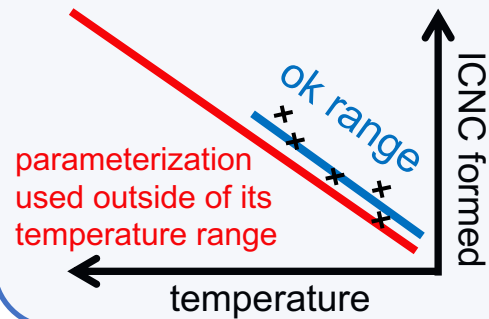


# Step-by-step guide to model improvements

**Step 1:** remove sources of artificiality  
→ (unphysical) ice crystal number limit

**Step 2:** Make sure freezing doesn't operate outside of the parameterization range



**Step 3:** Implement a new ice nucleation process at  $T < -37^{\circ}\text{C}$

