

# How To MorphOT MAP594

Arthur Ecoffet

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## 1 Introduction

This document is a short supplementary material for my jury to test my USCF ChimeraX *MorphOT* bundle if they feel like it.

## 2 Step-by-step explanation

- Download UCSF ChimeraX on this [page](#).
- Clone this [github](#) repository containing the bundle itself, a more thorough user manual and some input data
- Launch ChimeraX and install the plugin by typing in ChimeraX's command line :  

```
devel build Path/To/GitHub/Repo/otmorph-bundle  
devel install Path/To/GitHub/Repo/otmorph-bundle
```
- Open the two files `emd5140_preprocessed.mrc` and `emd5138_preprocessed_aligned.mrc`
- In the **Volume Viewer** panel on the bottom right, set the level of each volume to approximately 0.15 . You can do this either by typing it in the "Level" box, or by sliding the vertical bar on the histogram below.
- Type in one of the following commands in the command line :

```
MorphOT morphOT #1 #2  
MorphOT semiMorphOT #1 #2 frames 100 otframes 10  
MorphOT barycenterSave #1 #2 Path/to/save/folder
```

Note : the "numbers" correspond to volumes IDs you can see in the **Volume Viewer** panel. They are the only required parameters.

See the user manual for the different function parameters and how they affect computation.