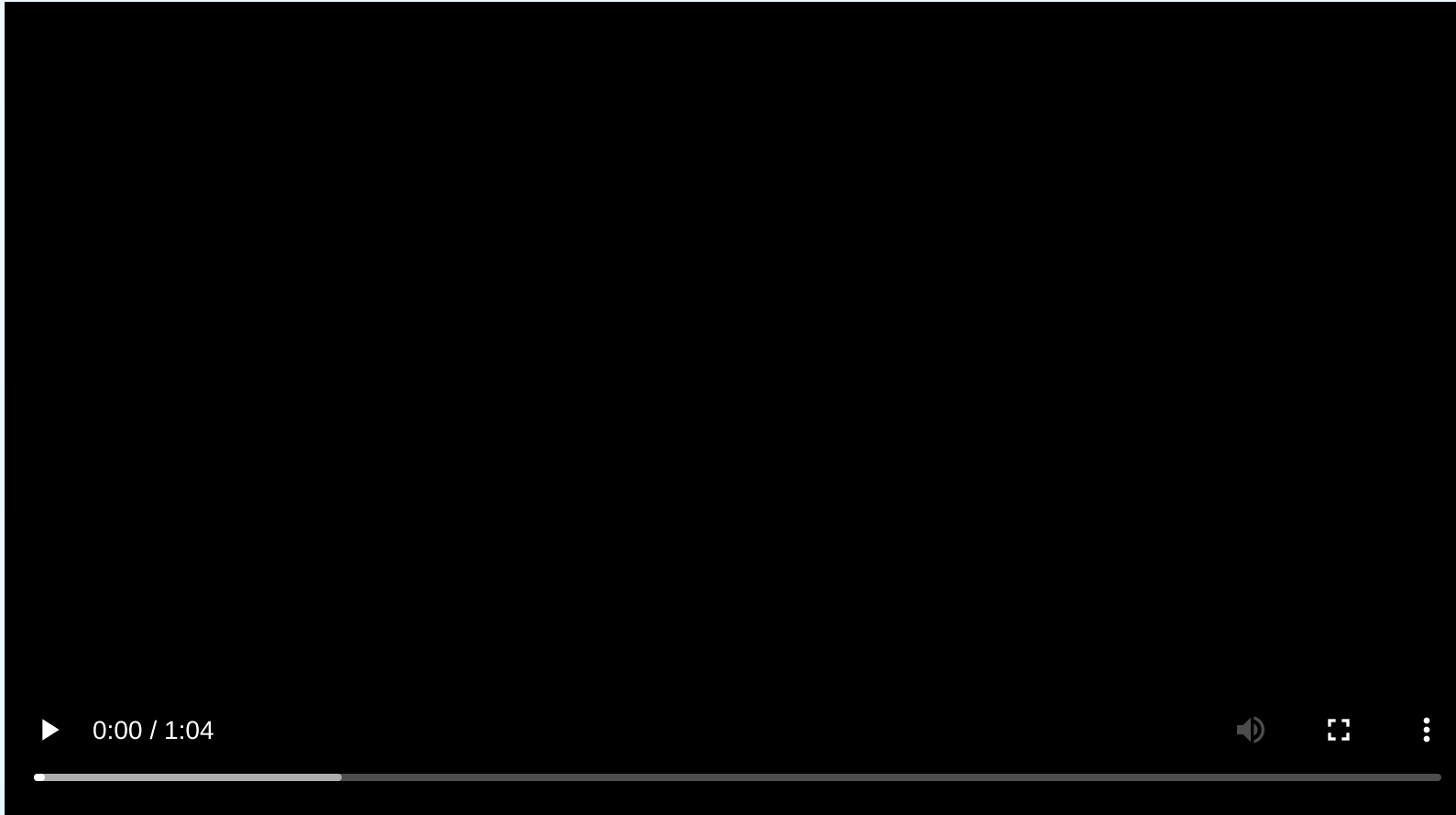
Push your updates onto your branch

```
# Stage all changes
git add .
# Commit the changes with a descriptive message
git commit -m "Added my awesome tutorial to tutorials.json"
# Push the changes to your branch
git push origin my-new-tutorial-branch
```

🔁 Create a Merge Request

- Check the gitlab https://gitlab.mercator-ocean.fr/pub/edito-infra/edito-tutorials-content

- See if your commit is in a pipeline and if it passes or not

- If it passes, create a Merge Request

- In your merge request, '@pub/edito-infra/codeowners' to request code owners to review your proposal.

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✅ **Final Review Checklist**

✔️ Tutorial `.Rmd` created and runs

➡️ GitHub repo is public and clean

🔗 Launch link tested

✅ `tutorials.json` updated

✅ Commited to Gitlab and passes Pipeline

✔️ Merge Request submitted

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🙌 Done!

Once your Merge Request is approved

🎉 You've contributed to EDITO Datalab!

Your tutorial is now one click away from reproducible research!

💬 Issues? Email edito-infra-dev@mercator-ocean.eu

🔗 Contribution Docs