

# Summary of changes in paper “Algebraic Lens Distorsion Estimation”

This document reviews the changes between the currently published version of the paper “Algebraic Lens Distorsion Estimation” and the new material submitted by the authors.

## 1 Algorithm description

Minor changes:

1. some typos have been corrected
2. some links to auxiliary files have been removed
3. the references to the computation of the lens distortion center have been changed and a new section, of just 2 lines, has been added explaining the management of the lens distortion center
4. links to the 'basic' version of the code (the one used in the demo) have been added

## 2 Code

Two versions of the code have been provided, only the 'basic' version has been checked. This 'basic' version complies with the IPOL software requirements concerning portability, compilation and dependencies. This version is the one used in the demo.

The differences between the currently published and the new 'basic' version of the code are:

1. pre-linked libraries and unused files have been removed
2. indentation and copyright attributions have been corrected
3. the makefile have been modified to meet IPOL compilation requirements
4. some new functions have been added to compute output (undistorted) images and to refine the position of the center of distortion (now a parameter of the method)
5. some data structures have been modified in order to add the coordinates of the center of distortion as an input parameter
6. only computations involving 'trivial solution + gradient' are performed
7. only bmp images are accepted as input

## 3 Demo

Some features have been added in the new version:

1. selection of center of distortion
2. optimization of the center
3. results shown in “gallery” format (input and output images in the same frame)
4. possibility of rerun using previously selected lines