

VideoFusion 1.1

E. de Margerie - CNRS 2022-2025

Video frame fusion for easy detection of flying animals

videoFusion 1.1

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Dossier des videos

/Users/emmanuel/Desktop/sandbox

choisir un dossier

Intervalle de fusion (secondes)

20

Mode de fusion


minimum

FUSIONNER

Messages

Videos trouvees :
A.mov
B.mov
C.mov

DEBUT de la fusion de 60 secondes de video (total)
Fusion en cours de A.mov (1/3)...
Fusion en cours de B.mov (2/3)...



Version 13/05/2025

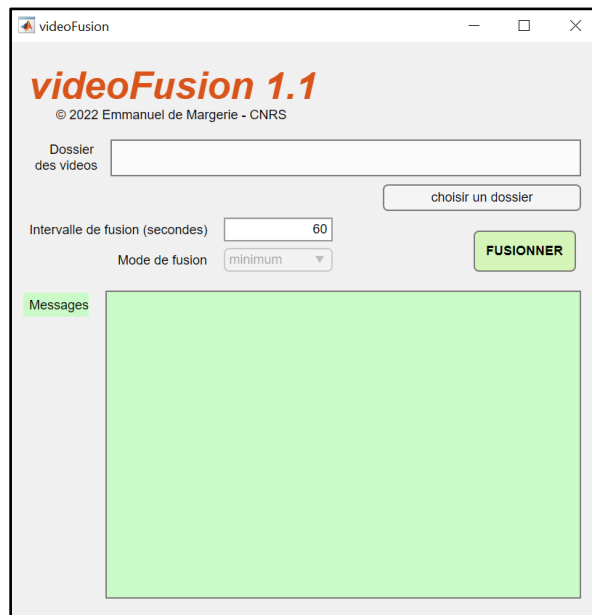
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Installation (on a windows® PC)

- 1) Copy the **videoFusion_v1p1_Installer_web.exe** installation file to your computer's hard disk.
- 2) Double-click on **videoFusion_v1p1_Installer_web.exe**. You must have administrator rights on your computer to perform the installation.
- 3) A *videoFusion Installer* window will open. Follow the on-screen instructions and click *Next*.
- 4) Choose an installation folder on your computer hard drive, then click *Next*.
- 5) The installer indicates that it must also install Matlab Runtime (a free collection of Matlab functions, which videoFusion needs to run). Choose an installation directory and click *Next*.
- 6) Accept the Matlab Runtime licence and click *Next*.
- 7) Click *Install*.
- 8) The Matlab Runtime download begins. This will take a few minutes.
- 9) Click *Finish*.
- 10) videoFusion should appear as a shortcut on the desktop or in the applications menu.

Usage

- 1) Double-click on the videoFusion shortcut to launch the application.
- 2) A console window opens (black background). It is not useful in normal use, and you can hide it if it bothers you (do not close it).
- 3) Another window opens with the videoFusion application. This may take a few minutes.



- 4) Click on *Choisir un dossier* [Choose a folder]. Select the folder containing the videos to be processed
 - a) **All the videos in the folder will be processed.**
 - b) Video files can be .MP4 or .MOV (or .mp4 or .mov).
 - c) Video files must simply be located at the root of the folder (videos in sub-folders will not be processed).
- 5) Choose an *intervalle de fusion* [fusion interval] in seconds.
 - a) By default, the fusion interval is 60s, which means that each minute of video will be merged into one image (if the video is 4 min and 17s long, the last image will merge the last 17s of video).
 - b) A longer fusion interval allows the video to be summarised into a smaller number of images, which will be quicker to inspect.
 - c) A shorter fusion interval is useful when birds pass through the frame very frequently, to avoid mixing up individual trajectories.
- 6) Click *Fusionner*.
- 7) The video files found are displayed in the *Messages* frame (green background), and the fusion begins.

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Dossier des videos

Intervalle de fusion (secondes)

Mode de fusion

Messages

Videos trouvees :
GH010082.MP4
GH020082.MP4
GH030082.MP4

DEBUT de la fusion de 1595 secondes de video (total)
Fusion en cours de GH010082.MP4 (1/3)...

N.B. If nothing is displayed in the Messages box, select the video folder again and click *Fusionner* again.

8) Fusion takes time.

- The speed of progress depends on the resolution of the videos (e.g. 4K vs. 2K), their frame rate (e.g. 60 or 30 fps), and the specifications of your PC.
- Placing the raw videos in a folder on your computer's hard drive, or on a fast external SSD hard drive, can speed up the fusion process
- To get an idea, the video processing speed can be close to real time (example: 2 hours of fusion for 2 hours of video). For a large batch of videos, we therefore recommend launching videoFusion in the evening and letting the application work overnight.
- You can interrupt the fusion process by closing the application, and restart it later. The images already produced will be automatically taken into account.

9) The images produced are stored in the same directory as the videos, in a sub-folder for each video (named xxx_fusions).

10) When the fusion is complete, exit the application by closing its window and the associated console window.

Messages

Videos trouvees :
GH010082.MP4
GH020082.MP4
GH030082.MP4

DEBUT de la fusion de 1595 secondes de video (total)
Fusion en cours de GH010082.MP4 (1/3)...
Fusion en cours de GH020082.MP4 (2/3)...
Fusion en cours de GH030082.MP4 (3/3)...

Fusion TERMINEE pour tous les fichiers.