**LISTED RESPONSE TO COMMENT/SUGGESTIONS OF**

***REVIEWER 2***

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| --- | --- | --- | --- |
| ***No*** | ***Reviewer’s Comment/Suggestion*** | ***Author’s Comment*** | ***Action Taken\*\*\**** |
| 1 | In test results shown in Tables 1,2,3, most results of MOD\*-Lite and MOA\* are the same. The authors should discuss why these two complete algorithms yield different results in some simulations. | Thanks for your comments and suggestions. Results on table 1 and 2 belong to fully observable environments which are generated randomly and handcrafted, respectively. As MOA\* and MOD\* Lite are both complete algorithms, it is expected that they will both find optimal or sub-optimal results. That's why most of the results are same. For different results, we can say that the algorithm which find dominatable result finds the sub-optimal one instead of optimal. However, for results on table 3, which are the ones for partially observable environments, the agents are probable to discover different parts of the environment for MOA\* and MOD\* Lite. This naturally causes different results to occur. | Modifications and additions are done in accordance with author reply in Section V-A and Section V-B. |
| 2 | The column of MOGPP in tables should be described more clearly. | Extra explanation for MOGPP columns in tables is added : “ Also it is important to emphasize that MOGPP does not guarantee Pareto optimum and that's why the results are not optimal or sub-optimal.” | Modifications and additions are done in accordance with author reply in Section V-A. |
| 3 | MOGPP implementation does not show the Pareto front , which is an essential concept in multiobjective problems. | We implement MOGPP as a soft computing alternative genetic realization of multi-objective path planning problem, and we don't guarantee that it will yield optimal results. We only state that MOGPP is a complete algorithm, and eventually finds a solution in search space. Pareto front is more or less related with fitness function of genetic algorithm, which might separately be considered out of this study's scope. | No actions taken. |
| 4 | The comparison should be made also with single-objective path search algorithms using weighted sum of multiple objective, and it would be more convincing if the MOGPP implementation is from the literature such as SPEA2 or NSGA2. | In this study, we concentated on multi-objectivity on path planning where objectives that can not be transformed into each other. Thus, calculating weighted sum of multiple objectives (in case where we transform one objective to another) could be considered out of this study's scope. We gonna add SPEA2 tests (at least attach to this reviewer’s document). | We need to explain what actions are taken after adding tests. |