**Instructions to Use `** **H5toMATConverter** **` App**

**1. Launching the App:**

- Open MATLAB.

- Run the `H5toMATConverter ` script to launch the app.

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* The MATLAB app window will open

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**2. Selecting the Folder:**

- Click the "Select Folder" button.

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- Choose the folder containing the `.h5` files you want to convert.

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\* Not all files are mandatory

- The selected folder path will be displayed below the "Select Folder" button.

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**3. Selecting the Conversion Mode:**

- Choose one of the options in the "Select the files to generate" group:

- **Generate complete episode**: This will create a complete episode file.

- **Generate signals and maps data file, and geometries file apart**: This will create separate files for signals/maps data and geometries.

- **Generate geometries file only**: This will create only the geometries file.

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**4. ID Selection for Single Map Conversion:**

- If you want to convert a single map, enter its ID in the "ID selection if only 1 map to convert" field.

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- If you want to convert all available maps, leave the field as `0`.

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**5. Starting the Conversion:**

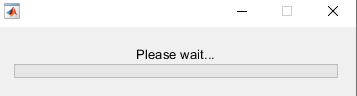
- Click the "Convert" button.

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Description automatically generated

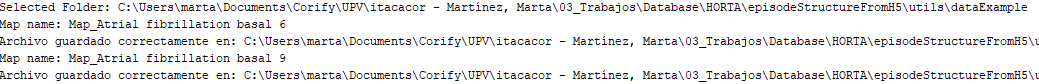
- The app will process the files according to the selected mode and ID.

- Progress and status messages will be displayed in the MATLAB command window.



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**6. Completion:**

- Upon successful conversion, the generated `.mat` files will be saved in the selected folder.

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*Flies generated with Generate Complete Episode option*

A number of maps with black text

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*Flies generated with Generate signals and maps data file, and geometries file apart option*



*Flies generated with Generate geometries file only option*

- A confirmation message will be displayed in the MATLAB command window.

**Notes**

- Ensure that the folder you select contains `.h5`/`.hd5` files formatted as expected.

- If you select the "Generate complete episode" mode, the app will save the episode file in the selected folder.

- If you select the "Generate signals and maps data file, and geometries file apart" mode, the app will save separate files for signals/maps data and geometries.

- If you select the "Generate geometries file only" mode, the app will save only the geometries file.

**Example Workflow**

1. Launch the app by running ` H5toMATConverter`.

2. Click "Select Folder" and choose the folder with your `.h5`/`.hd5` files.

3. Select "Generate complete episode".

4. Enter the ID in the ID field if you want to convert only the first map, or leave it as `0` to convert all maps.

5. Click "Convert".

6. Check the MATLAB command window for progress and confirmation messages.

7. Find the generated `.mat` files in the selected folder.

**Labels**

Standardized labels encompass all fields of estimated and personalized geometries and are linked to the labels of both geometries through mapping indices. In this way, the standardized labels always maintain the same order and the same keyType across instances and different personalized geometries.

1. **Atrial labels**

A table of text with white text

Description automatically generated with medium confidence

Standardized labels

A colorful object with black text

Description automatically generated A colorful object with text

Description automatically generated with medium confidence

Estimated geometry labels

A colorful mask with text

Description automatically generated A colorful map of the region

Description automatically generated

Personalized geometry labels

A colorful object with text

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Description automatically generated

1. **Ventricular labels**

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