

## Supporting Information for “Atomic-Scale Simulations of Meteor Ablation”

Gabrielle Guttormsen<sup>1</sup>, Alex C. Fletcher<sup>2</sup>, and Meers M. Oppenheim<sup>1</sup>

<sup>1</sup>Center for Space Physics, Boston University, Boston, MA, USA

<sup>2</sup>Naval Research Laboratory, Washington D.C., USA

### Additional Supporting Information (Files uploaded separately)

1. Caption for Movie S1

#### Movie S1.

This movie shows a LAMMPS simulation of an normally incident argon atom impact on a quartz ( $\text{SiO}_2$ ) target. The color scale shows the kinetic energy of the atoms, with black to red indicating lower energies, and orange to yellow and white indicating higher energies. The white atoms leaving the surface are the sputtered atoms, and disappear from the simulation after crossing the upper boundary. The simulation block is approximately 145 Å in the x and y direction, and 70 Å in the z direction. The simulation view is in the x-z plane.

---

Corresponding author: Gabrielle Guttormsen, [gabigutt@bu.edu](mailto:gabigutt@bu.edu)