This Xtra is a complete use case implementing the computation of an area fraction relatively to a binary label within *Amira-Avizo2D*.

Here are the steps to follow to run this Xtra:

1. Copy paste the content of the *local* directory into the root directory of your *Amira-Avizo2D* installation.  
   This will add the ***Label to Area*** module to your application.
2. Open the file *grains.png* in with *Amira-Avizo2D*.
3. In the *Workflow Processing* panel load *recipe.hxisp* and then click *Apply* to run the recipe.
4. In the *Label Analysis* section go to the Measure Group Editor and create a new measure group ***Custom Area Fraction Analysis***.
5. Create the new measure ***Custom Area Fraction*** and affect it the formula Area/Maximum.
6. Add the new measure ***Custom Area Fraction*** to the measure group ***Custom Area Fraction Analysis*** and exit the Measure Group Editor.
7. In the *Label Analysis* section select *grains.png.img1* for the input *Intensity Image* and ***Custom Area Fraction Analysis*** for the input *Measures*.
8. In the same section click on *Apply* to compute the area fraction of the bright particles (grayscale value greater than 127) relatively to all particles (grayscale value greater than 2).

The recipe *recipe.hxisp* is provided just to illustrate the use of the ***Label to Area*** module, combined with the custom measure ***Custom Area Fraction***, through a comprehensive use case.

In other terms, you will just need to reuse the ***Label to Area*** module and the custom measure Area/Maximum(aka ***Custom Area Fraction***) to compute the area fraction of any sub-area relatively to any binary label.