

**Comments on ‘Fractal analysis of geomagnetic data to decipher pre-earthquake process in Andaman-Nicobar region, India’ (npg-2024-8) authored by Rahul Prajapati and Kusumita Arora.**

From the measures of fractal and multifractal dimensions of observed Z-component seismo-electromagnetic (EM) signatures prior to earthquakes, the authors tried to study the possible existence of seismic precursor. Although their study is fine and interesting, the manuscript cannot be accepted for publication just in the present form due to the following several major problems which made me unable to follow their studies well. Hence, I cannot judge if the study is acceptable or not. The authors should substantially re-write and re-organize the manuscript and then re-submit it.

**Major Problems**

- (1) The authors applied two methods to measure the fractal dimensions. They should simply describe the methods and clearly explain the parameters. For example, the authors should explain the definitions of ‘length’ and ‘k’ in Figure 1.
- (2) The authors must use a testing example to describe the way applied to estimate the values of multifractal spectrum, i.e.,  $h_w$ , and to explain whether or not the estimated values are reliable. This will help me to accept the results.
- (3) The English writing should be substantially re-written because there are many grammatical and typo errors. Meanwhile, the statements should be re-organized
- (4) In Table 1, the authors should replace ‘Mod’ and ‘Large’ for Mag (magnitude), ‘Mod’, ‘Shallow’, and ‘Large’ for ‘Foc. D.’ (Focal Depth), and ‘Mod’, ‘Small’, and ‘Large’ for ‘Epi. D.’ (Epicentral Distance) by the magnitude range, focal depth range, and epicentral range in numbers.

**Minor Problems**

- (1) The abstract is not concise.
- (2) It is better to provide a figure to show an example of observed Z-component seismo-electromagnetic (EM) signatures.
- (3) The quality of figures should be improved.