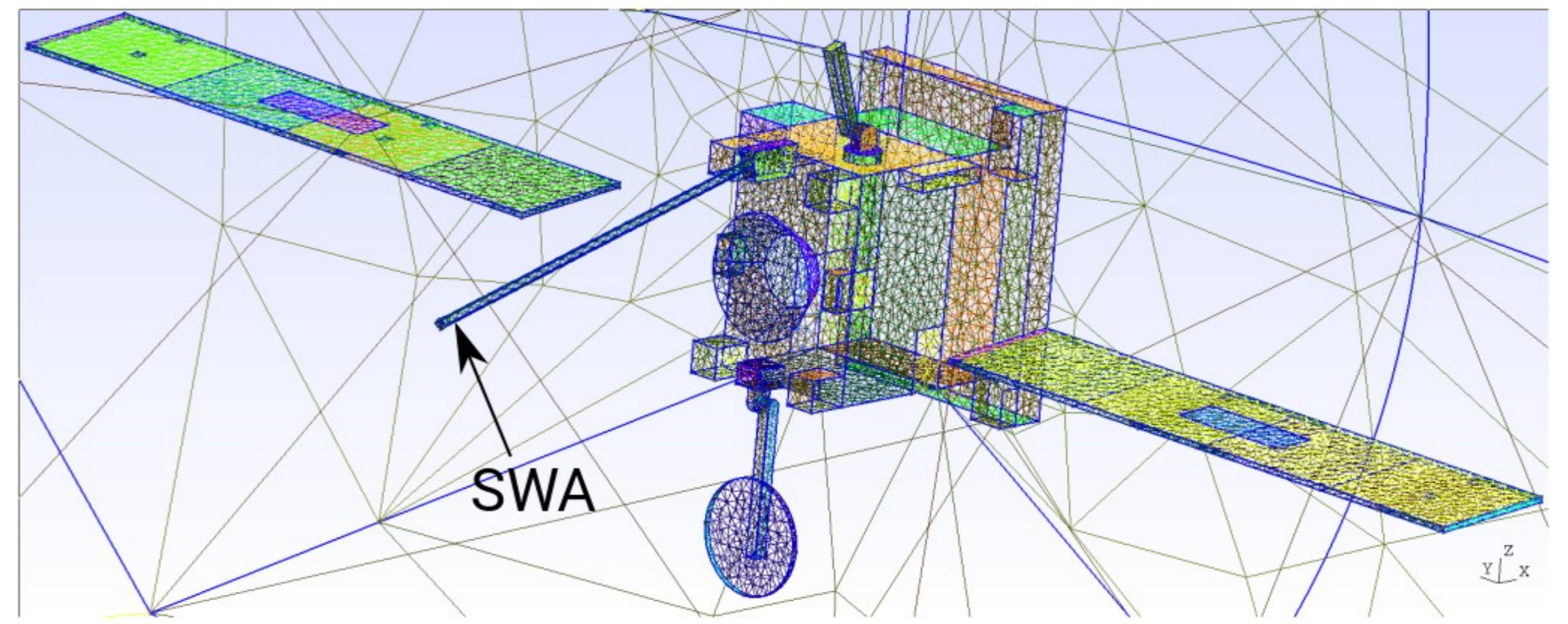
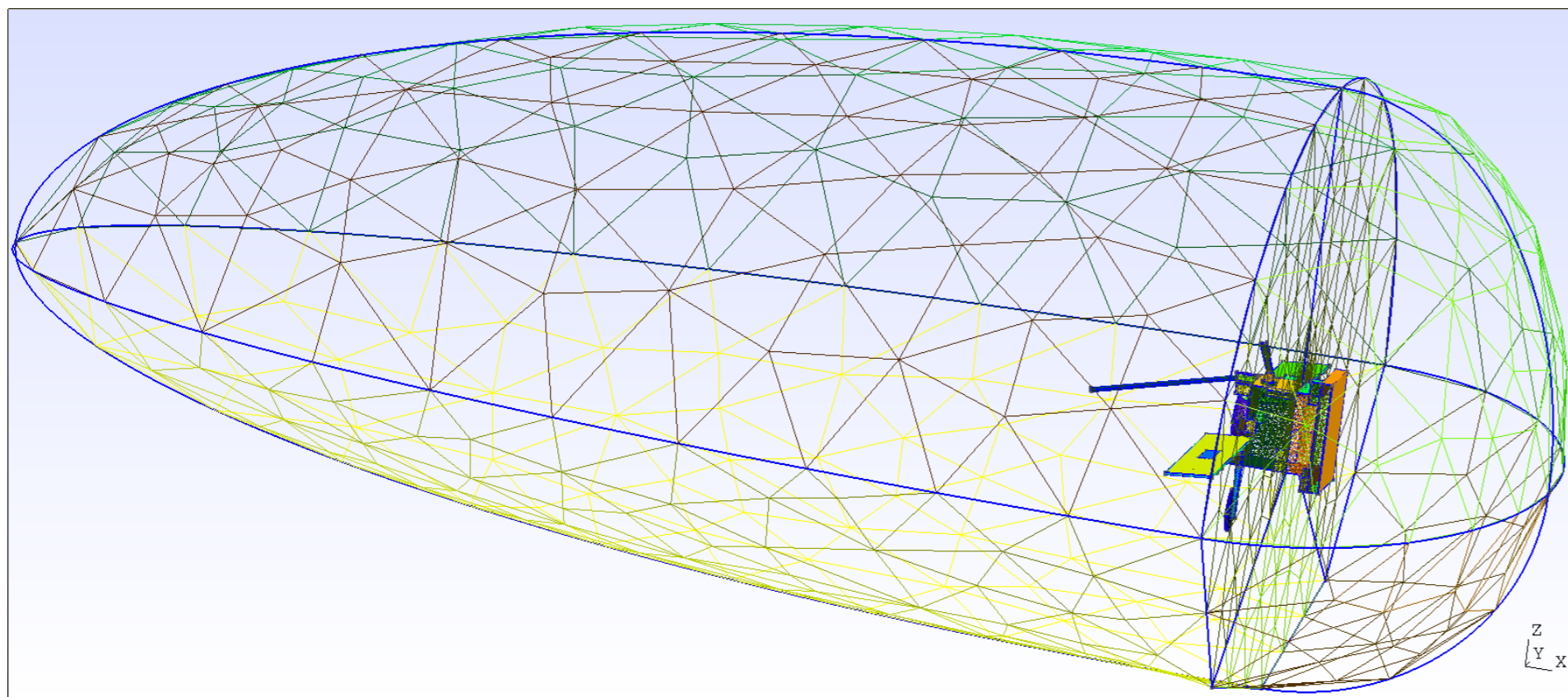


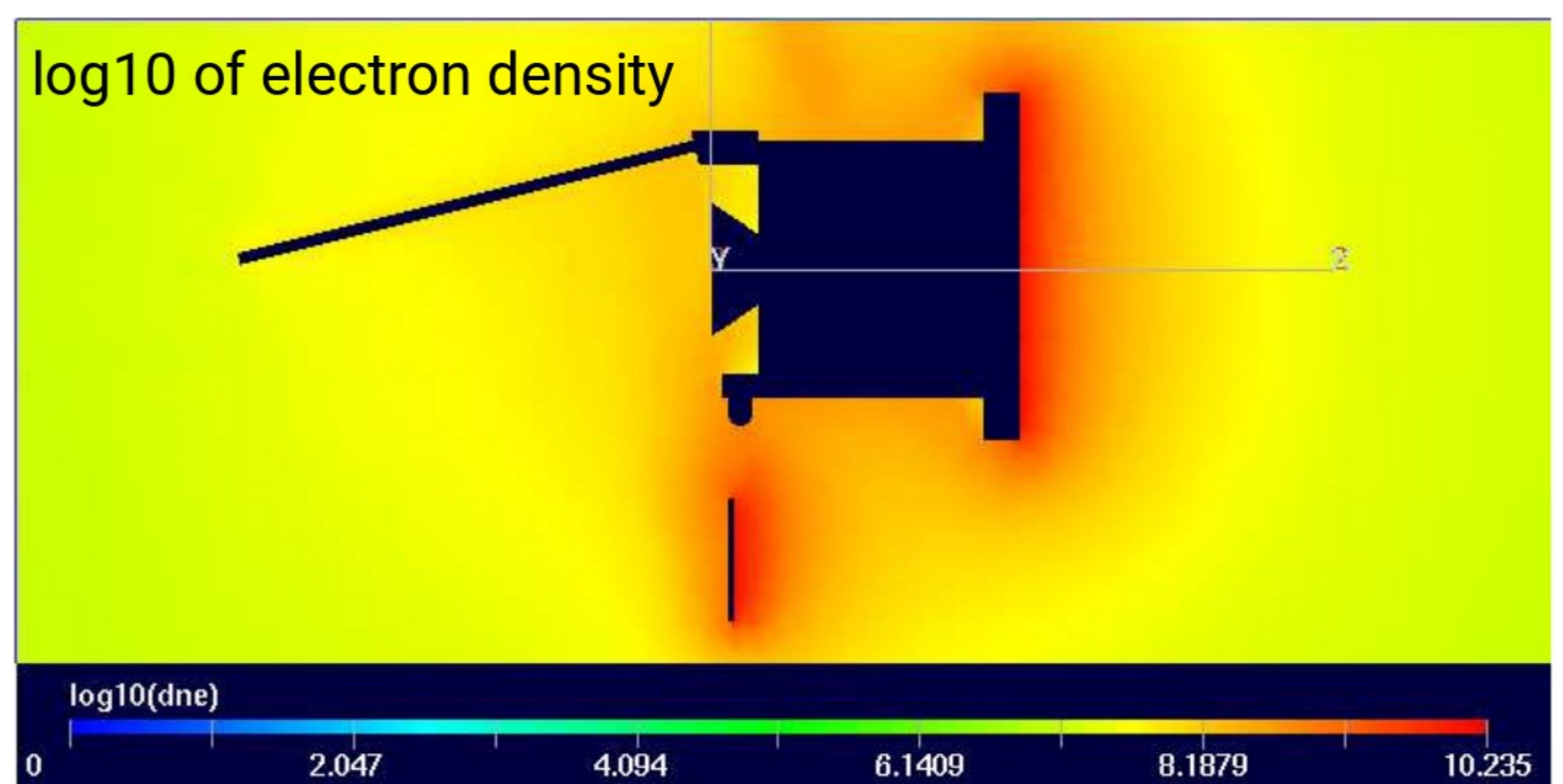
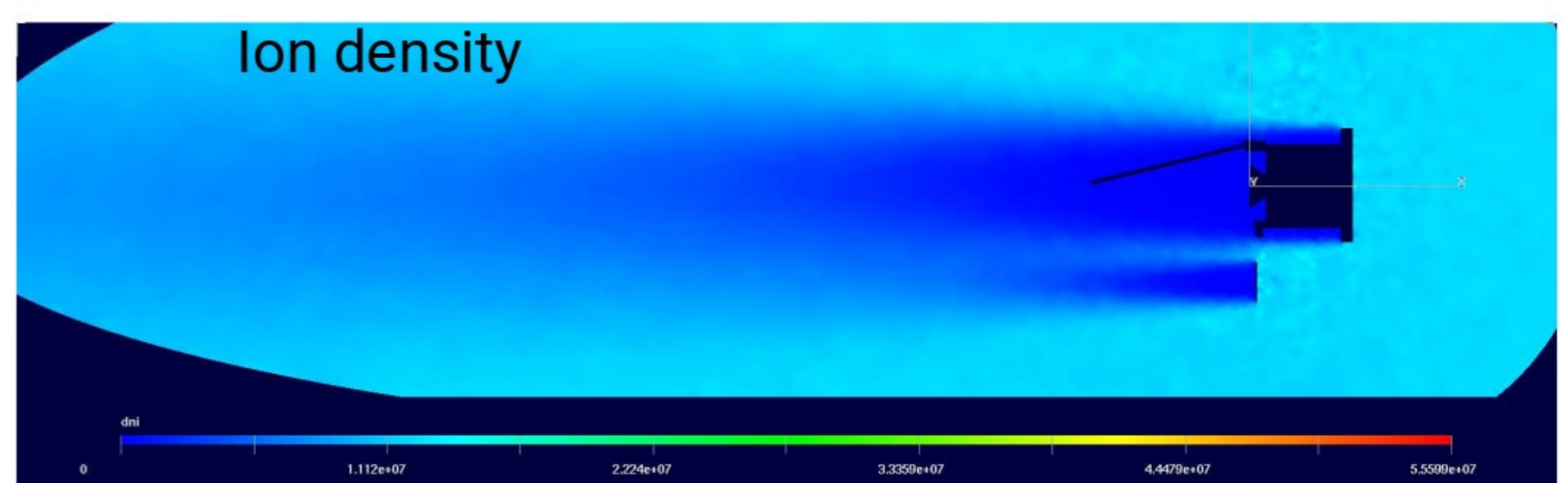
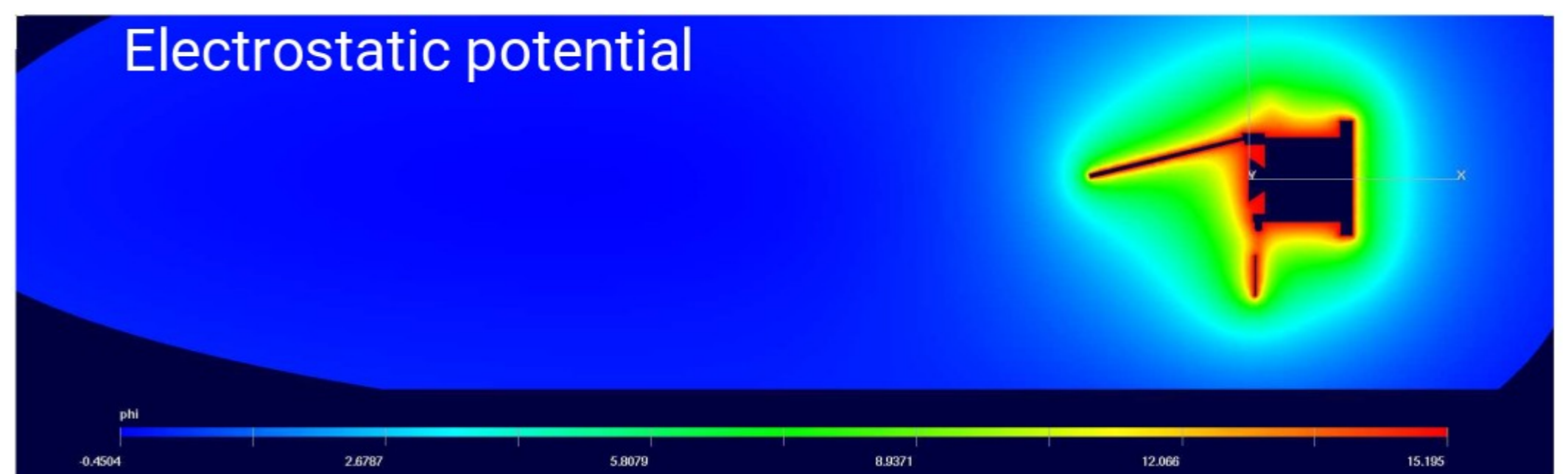
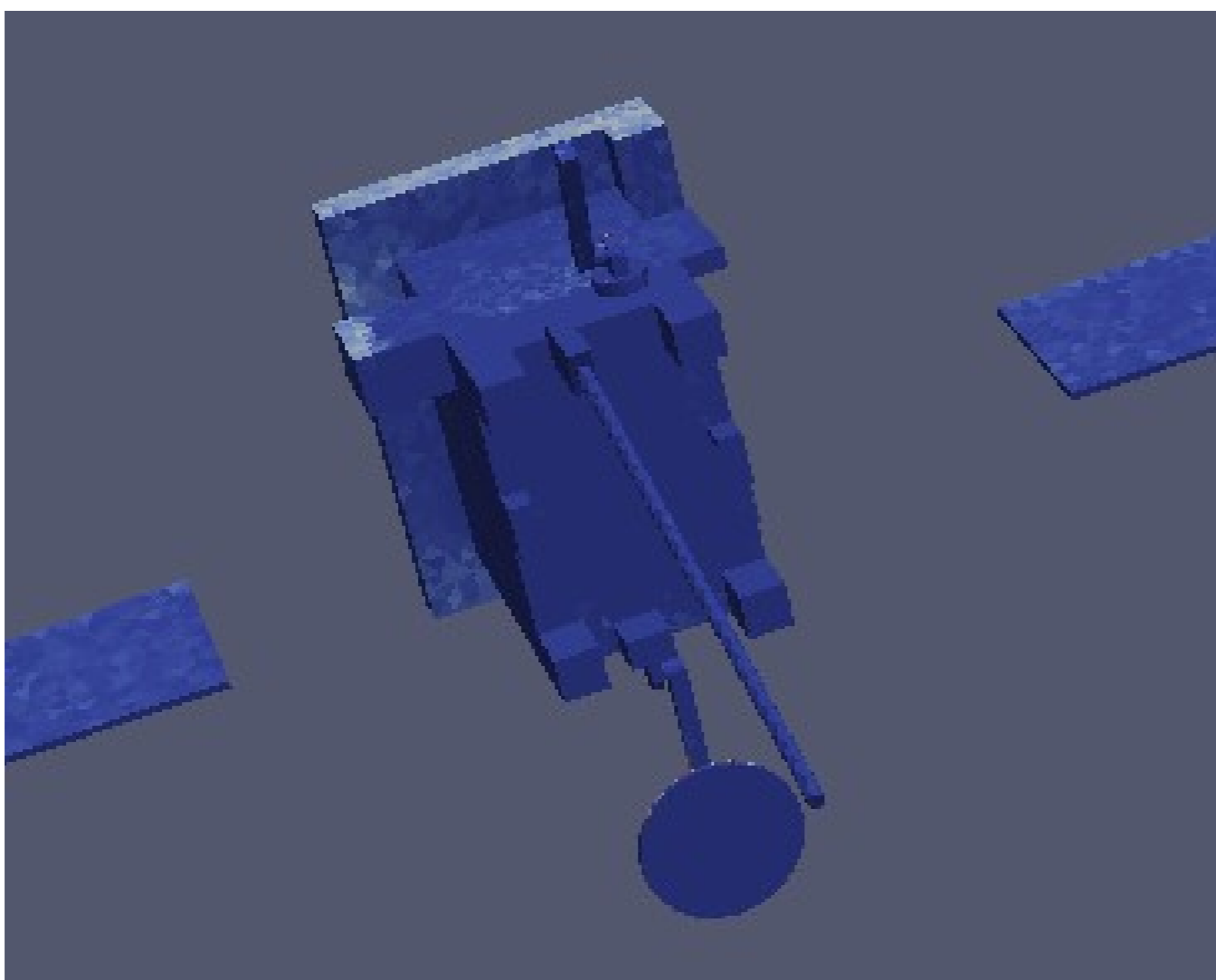
# Photoelectron emission with multiple reflections

R. Marchand<sup>a</sup>, S. Grey<sup>b</sup>

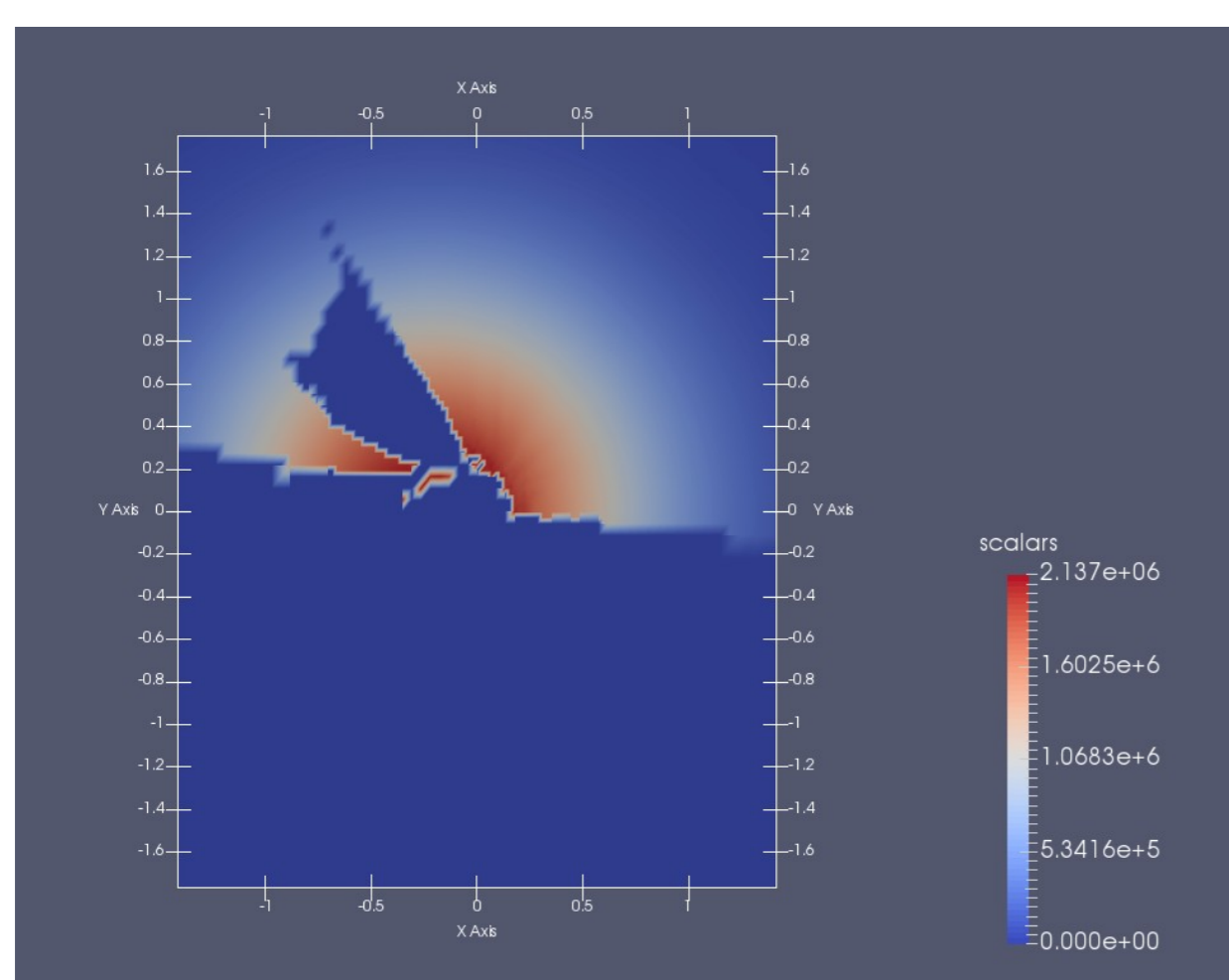


- PTetra<sup>1</sup> was modified to import multiple reflection calculations of illuminations from S. Grey's code.
- Simulations of SO were made with and without multiple reflections

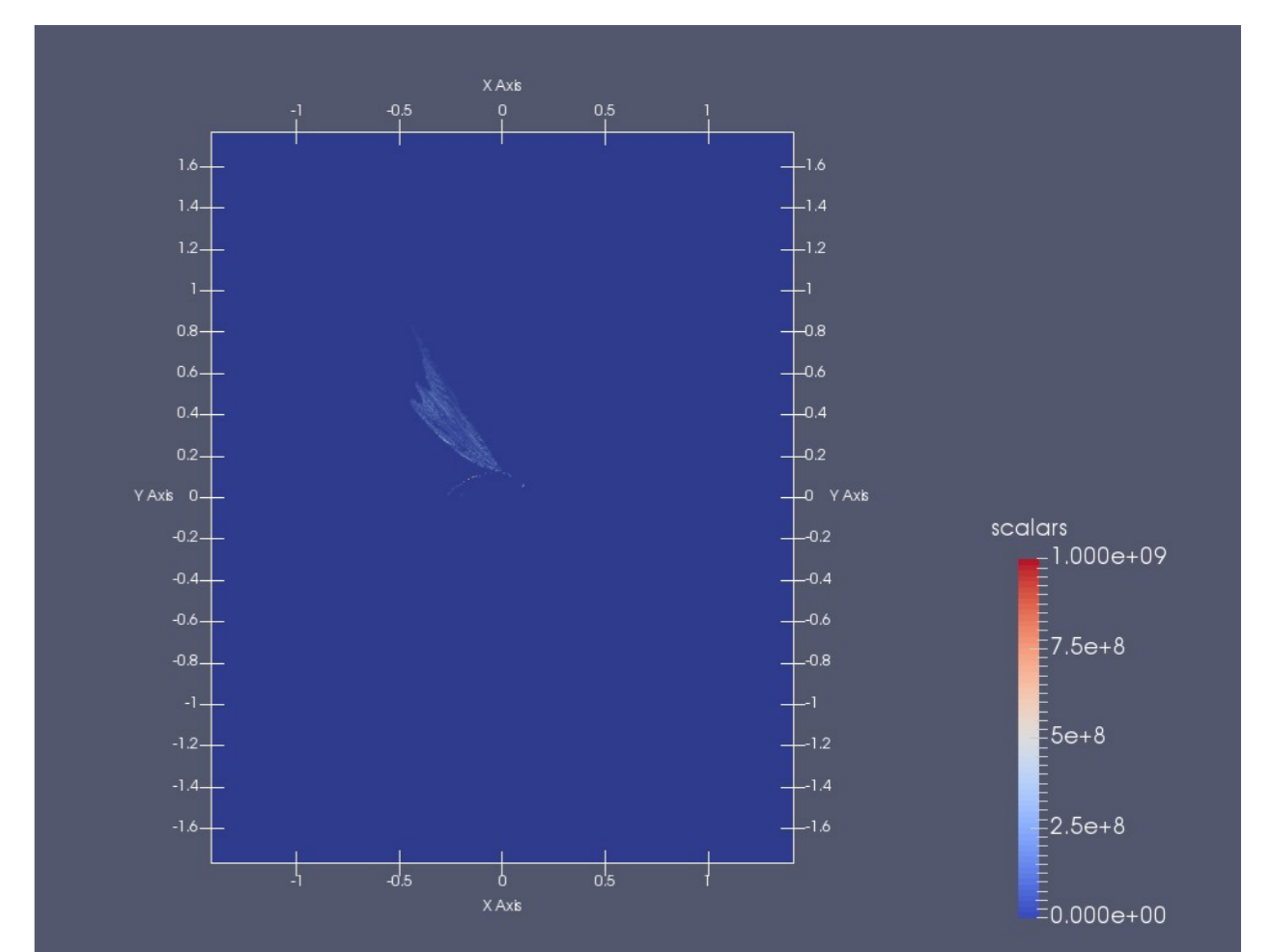
<sup>1</sup> Marchand, IEEE Trans Plasma Sci. 2012



- Electron distribution functions near SWA (tip of the boom in the wake) were calculated with test-particle backtracking, with and without multiple reflections.



Solar wind parameters	
$n_e$	$1.19 \times 10^8$
$T_e = T_i$	10 eV
ions	$100^+ H^+$
$V_{\text{solar wind}}$	$4.1 \times 10^5 \text{ m}^{-3}$
$B$	5 nT



Photoelectrons, no multiple reflection

Photoelectrons, with multiple reflections

a- University of Alberta, Canada, b- University College London, UK.