

# 1) Getting data

Data are stored sequence by sequence and are provided as archives or videos.

1. Before starting :

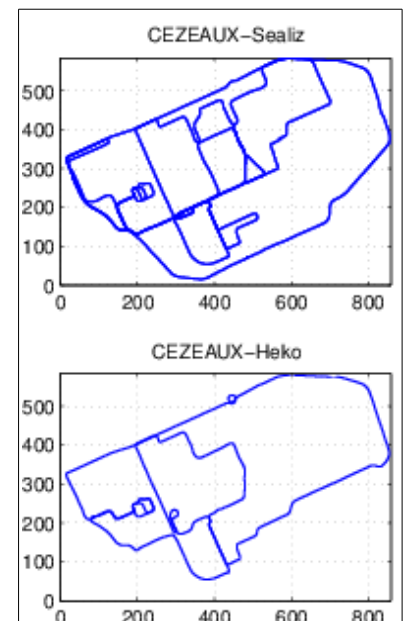
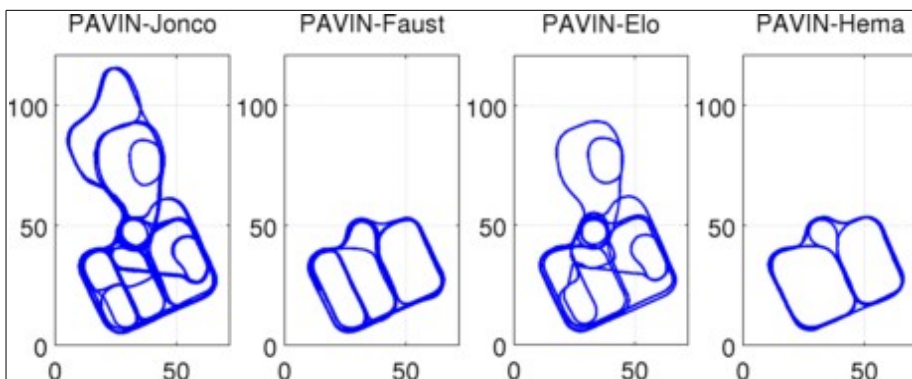
- Choose a sequence  
In function of your application, choose the sequence (in the Dataset section of the website)
- Choose the time range  
View the videos of the sequence (in the Dataset section of the website) and note the date range for the data that interest you.
- Choose the sensors

The complete list is provided on the page <http://ipds.univ-bpclermont.fr/index.php?page=platform>

2. Then, in the Download section, click on Sequences
3. Choose the desired workspace and then sequence

Select the workspace and then the sequence	
Workspace	PAVIN ▾
Sequence	PAVIN-Jonco ▾

Sequences have been acquired on two workspaces : PAVIN and CEZEAUX



More details about the sequences :

- [PAVIN workspace](#)
- [CEZEAUX workspace](#)

4. Select the time range within the sequence

- **Entire sequence**
- **Time range**

**Full sequence**

Starting time (in minutes) :  Ending time (in minutes) :

5. Check the required sensor(s)

**All sensors**

Forward left camera    Forward right camera    Backward camera    Forward Middle camera

Fisheye camera    Catadioptric camera    Webcam

Horizontal lidar    Inclined lidar

RTK GPS    Low-cost GPS

Proprioceptive sensors

6. Then click on the button « Get list of files to download »

7. A summary of your request is displayed with the list of ALL files that have to be downloaded.

You may use an extension to your web navigator to download all the links or images contained in a webpage (for instance DownThemAll for Mozilla Firefox).

Once the download is ended :

8. Run the bash script `extractVideosAndArchives.sh`



**ffmpeg** is required for the script `extractVideosAndArchives.sh` to extract images from a video file  
*ffmpeg is a cross-platform solution*

Different process will occur :

1) a folder named "Extracted" is created. It will contain all the downloaded files after extraction

2) all .tar.gz archives are unzipped

3) for all .avi video files

3.1) The info file (file with the same name as the video and with the extension .videoinfo) is read and the following elements are obtained: bus name (*bus*), image extension (*extension*), supposed framerate (*framerate*) [these elements are required for the video to image conversion], number corresponding to the first image (*numstart*) and total number of images (*totalnumber*)

3.2) If the video of the entire sequence has been downloaded (the filename contains "all"), the images are extracted from the video, put on the folder *bus/* and named *bus-*

%10d*extension* using ffmpeg

3.3) else the video contains only a subpart of the sequence:

- the images are extracted from the video, put on the folder tmp/ and named *bus-%10dextension* using ffmpeg
- the images are moved to the folder *bus* with a renaming step (the number for the first image is *numstart*)

3.4) video and info files are moved to the folder Extracted

All the data are now organised sensor by sensor with the files specified in the page  
[http://ipds.univ-bpclermont.fr/index.php?page=logs\\_format](http://ipds.univ-bpclermont.fr/index.php?page=logs_format)

(refer to the Section **Understanding data**)