There is another reason why we conclude that Ne is underestimated by LAP on on-board CSES. That is Ne estimated from another probe, the small one, is larger than the formal published Ne data, which I mentioned in the initial comment, but you neglect it. The most possible reason as pointed out is underestimation of the Ie. Ie from both probes is lower than it should be, but Ie from the larger one loses more current, therefore a lower Ne estimation.