

Point-by-point response to the reviews

We are grateful to the reviewers for their valuable comments. We have revised our manuscript accordingly. We also thank the topical editor for dealing with our manuscript.

In the manuscript with the changes indicated, all the changes made in response to Reviewer 1 and Reviewer 2 are marked in red and blue, respectively.

Answers to Referee 1

Referee 1:

A very thorough piece of work which improves confidence in 19th century magnetic field data from Prague observatory. A small number of minor changes are in the attached marked up PDF.

Our answer:

The authors thank Dr. Susan Macmillan for her valuable comments. We will adopt all her suggestions in our new manuscript. As for the reference (Glassmeier 2007), it is included in the text in lines 23 and 24; it is divided between two lines there.

Detailed responses to comments provided in hgss-2022-13-RC1-supplement:
(Line numbers given in our answers refer to those in hgss-2022-13-RC1-supplement.)

Line 3: *horizontal intensity of*

Answer: "the horizontal intensity of" added

Line 8: *remove "the"*

Answer: Done.

Line 11: *"got completely" --> "went"*

Answer: Done.

Line 14: *remove "already"*

Answer: Done.

Line 132: *horizontal intensity of*

Answer: "the horizontal intensity of the geomagnetic" added

Line 200: *be consistent - use decimal point instead of comma*

Answer: corrected to decimal point

Line 202: *ditto*

Answer: corrected to decimal point

Line 302: *change position of "also"*

Answer: The word "also" has been moved to the indicated position in the sentence.

Line 328: *correct "1950.0" to "1850.0"*

Answer: Done.

Line 361: *reference missing?*

Answer: The reference (Glassmeier 2007) is included in the text in lines 23 and 24.

Answers to Referee 2

Referee 2:

The manuscript is very interesting because it offers a historical review of the earliest magnetic observations routinely performed in Prague since mid 1800. Many of the initial procedures later led to the practices used today in modern geomagnetic observatories. It is important to recover the history that tells about the first steps taken in this scientific context.

I suggest a few changes which are included in the pdf files attached.

Our answer:

We would like to thank Dr. Domenico Di Mauro for useful comments and additional information, which we will use in the improved text of the manuscript. We will adopt all the reviewer's comments.

Detailed responses to comments provided in hgss-2022-13-RC2-supplement:

(Line numbers given in our answers refer to those in hgss-2022-13-RC2-supplement.)

Line 22: *at the Brera Astronomical Observatory*

Answer: We added the offered information. Thanks.

Line 289: *please consider to change "distribution" in configuration*

Answer: "distribution" changed to "configuration"

Line 297: *intensity is temperature dependent... --> intensity was temperature dependent for the available instruments at that time [nowadays intensity of the magnetic field is obtained by proton procession magnetometers which are not temperature dependent]*

Answer: Yes, we agree with the Referee. We have edited the sentence according to the reviewer's advice.

Line 301: *Ferro Island, (Canary Islands, Spain)*

Answer: The offered information included. Thanks.

Line 326: *change "coincide well" --> "are consistent" [they cannot coincide since the secular variations change some components of the Earth's magnetic field]*

Answer: Done.

Line 328: *mistyped? 1850.0?*

Answer: We have corrected "1950.0" to "1850.0".

Line 333: *in this contest.*

Answer: The words "in these events" changed to "in this contest".

Line 338: *of*

Answer: "from" 3-4 September 1839 corrected to "of" 3-4 September 1839

Line 338: *The tracking of such old events represents unique...*

Answer: We have used the proposed wording of the sentence. Thanks.

Line 339: *topic*

Answer: The word "area" changed to "topic".