Earth Syst. Sci. Data Discuss., https://doi.org/10.5194/essd-2020-270-RC1, 2020 © Author(s) 2020. This work is distributed under the Creative Commons Attribution 4.0 License.



## Interactive comment on "Historical K index data collection of Soviet magnetic observatories, 1957–1992" by Natalia Sergeyeva et al.

## **Anonymous Referee #1**

Received and published: 22 October 2020

The manuscript 'Historical K index data collection of Soviet magnetic observatories, 1957–1992' by Natalia Sergeyeva and others, submitted to ESSD, https://doi.org/10.5194/essd-2020-270, describes the geomagnetic K indices collected at a large number of geomagnetic observatories in the second half of the 20th century. This data set is scientifically valuable and its publication is laudable. It is a relevant subject for ESSD. The description of the data set, which I review here, is well written and I have only minor comments to the authors.

## Comment to Editor:

line 185 to 189 I do not know enough about DataCite so I am not sure if it is relevant here. This point should be covered by you or another reviewer

C<sub>1</sub>

## Comments to authors:

line 11: eight Solar cycles -> eight solar cycles?

line 23: K should be italics

line 48: Please explain the term Severny Polus (or Severnyy Polyus)? Also, I am not sure if the term 'romanized' is well known by many readers. How about 'transcribed into the Latin alphabet'?

line 71: extraterrestrial -> solar wind and magnetosphere-ionosphere interaction?

line 98: relative to -> minus?

line 118 to 122: I am not aware of the significance of the geomagnetic disturbance of April 16, 1938. Can you give references for this information?

line 122 to 123: Can you give a reference for this classification of events?

line 144: definitions -> determinations?

line 193: Data is stored not in Excel but in ASCII-Text-files?

Figure 3 caption: Please mention in the figure caption the quiet curve shown in panel (c)

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