

## ***Interactive comment on “Dynamic variability examination of Mediterranean frontogenesis: teleconnection of fronts and flood 2010” by B. A. Munir et al.***

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Regarding Methodology – Somehow the reviewer has confused the term “improved scheme” with improved algorithm. Improved scheme relates to the use of large archive of satellite imagery simultaneously in different band wavelengths. Whereas, algorithm is far different in this sense and the study didn’t use any advance or modify/improve any existing algorithm.

– It is clearly mentioned in the manuscript (Page 5 Para 4) that unsupervised classification (K-means) was performed on infrared and water vapor imagery and classes were formed with the variation in brightness values of the image.

C1

– The images used are in 3-dimensional domain and as we move towards higher latitudes and east west extremities of the image the scale distorted enormously. However the selected study area has minute variation in the scale that was managed by the manual scale. The manual scale (dividing 10 degree interval into equal and smaller intervals) was incorporated in between each 10 degree interval of the existing scale in the Meteosat-7 satellite imagery.

– Rainfall data from the TRMM product 3B42 version 7 with spatial resolution 0.25degree is used. Whereas, the TRMM (3B42 version 7) data was used for 1.5 years and the trend of peak rainfall value was analyzed.

Regarding Results

– The result and discussion section is united in a single heading therefore the results are presented simultaneously with discussion. Section 3.1 (line 2-7) presenting the actual results. However, Fig 3 was portray as to show the geographical position of the results in global prospective.

Regarding Last Section:

– The conclusion section concluded the research as well as the psyche of frontogenesis not actually the results. However, acknowledged.

Some Other Points:

– As to analyze the direct impacts the authors work on the scenario and correlation of fronts and weather event in Pakistan (flood 2010).

– The information was mentioned as to describe the extent of study area.

– The dynamicity in the extent of frontogenesis is mentioned in 3.2 section, however the related fig 3 presents the results. The legends of the figure shows the seasonal extents of these phenomena.

C2

