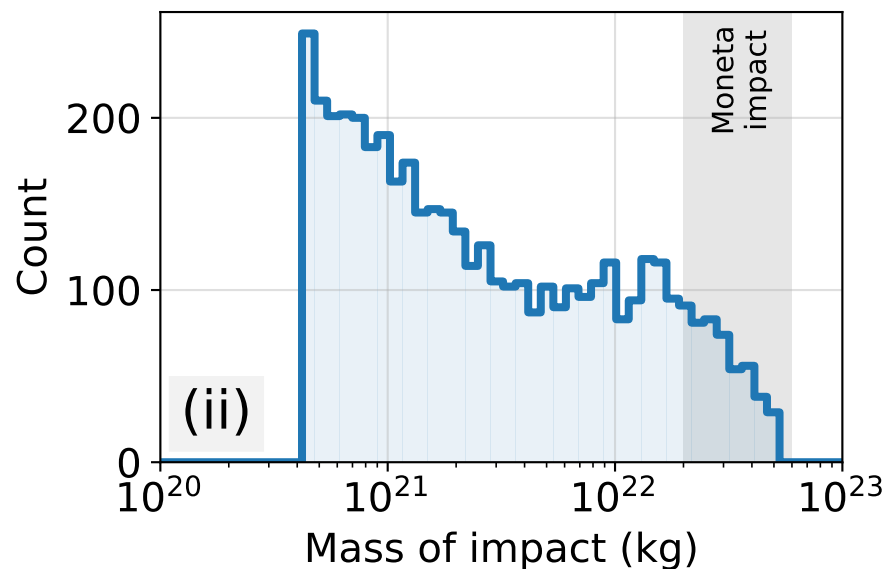
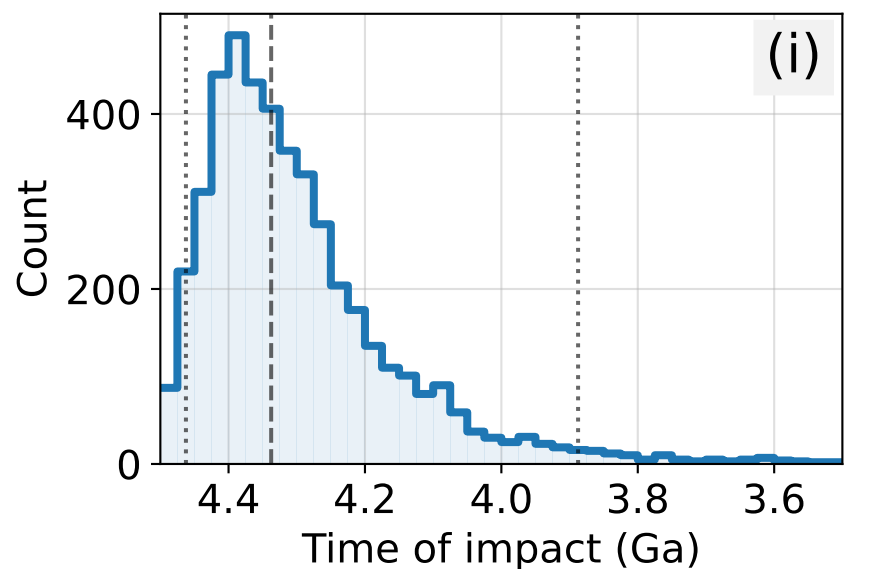


**(a)****Chapter 5 optimistic case**

Last  $> 4 \times 10^{20}$  kg impact  
with no later ocean vap.

**(b)****Chapter 5 pessimistic case**

Last  $> 5 \times 10^{21}$  kg impact  
with no later ocean vap.

