

# Review of: "ALR\_Sim\_tracks - trajectory simulator software to assist the search for favourable trajectories for the exploration of the triple Asteroid 2001-SN263 from the Laser Altimeter point of view"

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Potential competing interests: No potential competing interests to declare.

The paper presents the trajectory simulation and analyzer software for space missions involving the exploration on the surface of celestial body using optical instruments, called ALR\_Sim\_tracks. It was created to help the ASTER space mission, using the Laser Altimeter to design the mission and the MATLAB software. All the involved parameters and the sequences of the operations are well described in the paper. This simulator will be useful to analysis of space mission and it can be adapted for others optical instruments.

I recommend the publication of this paper after few changes.

My suggestions are:

1. Keep the same notation for the footprint diameter, or FTD (section 2.2) or Dfp (section 2);
2. Introduce a citation of Figure 6a (subsection 2.3.1.iii) and 6b (subsection 2.3.1.iv) in the text of the paper;
3. Change the title to section 2.3.1 to MAIN RESULTS PRODUCED
4. If it is possible, compare the results with others authors, for example , in the section 2.3.1.i, the authors comments that the terminator orbits produced are similar with the results from reference 10. It can be point out in the conclusion.