**LISTED RESPONSE TO COMMENT/SUGGESTIONS OF**

***REVIEWER 1***

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| --- | --- | --- | --- |
| ***No*** | ***Reviewer’s Comment/Suggestion*** | ***Author’s Comment*** | ***Action Taken\*\*\**** |
| 1 | Please explain the difference between reference [9] and this paper. They are both presented the MOD\* Lite methods. | Thank you for your comments and suggestions. Citation [9] is the prior version of this study. However, we extend the MOD\* Lite method in this paper with adding a soft computing genetic algorithm (MOGPP) and executing the tests from scratch. We also explained MOD\* Lite more deeply as well. | No actions taken. |
| 2 | Please check the type errors in the paper, such as "For the experimental study, MOD\* Lite is is realized," in Page 5 (Line 4-5). I find several errors. In Section IV, the word "multi objective" does not have the '-'. But, in the previous sections, the word is "multi-objective." Please correct them. | All “multi objective” phrases are replaced with “multi\*objective”, to keep consistency. Also other errors are typos are corrected. | Corrections are done in accordance with author reply. |
| 3 | In this paper, the MOD\* Lite method is applied to 2D UAV problem whose environment is represented by the square cells. Please explain how to transform the cell-base environment to the real space in real application. |  |  |
| 4 | In Algorithm1, I suggest to put the PLAN() procedure to the top and indicate that it is the main procedure to avoid confusion. | Thanks for your suggestion. PLAN() procedure in Algorithm1 is put at the top of other procedures. Also it is stated that PLAN() procedure is the main one in Section XXX. | Corrections are done in accordance with author reply. |
| 5 | In Section III, it seems not easy to be understand about the algorithms presented in this section. Can you illustrate the important concept of the algorithm by using another figure? |  |  |
| 6 | In Fig. 6, why MOA\* requires the most computing time? |  |  |
| 7 | For MOGPP method, please explain that how to judge the chromosome is non-dominated and how to update or replace the old chromosome. |  |  |
| 8 | In Section V-B, page 10, the agent has found three paths with costs (15, 200), (18, 230) and (23, 260). The agent tends to choose the path with cost (18, 230). Please explain why it does not choose the path with (15, 200) since (15,200) dominates (18,230). |  | Corrections are done in accordance with author reply. |
| 9 | In Section V, both MOD\* Lite and MOA\* method require re-plan while the environment changes. Please state that why MOA\* requires much time compared with MOD\* Lite. |  |  |

*\* Throughout the letter, the section and figure numbers are referred to our revised version of the paper, unless it is specified as in old version.*

*\*\* Throughout the letter, all figures and tables included in the Appendix of this letter are specified as “in Appendix below”.*

*\*\*\* In the revised manuscript, all textual insertions are marked with red, deleted ones with green.*

**References**

**Appendix**