Anatoly **Tsyplenkov**

Junior Research Fellow

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Academic Career

Lomonosov Moscow State University — *Faculty of Geography*

Junior Researcher — *Jan. 2020 – …*

Lomonosov Moscow State University — *Faculty of Geography*

Ph.D. in Geographic Sciences — *2015 – 2019*

- Title thesis: Suspended sediment load formation in small mountain river basins: general patterns and regional features (defended: 19 Dec 2019)
- Supervisor: Prof. D.Sc. Valentin Golosov

Lomonosov Moscow State University — *Faculty of Geography*

Specialist in Hydrology (Master equivalent) — *2010-2015*

- Title thesis: Conditions of sediment load formation in small river basins of different mountain regions (defended: 19 May 2015)
- Supervisor: Prof. D.Sc. Valentin Golosov

Main research interests and expertise

- Mountain fluvial geomorphology
- Sediment budget and dynamics
- Soil erosion modeling
- Statistical analyses on heterogeneous datasets and quantifying uncertainties based on Monte Carlo simulation techniques
- Designing and maintaining large databases of measurements on various geomorphic processes
- Quantifying and understanding geomorphic processes at catchment and regional scale
- Designing and conducting fieldwork campaigns (including in Russia (Caucasus, Kamchatka, Chukotka, etc.), Sweden, Italy)

Awards & Distinctions

2022	Continental Erosion Commission of the International Association of Hydrological Sciences (IAHS-ICCE) Early Career Committee Representative 2022-2025	*IAHS*
2021	Winner of the Lomonosov Moscow State University (LMSU) scholarships for young scientists who have achieved significant results in research activities	*LMSU*
2020	Erasmus+ Staff Mobility	*European Commission*
2018	Erasmus+ International Credit Mobility scholarship	*European Commission*

Publication statistics

- Co-author of 40 peer-reviewed articles, book chapters, and proceedings
- Around 30 contributions to conferences (excluding full proceedings)
- Around 100 citations over the past 5 years, current h-index: 5
- Info and an overview: Google Scholar

Other information

- Completed the basic educational programme of postgraduate academic and pedagogical training in Geosciences at *Lomonosov Moscow State University* in 2019 (awarded the qualification of Researcher.Instructor-researcher)

- Additional training at *Bioinformatics Institute* (courses *Introduction to Statistics I, II, III* and *Data Analysis in R*) in 2018-2019
- Teaching experience with various courses at BSc level:
  - Fundamentals of Hydrology (Lomonosov Moscow State University, BSc-level, teaching assistant)
  - GIS in Hydrology (Lomonosov Moscow State University, BSc-level, teaching assistant)
- Co-Supervision of 4 BSc, MSc theses since 2018
- Peer reviewer for various international scientific journals (including Journal of Soils and Sediments; Earth Surface Dynamics; Ecohydrology & Hydrobiology and etc.)
- Co-author and maintainer of the open Russian-English hydrological dictionary hydrowiki.org
- Author and creator of the `loadflux` R-package - a set of tools for comprehensive analysis of the intra-event sediment dynamics
- Hobbies and interests: open source, `R` programming and coding enthusiast, mountain hiker, long-distance runner (best 1:40 for 21.1 km; 4:08 for 42.2 km), mystery stories

Skills

Languages

Skill	Russian	English
Reading	Native	C2
Writing	Native	C2
Listening	Native	C1
Speaking	Native	C1

Common European Framework of Reference for Languages: A1/A2: Basic User. B1/B2: Independent User. C1/C2: Proficient User

Defining attributes

advanced analytic skills, strategic thinking, resourceful team player, public speaking, organizational & communication skills

Tech skills

Coding Languages	Software	Other
R – Julia – MATLAB	QGIS – ArcGIS – SAGA – Inkscape – Blender – Mendeley/Zotero – Agisoft Metashape	Git – Markdown – LaTex – Arduino

Organizing Committee Secretary

Nov 2021	School for Young Scientists «Multi-Scales and -Processes Integrated Modelling, Observations and Assessment for Environmental Applications»	*Online Event*
Aug 2021	International Conference on the Status and Future of the World's Large Rivers	*Moscow, Russia*
Nov 2020	School for Young Scientists «Pollutant and sediment mobility in river systems: monitoring studies to identify human impacts»	*Online Event*
Aug 2018	The Second International Young Scientists Forum on Soil and Water Conservation and ICCE symposium 2018 «Climate Change Impacts on Sediment Dynamics: Measurement, Modeling and Management»	*Moscow, Russia*

Presentations

Aug 2021	Flow regime and bank erosion of the Anadyr River, Chukotka	*WLR, Moscow, Russia*
Apr 2021	How does the suspended sediment yield change in the North Caucasus during the Anthropocene?	*vEGU 2021, online*
Apr 2020	Application of geomorphological mapping and fingerprinting to identify the different suspended sediment sources of the glaciated Djankuat catchment, Caucasus mountains	*vEGU 2020, online*

Jul 2019	Intra-Event Suspended Sediment Dynamics in a Small Glacierized Caucasus Basin	*IUGG, Montreal, Canada*
Aug 2018	Spatio-temporal assessment of soil erosion and sediment yield for a large river basin	*ICCE, Moscow, Russia*
Aug 2018	Drivers of sedimentary fluxes assessment in alpine catchments	*ICCE, Moscow, Russia*
Apr 2017	Testing soil erosion model for large river basins: Lena river	*WLR, New Delhi, India*

Publications (selection)

Pending

1. Tsyplenkov, A., & Chalov, S. (2022). Loadflux: An r package to study intra-event suspended sediment dynamics. *Computers & Geosciences*, Submitted.

Published

1. Belyakova, P., Moreydo, V., Tsyplenkov, A., Amerbaev, A., Grechishnikova, D., Kurochkina, L., Filippov, V., & Makeev, M. (2022). Forecasting water levels in krasnodar krai rivers with the use of machine learning. *Water Resources*, *49*(1), 10–22. https://doi.org/10.1134/S0097807822010043
2. Tsyplenkov, A., Vanmaercke, M., Collins, A. L., Kharchenko, S., & Golosov, V. (2021). Elucidating suspended sediment dynamics in a glacierized catchment after an exceptional erosion event: The Djankuat catchment, Caucasus Mountains, Russia. *CATENA*, *203*, 105285. https://doi.org/10.1016/j.catena.2021.105285
3. Ivanov, M. M., Konoplev, A. V., Walling, D. E., Konstantinov, E. A., Gurinov, A. L., Ivanova, N. N., Kuzmenkova, N. V., Tsyplenkov, A. S., Ivanov, M. A., & Golosov, V. N. (2021). Using reservoir sediment deposits to determine the longer-term fate of chernobyl-derived 137Cs fallout in the fluvial system. *Environmental Pollution*, *274*, 116588. https://doi.org/10.1016/j.envpol.2021.116588
4. Golosov, V., & Tsyplenkov, A. (2021). Factors Controlling Contemporary Suspended Sediment Yield in the Caucasus Region. *Water*, *13*(22), 3173. https://doi.org/10.3390/w13223173
5. Tsyplenkov, A. S., Golosov, V. N., & Belyakova, P. A. (2021). How did the suspended sediment load change in the North Caucasus during the Anthropocene? *Hydrological Processes*, *35*(10), 1–20. https://doi.org/10.1002/hyp.14403
6. Golosov, V. N., Ivanov, M. M., Tsyplenkov, A. S., Ivanov, M. A., Konoplev, A. V., Wakiyama, Y., Konstantinov, E. A., & Ivanova, N. N. (2021). Erosion as a Factor of Transformation of Soil Radioactive Contamination in the Basin of the Shchekino Reservoir (Tula Region). *Eurasian Soil Science*, *54*(2), 291–303. https://doi.org/10.1134/S106422932102006X
7. Tsyplenkov, A., Vanmaercke, M., Golosov, V., & Chalov, S. (2020). Suspended sediment budget and intra-event sediment dynamics of a small glaciated mountainous catchment in the Northern Caucasus. *Journal of Soils and Sediments*. https://doi.org/10.1007/s11368-020-02633-z
8. Chalov, S. R., Tsyplenkov, A. S., Pietron, J., Chalova, A. S., Shkolnyi, D. I., Jarsjo, J., & Maerker, M. (2017). Sediment transport in headwaters of a volcanic catchment Kamchatka Peninsula case study. *Frontiers of Earth Science*, *11*(3), 565–578. https://doi.org/10.1007/s11707-016-0632-x
9. Chalov, S. R., Golosov, V. N., Tsyplenkov, A. S., Theuring, Ph., Zakerinejad, R., Maerker, M., & Samokhin, M. (2017). A toolbox for sediment budget research in small catchments. *GEOGRAPHY, ENVIRONMENT, SUSTAINABILITY*, *10*(4), 43–68. https://doi.org/10.24057/2071-9388-2017-10-4-43-68

References

- **Prof. D.Sc. Valentin Golosov**, Institute of Geography, Russian Academy of Science, gollossov@gmail.com
- **Prof. Dr. Matthias Vanmaercke**, Division of Geography and Tourism, KU Leuven, matthias.vanmaercke@kuleuven.be
- **D.Sc. Sergey Chalov**, Faculty of Geography, Lomonosov Moscow State University, hydroserg@mail.ru