Line 84: They state that there are dating but there is no reference and no dates are shown in the figure 1. Actually, the figure 1 is pretty poor. There is no geological, structural and ages of the soils.

Geology, structure and age of soils are available in Figure 2.

Line 95: how many are the "all samples"? it seems that the MS resolution is much higher that the environmental magnetism parameters resolution. Why? It seems that there are only 15 samples of environmental magnetism... this is very low sampling resolution for an section of 24 meters,

For this study, we had 237 samples, and the magnetic sustainability of all samples was measured, and a smaller number of samples were selected based on the fluctuation points for other parameters. The reason for choosing the samples was the high cost of testing.

Line 101: in which equipment have been measured the SIRM?

It was done by magnetic field inducing device and JR-6A device from 10 mt to 2 t. By doing this, in fact, the isothermal residual magnet was brought to the saturation state or SIRM, which was later calculated by the obtained numbers.

Line 119: Name NRM and why this is not described in the methods? Is it demagnetization? AF of Thermal?

Natural Remnant Magnetization, yes.

Line 133: What are Bw, Bt, Btk that have not been presented in the methods?

Bw, Bt, Btk are geological layers, not study methods.

Line 140: specify the steps of the NRM demagnetization.

To measure the magnetic resonance, after creating a file to store the measured information, in the computer memory connected to the device, put the samples in the order of naming and each time after entering the names of the samples, Their NRM was measured. When measuring the NRM of the samples, they were placed along the three axes of xz, yz and xy and their NRM was measured along these three axes each time and then from the sum of the measured numbers ¬, in these three directions the total NRM was calculated and obtained.

Lien 142: what are BW and BWK?

They are geological layers.

Line 148: Deterrent? What do you mean? They speak of goethite, maghemite, hematite increase, but this should be in the discussions and it is not clear which are the base to affirm this.

Based on the obtained results, the measured samples were megamite type.

Figure 2: Environmental magnetic parameters missing units. Numbers are illegible. The lithological description and legend are unreadable. Overall quality of the figure is very bad. Actually, all figures are very poor and immature.

In the new edition, high resolution images were replaced in the article.

Line 156: who measured those geochemistry parameters? Which reference? If they did it which equipment and method? How many samples?

To study the geochemistry of the sample, 70 samples were selected based on magnetic receptivity, and each of the samples was sieved with a spring number of 325 and dried in an oven. After the samples are dried, they are sieved with Cheshme 400 sieve and their very soft sediments are packed and labeled as the tested material in special containers. The main and minor elements were analyzed by the geochemical laboratory located in the Geological and Mineral Exploration Organization of Iran with the ICP device in the laboratory.

Line 227: typo of loees for loess

#### Was corrected

Line 252: I do not understand how magnetic intensity is related to glacial-interglacial. The phrase is badly written and the concept is very immature.

#### Was corrected

Line 227: typo of loees for loess

### Was corrected

Line 235: I cannot see the brown layers in the figure 3

# This item in the figure 2 Was shown

Line 252: I do not understand how magnetic intensity is related to glacial-interglacial. The phrase is badly written and the concept is very immature.

## Was corrected

Line 265: typo - .last years's ka???

Was corrected