Comments on Wieser et al., 2026:

This manuscript presents a useful in-flight calibration study of the JDC sensor onboard Juice, based on observations during the Earth flyby. The authors show that the original low-energy sweep table produced an unreliable energy assignment, especially at low energies, and that laboratory measurements of the ESA voltage can be used to reconstruct the effective energy scale. The corrected observations become more consistent with the spacecraft potential, and the new sweep tables will be important for future low-energy particle measurements near Jupiter's icy moons. Overall, the paper is interesting and timely. I recommend publication after revision. My main comments are listed below.

1. Spacecraft potential should be introduced earlier and connected to the target observations. The interpretation of low-energy ions strongly depends on the spacecraft potential, but the manuscript does not clearly explain why the spacecraft may charge negatively or positively in different plasma environments. I suggest adding a paragraph in the Introduction or Discussion to introduce this issue and link it to the relevant target regions, including Earth's plasmasphere during the flyby and the expected environments near Ganymede, Europa, and Callisto.
2. The Introduction mentions previous Galileo and Juno observations of Ganymede's ionosphere, but the current knowledge of its low-energy ion population is still described rather briefly. Since the main result of the paper is the optimization of low-energy sweep tables, the authors should better explain what ion populations are expected at Ganymede, their likely energy range, possible ion species, and the main open questions. This would make the need for the new table more convincing.
3. The energy correction is central to the paper, and the current validation based on the removal of artificial banding and the consistency with spacecraft potential is convincing. I wonder whether it would be possible to provide an approximate uncertainty estimate for the corrected energies. This could include contributions from different sources, including but not limited to the laboratory voltage measurement, possible differences between the laboratory model and the flight unit, and the intrinsic ESA energy resolution. If a full estimate is not possible, a brief discussion of the dominant uncertainty sources would still be helpful.
4. The choice of the three new energy ranges, 1 eV–35 keV, 1 eV–18 keV, and 1 eV–500 eV, should be briefly justified in terms of future science cases.