

## Answer to Referee#1

We would like to thank Referee#1 for the very fruitful comments and suggestions. In the following we include our answers point-by-point.

The new texts are in green and replace the old ones marked as strikethrough in red.

Referee Comment: 'The VLF technique itself is not new, but it is a new aspect to use it for monitoring GW activity.'

*This comment was considered in Page10, lines 3-5*

Minor revisions:

1. Page 2, line 14, higher than: longer than?

*All the abstract was rewritten face the revisions done in the manuscript, now considering the GWs daytime occurrences and also the inclusion of waves with periods below 5 min (AGWs).*

2. Page 4, Line 21-22: The authors mention that simultaneous measurement of VLF over NAA-EACF and NPM-EACF gives opportunity to identify propagation direction of GW. However they did not use it in this work. Why ?

*This mention in the text was moved to conclusions because is another interesting information possible to be obtained but not considered in this work. It deserves more attention to identify clearly the waves we want to follow since in the VLF signal we observe various waves simultaneously. See Pag 14, lines 17-19 in the commented version.*

3. Page 6, Figure 2: I think it is better to show only the lower panel (geographically coordinated images), with the latitude and longitude scales, so that readers can understand in the horizontal coverage of the images.

*Figure 2 was changed accordingly.*

4. Page 10, Figure 6, the authors presented GW occurrence rate using only nighttime VLF amplitude oscillation. They did not mention about how was the occurrence during the day time. Discussion of the data including the daytime occurrence would be worth.

*Following the referee suggestion, the statistical analysis now also includes the wave occurrences during daytime hours. The text was rewritten including now the wave occurrences separately in night and daytime, and also considering waves with periods below 5 min, which are associated with the acoustic waves. See in the commented version page 2, lines 26-30. Page 3, lines 8-9 and lines 37-39. Page 10, lines 14-16 and 36-38. Page 11, lines 2-7 and from 21-39. Page 12, lines 20-26. Page 13, lines 7-16, and all Summary.*

5. Page 11, line 23-25: The simultaneous analysis of VLF<sub>,,,</sub>: The authors did not show any analysis in the manuscript.

*Already commented above. See Page 14, lines 17-19 in the commented version.*