In this manuscript, an algorithm for automatic coordinate registration and obstacle boundary extraction was presented. An image of farmland was acquired using an RGB camera mounted on a UAV. The coordinate registration and obstacle boundary extraction processes were completed using ArcGIS geographic information system. The obstacle detection is based on template matching technique, which is first executed using 10 pixels step and then refined in the selected region of interests. Here are my comments and questions:

1. Could you emphasize where the novelty of your paper is? The image processing method is well-known and implemented in OpenCV library, the coordinate registration, as well as obstacle boundary extraction, is completed by using ArcGIS. Please show the Reader what your original contribution is. If possible, please add relevant enumeration to the summary section?

2. According to the abstract section, the method is automatic. How is the ROI containing a registration marker selected (Flow chart 4)?

3. What happens when the selected ROI contains some objects brighter than registration markers and after thresholding, more than one binary blob is obtained?

4. Could you provide more details about the preparation of templates? How many templates are used? How are they processed (rotated)? What are their sizes? During the rough matching procedure, how you decide whether ROI is detected or not.

5. The conclusions are based on the test with one image only. Is it possible to carry out additional experiments with different obstacles and various experimental environments? This would significantly strengthen the article.