

Thesis Changes Log

Name of Candidate: Svetlana Illarionova

PhD Program: Computational and Data Science and Engineering

Title of Thesis: Deep Learning for Remote Sensing of Environment and Land Cover Analysis

Supervisor: Prof. Ivan Oseledets

The thesis document includes the following changes in answer to the external review process.

I am grateful to the Defense Jury members for their reviews and comments that helped me to adjust the Thesis.

- I added additional details on satellite data used in the experiments: bands properties and preprocessing tools used for atmospheric correction;
- 2. PSNR values for NIR generation experiments are added to make results clearer;
- 3. Standard deviation values are added to the Chapters where they were not listed. In the major studies, it is added to the tables, while in some Chapters standard deviation assessment is discussed in the main text to show the significance of the achieved results:
- 4. Discussion about uncertainty in data is added to the second Chapter with the Literature review («Data and labeling limitations»), as it is a crucial point in forestry studies and has the same significance through the all Thesis;
- 5. Discussion about generalizability is added to the conclusion Chapter, as it shows opportunities for the future work in the related computer vision fields;
- 6. Figures and tables have been adjusted for better visibility;
- 7. To improve transitions between Chapters and to show links between them, additional notes have been added in the end of introduction section in each Chapter;
- 8. Some typos have been corrected both in the main body of the Thesis and in the references:
- 9. Formulas have been integrated in the text.