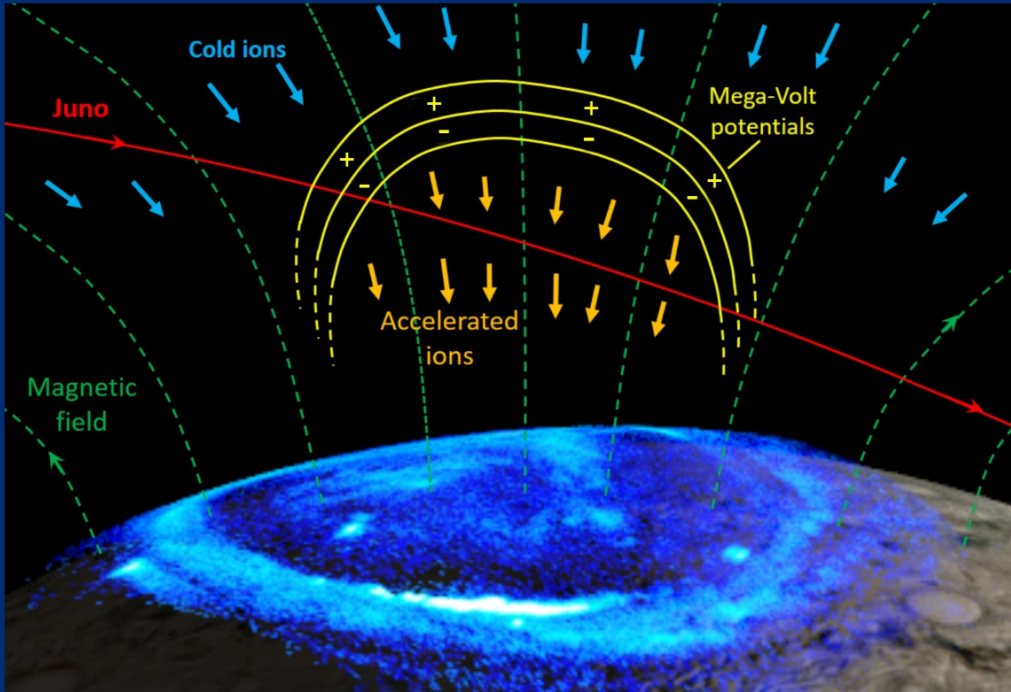


Heavy ion charge states in Jupiter's polar magnetosphere



- Megavolt potentials discovered by Clark et al. (2017) in Jupiter's polar cap region are used to determine the charge states of the heavier ions
- Charge states are important because they help us understand acceleration processes and energetic ion-neutral interactions

1) ion-neutral interactions are playing a role in redistributing the heavy ion charge states; 2) these energetic heavy ions may be a source of Jupiter's soft X-rays

