Review of: "Yield Forecasting Model for Maize Using Satellite Multispectral Imagery Driven Vegetation Indices"

Fadhlullah Ramadhani[1]

1 National Research and Innovation Agency (BRIN)

Potential competing interests: No potential competing interests to declare.

Review of: Yield Forecasting Model for Maize Using Satellite Multispectral Imagery Driven Vegetation Indices.

Dear authors,

Thank you for the manuscript. This study shows the relationship between indices using Landsat-8 and Sentinel-2 and ground data such as field maize in Bangladesh's rural area. The writing is quite good and clear. However, it is missing some key points, such as:

a. Abstract: Missing the result of the regression model, e.g., showing the RMSE value
b. The literature gap is quite evident here because Landsat/Sentinel-2 has been widely studied in relation to field crops, especially maize fields. I recommend inserting some local gaps in Bangladesh, such as limited resources or different cultivars.
c. The map of the study area needs to be remade. The inset should be in the Bangladesh area, and the study area needs to be clear or show the ground truth point in Figure 2.
d. Some typos: "We downloaded a total of 6 images, which was maximum cloud free, viz., 3 images were "
e. The method is not bulletproof because the satellite data is only recorded at the peak of the crop. It should start from the beginning of DAP to show a clear correlation between NDVI and the growth phase.
f. Try comparing with Google Earth Engine - GEE Level 2 of Landsat-8 and Sentinel-2
g. Please add a reference to this sentence: "Negative values of NDVI, i.e., values approaching -1, correspond to water. An NDVI close to 0 corresponds to no vegetation, while values lying between -0.1 and 0.1 generally correspond to barren areas of rock, sand, or snow."
h. What is viz?
i. Can you give some references for this sentence: "NDVI values less than 0.25 and more than 0.95 were removed from the listed fields to reduce the influence of the reflectance of other objects like bare soil, settlements, water bodies, non-agricultural crops, and infrastructure."
j. Make a figure to describe the maximum NDVI during the maize growth phase.
k. Replace Tables 2 and 3 with a boxplot.
l. It is better to mask out non-agricultural areas.
m. I think it is better to focus on local gaps and knowledge.