Reviewer#2.

In this investigation, the author attempts to correlate ULF geomagnetic anomalies to 63 seismic activities occurred within 250 km from the observatory site during 2019 to 2020. To identify geomagnetic anomalies associated with lithospheric processes, three approaches have been utilized: diurnal ratio, polarization ratio I S_Z/S_H and II S_Z/S_G. The results have presented that geomagnetic anomalies appear before the large percent of earthquakes.

However, there are still some major or minor unclear issues:

Comment 1. There are some grammar or expression mistakes but it is not easy to point them out because there is no line number in the manuscript.

Answer 1. We have thoroughly checked and revised sentences and corrected grammar mistakes in the manuscript according to suggestions of reviewer.

Comment 2. In Figure 1, there are some earthquakes and related numbers added together and it is no easy to figure out and the resolution is also not enough, including Figure 3.

Answer 2. A swarm of earthquakes (numbered from 1 to 45) occurs at the beginning of the study period. These earthquakes are concentrated in a very small area and representative circles overlap each other. Thus it is difficult to resolve the earthquakes and their numbers separately. The resolution of the original figure was good and its size was 23672 kb. We are again uploading the high resolution figures of 1 and 3 in supplementary section for your kind review. An enlarged view of the earthquake cluster area is additionally shown here Figure S.
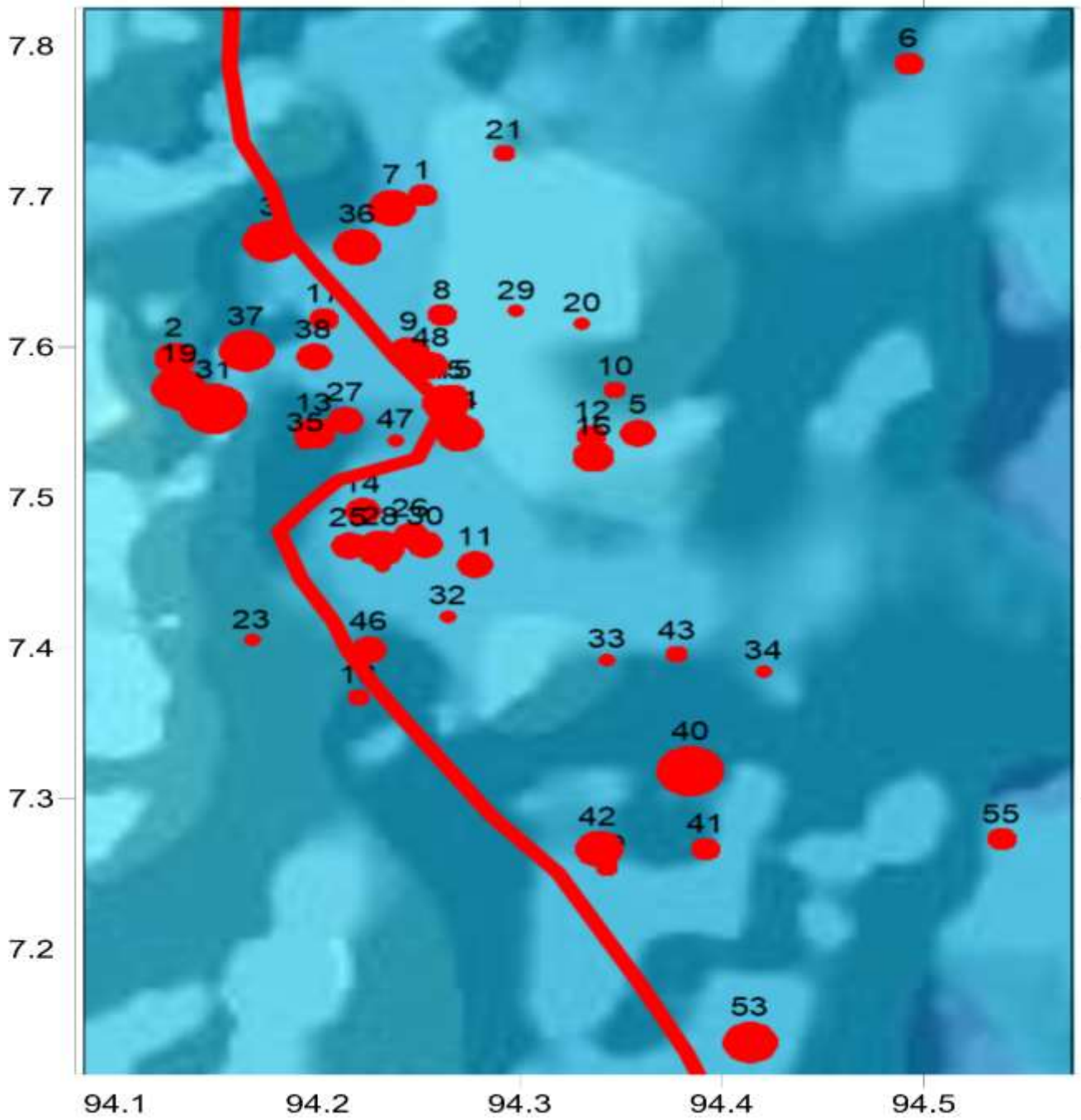
Figure S. Enlarge view of earthquake event clustered region shown in rectangle of figure 1.
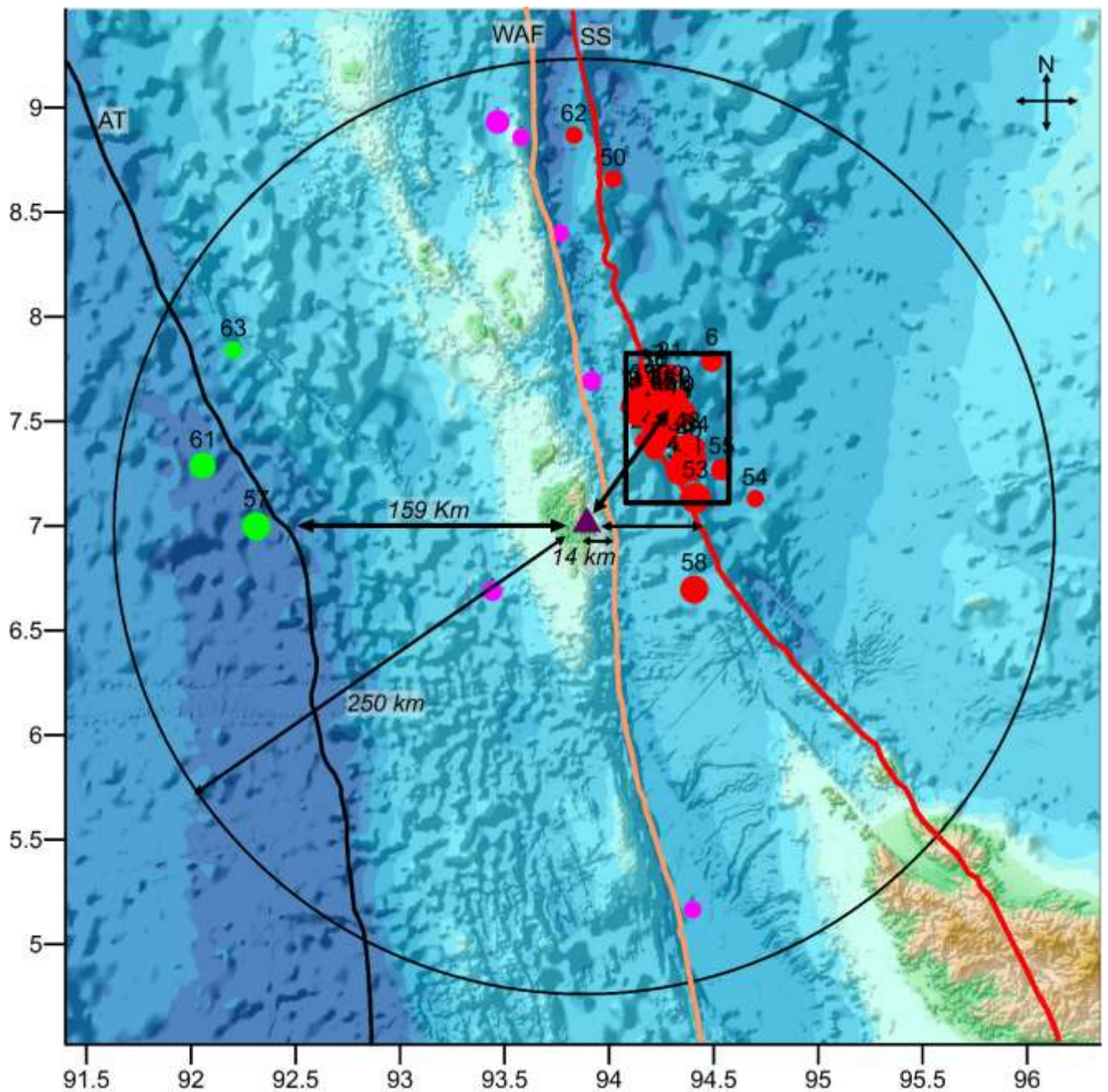
Figure 1. Bathymetry map of Andaman-Nicobar subduction zone (modified after Cochran et al., 2010; E. Anusha et al., 2020). The faults are AT (the Andaman Trench of the); SS (the Seulimeum strand); WAF (the West Andaman Fault) of Sumatran Fault System. The green, pink, and red circles are the earthquakes are associated with AT, WAF, and SS faults respectively. the location of Campbell Bay geomagnetic station shown by triangle.
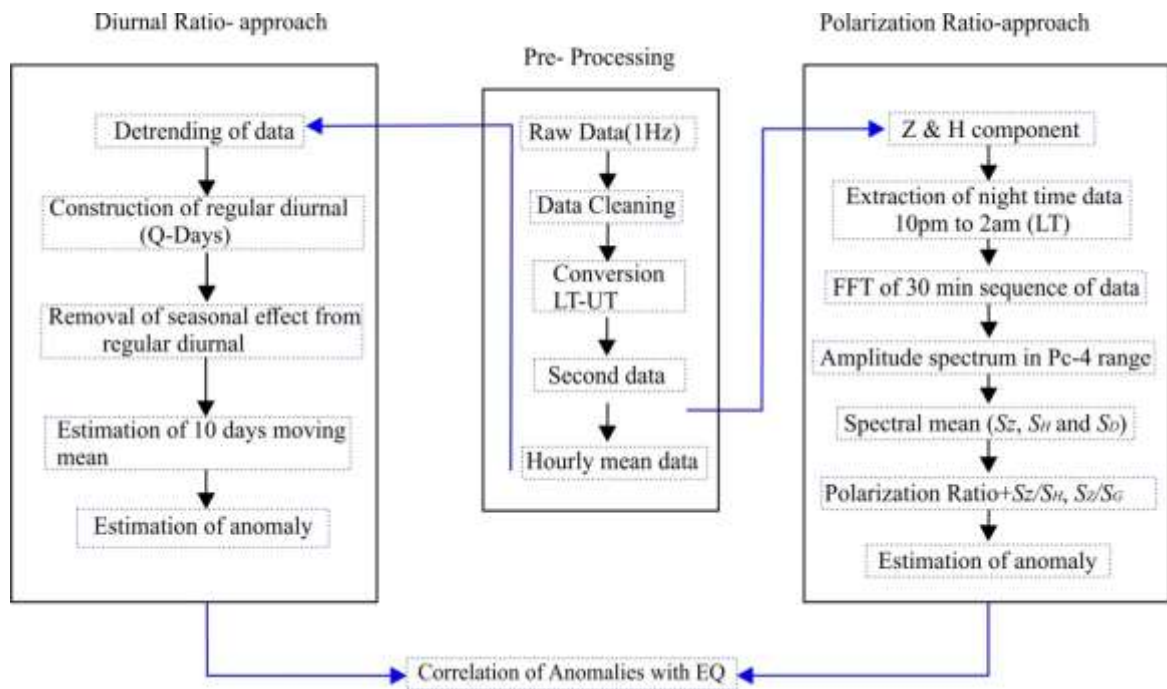
Figure 3. Schematics of work flow of diurnal ratio and polarization approach in the anomaly detection of EM signature in ULF range.

Comment 3. It is maybe better for Table 1 acting as an appendix?

Answer 3. We have analysed our results in the Result and Discussion sections with reference to earthquakes by its number only, which is mentioned in Table 1. Thus we believe that Table 1 should be included in the manuscript.

Comment 4. We find no more useful information in Figure 2, or it can be compared with that of raw data.

Answer 4. The purpose of including the figure 2 is to demonstrate the quality of data and data gaps. Figure 2 shows clearly the quality of data and its availability is enough good for further processing to meet our objectives. The raw data will again show same information and its comparison with present data (shown in figure 2) will not give any additional information. Thus, we believe that inclusion of figure 2 in the present form is appropriate.