

Referee's report for the manuscript QNUJS-B2403:

“The stability of star Milyutin regularity set-valued mappings under Lipschitz perturbation”

General comments.

The paper study the stability result under single-valued Lipschitzian perturbation in the paradigm of star Milyutin regular mappings. As pointed out in the paper as well as several recent developments in the literature, the notion of star Milyutin regular may subsume as a weaker variant of the so-called metric regularity property, which is a key ingredient in nonsmooth and variational analysis. After a survey introduction of related existing works, the main results of the paper are presented in the two theorems (Theorem 17, Theorem 18) in Section 3. As a short summary, the paper is well-written with suitable organization. However, the manuscript seems to be quite technical and slightly complicated to understand excepting some few expertises in the similar area of the research. I could not check by myself all of the details of the paper since I believe that the author(s) had been completed totally. In my opinion, the developments here are among of useful contributions to the topic of regularity properties and beyond.

Conclusion.

The manuscript can be considered to publish after some minor corrections.

Further comments and/or suggestions.

I suggest hereafter several things that I think being misprint(s) and/or mistake(s). The author(s) should recheck by himself/herself/themselves for getting a better version of the paper.

1. *Page 2, left column*, in the first sentence: “... Banach Open Mapping Theorem by Rudin (1973), and Classical Implicit Function Theorem by Cauchy, Dini (1980s), ...” → I think that something need to be precise here.
2. *Page 2, left column*, the last sentence of the first paragraph: “... the infinitesimal characteristics” → Did you mean “... the infinitesimal characterization”?
3. *Page 2, left column*, the last sentence: “Besides ... fixed set **situiation** ...” → Did you mean “...fixed set situation... ”?
4. *Page 2, right column*, the second sentence: this is a very long sentence, and perhaps slightly obscure → I recommend to rewrite this into a better form.
5. *Page 2, right column*, nearby the last sentence: “Then, for the such mapping ... may be **not useful**...” → the word **useful** here may cause confusion
6. *Page 3, left column*, in the first paragraph of Section 2: “... $T:X \rightrightarrows Y$ is a correspondence **associates** ...” → seems to have syntax mistake here, please ensure a correct redaction
7. *Page 3, left column*, the second sentence at the beginning of Subsection 2.1: “.. **the reader is** referred...” → please recheck again

8. *Page 4, left column*, first sentence: “In order **to convenient**” → Did you mean *to be convenient* ...?
9. *Page 5, left column*, first paragraph after Definition 11: “... For fuller treatment of **slope**, ... ” → I think it should be *strong slope* here