Response to comments of the Anonymous Referee 1 on the manuscript entitled “The vapor pressure over nano-crystalline ice”

We thank the reviewer for the very encouraging review and the thoughtful comments which we address individually below:

**Comment 1:** In the revised manuscript, the authors should ensure that all abbreviations are defined. For example, in Appendix A, “k” in Eq. A2 is presumably the Boltzmann constant, though it is not defined. Similarly, “Tw” is not defined. On page 10, line 17, “NLC” presumably refers to noctilucent clouds but is not defined.

**Response:** We thank the Referee for the thorough reading of our manuscript uncovering undefined abbreviations. We carefully revised the manuscript to make sure that no abbreviations are undefined any more.

**Changes made:**
- Page 9, line 31: ... particles, **k is the Boltzmann constant**, \( v_{th,s} = \sqrt{8kT_s/\pi m_{H_2O}} \) is...
- Page 10, line 17: However, **noctilucent clouds** form under...
- Page 11, line 1: At \( T_s = 135 \) K the time needed for...