

LEVAN TEILIDZE

Education:

2019 - [PhD student in Glaciology. Antarctic Research Centre, Victoria University of Wellington, New Zealand.](#)

2007-2009 - MSc (Hons) in Geomorphology-Geo-ecology and Cartography-Geoinformatics. Ivane Javakhishvili Tbilisi State University.

2003-2007 - BSc in Geomorphology-Geo-ecology and Cartography-Geoinformatics. Ivane Javakhishvili Tbilisi State University.

Visiting stay:

2019 (15-30 Nov) - [School of Earth, Atmosphere, and Environment Sciences. Monash University.](#) Australia.

2018 (10-25 Nov) - [World Glacier Monitoring Service.](#) Switzerland.

2017 (1 Mar-1 Sep) - [Faculty of Natural Resources and Environmental Studies. University of Northern British Columbia.](#) Canada.

2015-2016 (1 Nov-1 Mar) - [Faculty of Natural Resources and Environmental Studies. University of Northern British Columbia.](#) Canada.

2015 (15 Jan-15 Jun) - [Climate Change Institute. University of Maine.](#) USA.

2014 (15 Apr-15 Jun) - [Climate Change Institute. University of Maine.](#) USA.

Membership in professional organizations:

-[National Correspondent of the World Glacier Monitoring Service for Georgia \(Caucasus\).](#)

-[National Correspondent of the International Association of Cryospheric Sciences for Georgia \(Caucasus\).](#)

-[Global Land Ice Measurements from Space \(GLIMS\) Regional Center 38 \(Caucasus\) correspondent.](#)

-[National Representative of the Permafrost Young Researchers Network for Georgia \(Caucasus\).](#)

-[Member of the Commission on Mountain Cartography \(International cartographic Association\).](#)

-[Member of the Council of Young Scientists, Georgian National Academy of Sciences.](#)

Work Experience:

2018-2020 - Senior Research-Scientist. Department of Geomorphology-Geo-ecology. Institute of Geography, Tbilisi State University.

2018-2019 - Lecturer in Glaciology. Faculty of Natural Sciences and Engineering at Ilia State University.

2009-2017 - Researcher-Scientist. Department of Geomorphology-Geo-ecology. Institute of Geography, Tbilisi State University.

2012-2013 - Lecturer in Glacier dynamics. Faculty of Exact and Natural Sciences at Tbilisi State University.

2006-2009 - Laboratory assistant. Department of Geomorphology-Geo-ecology and Cartography-Geoinformatics. Institute of Geography.

Publications:

2021

1. [Glacial geomorphology of the Ahuriri River valley, central Southern Alps, New Zealand. Journal of Maps. doi.org/10.1080/17445647.2021.1876777.](https://doi.org/10.1080/17445647.2021.1876777)
2. [Topsoil organic matter build-up in glacier forelands around the world. Global Change Biology. 2021;00:1–16. doi.org/10.1111/gcb.15496.](https://doi.org/10.1111/gcb.15496)

2020

3. [Supra-glacial debris cover changes in the Greater Caucasus from 1986 to 2014. The Cryosphere, 14, 585-598, doi.org/10.5194/tc-14-585-2020, 2020.](https://doi.org/10.5194/tc-14-585-2020)
4. [A 54-year record of changes at Chalaati and Zopkhito glaciers, Georgian Caucasus, observed from archival maps, satellite imagery, drone survey and ground-based investigation. Hungarian Geographical Bulletin, 69\(2\), 175-189. doi.org/10.15201/hungeobull.69.2.6.](https://doi.org/10.15201/hungeobull.69.2.6)
5. [Change of Chalaati Glacier \(Georgian Caucasus\) since the Little Ice Age based on dendrochronological and Beryllium-10 data. Led i Sneg. Ice and Snow. 60 \(3\): 453-470. doi.org/10.31857/S2076673420030052.](https://doi.org/10.31857/S2076673420030052)

2019

6. [Glacier monitoring tracks progress in limiting climate change. Nature 576: 39. doi:10.1038/d41586-019-03700-3.](https://doi.org/10.1038/d41586-019-03700-3)
7. [The Devdoraki Glacier Catastrophes, Georgian Caucasus. Hungarian Geographical Bulletin 68\(1\), 21-35. doi.org/10.15201/hungeobull.68.1.2.](https://doi.org/10.15201/hungeobull.68.1.2)

2018

8. [The Greater Caucasus Glacier Inventory \(Russia, Georgia and Azerbaijan\), The Cryosphere, doi.org/10.5194/tc-12-81-2018, 2018.](https://doi.org/10.5194/tc-12-81-2018)

2017

9. [Supraglacial debris cover assessment in the Caucasus Mountains, 1986-2000-2014, Earth System Science Data Discuss., doi.org/10.5194/essd-2017-96, 2017.](https://doi.org/10.5194/essd-2017-96)
10. [Late Pleistocene and Holocene Glacier Extent in the Georgian Caucasus, Open Journal of Geology, doi:10.4236/ojg.2017.74036, 2017.](https://doi.org/10.4236/ojg.2017.74036)
11. [The Geographic Reference Atlas of Georgia: Basic Principles, Earth Sciences, Vol. 6, Issue 5-1, pp: 56-61. doi: 10.11648/j.earth.s.2017060501.18, 2017.](https://doi.org/10.11648/j.earth.s.2017060501.18)

2016

12. [Glacier change over the last century, Caucasus Mountains, Georgia, observed from old topographical maps, Landsat and ASTER satellite imagery, The Cryosphere, 10, 713-725, doi: 10.5194 / tc-10-713-2016, 2016.](#)

13. [First geophysical and shallow ice core investigation of the Kazbek plateau glacier, Caucasus Mountains. Environ Earth Sciences \(2016\) 75:1488. DOI 10.1007/s12665-016-6295-9.](#)

2015

14. [Glaciers Reduction and Climate Change Impact over the Last One Century in the Mulkhura River Basin, Caucasus Mountains, Georgia. 2015. International Journal of Geosciences, Vol. 6, No. 5, p. 465-472.](#)

15. [Glaciers Retreat and Climate Change Effect During the Last One Century in the Mestiachala River Basin, Caucasus Mountains, Georgia. 2015. Earth Sciences, Vol. 4, No. 2, p. 72-79.](#)

16. [Glaciers Fluctuation over the Last Half Century in the Headwaters of the Enguri River, Caucasus Mountains, Georgia. 2015. International Journal of Geosciences, Vol. 6, No. 4, p. 393-401.](#)

17. [Superficial moraine expansion on the Djankuat Glacier snout over the direct glaciological monitoring period. 2015. Earth Cryosphere, Vol. XIX, No. 1, p. 89-98.](#)

18. [A One Century Record of Changes at Nenskra and Nakra River Basins Glaciers, Caucasus Mountains, Georgia. 2015. Natural Science, Vol. 7, No. 3, p. 151-157.](#)

19. [Glaciers Dynamics Over the Last One Century in the Kodori River Basin, Caucasus Mountains, Georgia, Abkhazeti. 2015. American Journal of Environmental Protection. Special Issue: Applied Ecology, Problems, Innovations, Vol. 4, No. 3-1, p. 22-28.](#)

20. [Glaciers Amount and Extent Change in the Dolra River Basin in 1911-1960-2014 years, Caucasus Mountains, Georgia, Observed with Old Topographical Maps and Landsat Satellite Imagery. 2015. American Journal of Climate Change. Vol. 4, No. 3, p. 217-225.](#)

21. Climate Change Impact on the Chalaati Glacier in the Last Half Century. 2015.

"Collected Papers" of International conference - Contemporary Issues of Geography and Anthropology. Tbilisi, TSU Publishing. pp. 246-251.

22. Abkhazeti Glaciers Amount and Extent Change During The Last One Century. 2015.

"Collected Papers" of International conference - Contemporary Issues of Geography and Anthropology. Tbilisi, TSU Publishing. pp. 252-258.

2013

23. [Climate Change of Coastal Zone of the Black Sea on the Background of Global Warming \(within the territory of Georgia\). 2013, The 2nd International Symposium on Kaz Mountains \(Mount Ida\) and Edremit. Human - Environment Interactions and Ecology of Mountain Ecosystems. PROCEEDINGS & ABSTRACTS. pp. 124-131.](#)

2012

24. Glacial-Geomorphological research of the glaciers of the Tergi river basin and glaciations evolution in Pleistocene, 2013. TSU V. Bagrationi Institute of Geography. Collected papers. New series, #5(84). pp. 44-47.

25. Glacio-Geomorphological research of the Mestiachala River basin Glaciers, 2012. TSU V. Bagrationi Institute of Geography. Collected papers. New series, #4(83). pp. 64-71.
26. Issues of understanding and use of environmental-tourism resources (Glaciers of riv. Enguri), 2012, Gori State University, 5th International Conference Collected papers, Universali, pp. 126-131.

2011

27. Glaciological studies in the Zopkhito glacier (Central Caucasus). 2011. Ivane Javakhishvili Tbilisi State University, Vakhushti Bagrationi Institute of Geography, Collected Papers, New Series 3 (82). Publishing house of Tbilisi State University. pp. 172-179.
28. [Late Pleistocene \(Wurm\) Glaciations of the Caucasus. 2011, Quaternary glaciations-extend and chronology. Developments in Quaternary Science, Amsterdam, the Netherlands. pp. 141-147.](#)
29. Relief and Geodynamic Processes of High Mountainous Region of Caucasus (Stepantsminda region). 2011. Ivane Javakhishvili Tbilisi State University, Vakhushti Bagrationi Institute of Geography, Collected Papers, New Series 3 (82). Publishing House of Tbilisi State University. pp. 154-159.

2008

30. Mudflows role in the Rioni River inundations. 2008. Vakhushti Bagrationi Institute of Geography, "Collected Papers", Tbilisi. Publishing House "Universali". pp. 19-27.
31. Glaciological researches in the Zopkhitura River basin. 2008. Vakhushti Bagrationi Institute of Geography, Collected Papers, Tbilisi. Publishing House "Universali". pp. 490-495.

Monographs and Atlases:**2018**

1. [Geographical Atlas of Georgia](#). 2018. Publ. House "Palitra L". 183 pp. Tbilisi, (Editor), (in Georgian).

2017

2. [Glaciers of Georgia](#). 2017. Springer, Geography of the Physical Environment. Springer, Cham.

2016

3. Modern and old glaciers of Georgia. 2016. 216 pp. Publ. House "Samshoblo", Tbilisi.
4. Glaciers catalog of Georgia. 2016. 116 pp. Publ. House "Samshoblo", Tbilisi, (bilingual - Georgian/English).

2014

5. Glaciers of Georgia. 2014. 254 p. publishing house "Color", Tbilisi (in Georgian).
6. [Tbilisi Atlas-Guide](#). 2014. 68 pp. publishing house "Cartography", Tbilisi (in Russian).

2013

7. Tbilisi Atlas-Guide. 2013. 105 pp. publishing house "Cartography", Tbilisi (in Georgian).

2012

8. [Monitoring of glaciers on the background of climate change](#). 2012. 176 pp. publishing house "Universali", Tbilisi (in Georgian).

Maps:

1. [Glacial geomorphology of the Ahuriri River valley, central Southern Alps, New Zealand](#). [Journal of Maps](#). doi.org/10.1080/17445647.2021.1876777.
2. [Geomorphology](#). National Atlas of Georgia. pp. 28-29. Franz Steiner Verlag. Stuttgart, Germany. 2018.
3. [Glaciers](#). National Atlas of Georgia. pp. 68-69. Franz Steiner Verlag. Stuttgart, Germany. 2018.
4. [Modern and Late Pleistocene Glaciers](#). National Atlas of Georgia. pp. 70. Franz Steiner Verlag. Stuttgart, Germany. 2018.
5. [Glacier Change in the Enguri River Basin](#). National Atlas of Georgia. pp. 71. Franz Steiner Verlag. Stuttgart, Germany. 2018.
6. [Glacial Landscape](#). Geographical Atlas of Georgia. pp. 44-45. Hause "Palitra L". Tbilisi, 2018 (in Georgian).
7. [Mountaineering](#). Geographical Atlas of Georgia. pp. 156-157. Hause "Palitra L". Tbilisi, 2018 (in Georgian).
8. Oro-Hydrographical map of Georgia, scale 1 : 500 000, Publishing house "Cartography". Tbilisi, 2014 (in Georgian).
9. Map of Modern and Wurm Glaciers of Tergi River Basin, scale 1 : 100 000. Publishing house "Bene". Tbilisi, 2014.
10. [Political administrative map of Georgia](#), 1 : 500 000, 1 : 600 000. Publishing house "Cartography". Tbilisi, 2013 (in Georgian).
11. [Physical map of Georgia](#), scale 1 : 500 000. Publishing house "Cartography". Tbilisi, 2013 (in Georgian).
12. Physical map of Georgia, scale 1 : 600 000. Publishing house "Cartography". Tbilisi, 2012 (in Georgian).
13. [Orography](#). National Atlas of Georgia. Publishing house "Cartography". p. 41-43. Tbilisi, 2012 (in Georgian).
14. [Slope exposition](#). National Atlas of Georgia. Publishing house "Cartography". p. 44. Tbilisi, 2012 (in Georgian).
15. [Modern and Late Pleistocene \(Wurmian\) Glaciers](#). National Atlas of Georgia. Publishing house "Cartography". p. 91. Tbilisi, 2012 (in Georgian).
16. [Natural monuments](#). National Atlas of Georgia. Publishing house "Cartography". p. 123. Tbilisi, 2012 (in Georgian).

Research Grants:

2020-2024 - Déglaçiation dans le Grand Caucase (DeGlaC) - (International project between France, Russia, and Georgia). Partner from Georgian side.

2019-2022 - Classification of Karst Landscape of Georgia. ([SRNSFG](#)). Coordinator.

- 2018-2021 - Did a previous collapse of the Antarctic Ice Sheet cause abrupt climate change in the Southern Hemisphere? (New Zealand Marsden Fund). PhD student.
- 2019-2020 - [Impact du changement climatique sur les glaciers et les risques associés dans le Caucase géorgien](#) (International project between Romania, Georgia, and Canada). Participant from Georgian side.
- 2017-2019 - [Caucasus Glacier Monitoring Network \(SRNSFG\)](#). Principal investigator.
- 2016-2017 - [The Greater Caucasus Glacier Inventory \(SRNSFG\)](#). Principal investigator.
- 2015-2016 - Development of Glaciological research in Georgia. (International Educational Center of Georgia). Principal investigator.
- 2014-2016 - [Glaciological Catalog of Georgia. \(SRNSFG\)](#). Manager.
- 2014-2015 - [Development of Glaciological Researches of Georgia using Remote Sensing Method. \(SRNSFG\)](#). Principal investigator.
- 2013-2014 - [Glacio-Geomorphological Study of the Glaciers of Georgia on the Background of Modern Climate Change. \(SRNSFG\)](#). Principal investigator.
- 2013 - UNDP-Government of Georgia project "Georgia's Third National Communication" to the UNFCCC. UNUTED NATIONS DEVELOPMENT PROGRAMME IN GEORGIA. Expert in Assessment of Glaciers Mass-Balance.
- 2012-2013 - [Study of the Glaciers of the Tergi River Basin on the Background of Modern Climate Change, Paleo-Glaciological and Paleo-Geomorphological Reconstructions of the Late Pleistocene and Holocene. \(SRNSFG\)](#). Principal investigator.
- 2009-2012 - [Monitoring of Zopkhito Glacier mass balance on the background of climate change. \(SRNSFG\)](#). Manager.
- 2007-2009 - [Glaciers dynamics in the Caucasus, the climate change and modeling of river runoff \(INTAS\). Assistant.](#)
- 2006-2009 - The National Atlas of Georgia ([SRNSFG](#)). Assistant.

Participation in conferences:

2020

- 22-25 November - [Geoscience Society of New Zealand Annual Conference](#). University of Canterbury. Christchurch. Glacial geomorphology of the Ahuriri River valley, central Southern Alps, New Zealand.
- 11-13 November - [Virtual Nordic Branch Meeting 2020](#). Copenhagen, Denmark. IGS. Reconstruction of Late Quaternary glaciation in the Ahuriri River valley, New Zealand, based on geomorphological mapping and cosmogenic ¹⁰Be data.
- 6-7 November - [18th Swiss Geoscience Meeting](#). Zurich, Switzerland. Evolution of the Ahuriri Glacier during the Last Glacial Maximum, Southern Alps, New Zealand.
- 6-7 November - [18th Swiss Geoscience Meeting](#). Zurich, Switzerland. The history of glacier study of the Greater Caucasus and current state of observation.
- 21-22 September - [Students in Polar and Alpine Research Conference \(SPARC 2020\)](#). Brno, Czech Republic. The Ahuriri Glacier during the Last Glacial Maximum, Southern Alps, New Zealand.

21-22 September - [Students in Polar and Alpine Research Conference](#) (SPARC 2020).

Brno, Czech Republic. The current state of the glaciers in the Caucasus Mountains.

1 July 2020 - [Trans-Tasman Quaternary Science e-conference](#). Glacial History of the Ahuriri Valley, Southern Alps, New Zealand.

5 May 2020 - [EGU general assembly](#). Austria, Vienna. Soil organic matter build-up during soil formation in glacier forefields around the world.

8 May 2020 - [EGU general assembly](#). Austria, Vienna. Tree-ring dating of colonized moraine surfaces in deglaciated areas of Greater Caucasus Mountains

3-5 Feb 2020 - [New Zealand Snow and Ice Research Group \(SIRG\) annual meeting 2020](#).

Wellington, New Zealand. Comparison of Late Quaternary glacier extent from the Southern Alps and Greater Caucasus.

2019

10-14 Sep 2019 - [World Glacier Monitoring Service General Assembly](#). Almaty, Kazakhstan. Current state, progress, and challenges of glacier monitoring in Georgia.

30 Nov - 1 Dec 2019 - [Second Caucasus Mountain Forum](#). Ankara, Turkey. Change in glacier area and number in Georgia from repeat inventories.

2018

02-04 Nov 2018 - [International Conference Smart Geography](#). Sofia, Bulgaria. Present Glaciers and Their Dynamics in the Caucasus Mountains.

01-05 Oct 2018 - [5th International Conference Debris Flows: disasters, risk, forecast, protection](#). Tbilisi, Georgia. Rock-Ice Flows History onto Devdoraki Glacier, Georgian Caucasus.

2016

25-29 May 2016 - [XVI Glaciological Symposium](#). St. Petersburg, Russia. Georgian Caucasus Glacier Inventory. Arctic and Antarctic Research Institute.

25-29 May 2016 - [XVI Glaciological Symposium](#). St. Petersburg, Russia. Evaluating the suitability of Mt. Kazbek for deep ice core drilling. Arctic and Antarctic Research Institute.

2015

17 Apr 2015 - [New England Glaciology Meeting](#). Glaciers Amount and Extent Change over the Last Century, Caucasus Mountains, Georgia. Woods Hole Oceanographic Institution. Woods Hole, Massachusetts, USA.

10 Apr 2015 - [Harold W Borns Symposium](#). Glacier Change over the Last Century, Caucasus Mountains, Georgia. The University of Maine. Orono, Maine, USA.

23 Oct 2015 - [International conference - Contemporary Issues of Geography and Anthropology](#). Climate Change Impact on the Chalaati Glacier during the Last Half Century. Tbilisi State University.

23 Oct 2015 - [International conference - Contemporary Issues of Geography and Anthropology](#). Abkhazeti Glaciers Amount and Extent Change During the Last One Century. Tbilisi State University.

7 May 2015 - [International Conference - Applied Ecology: Problems, News](#). Dynamic of glaciers in Kodori River basin (Abkhazeti, Georgia) in 1911-2014. Tbilisi State University.

2014

28 Nov 2014 - [International conference - education, economy and sustainable development](#). Global climate change and Georgia. City of Gori - Gori State University.

28 Nov 2014 - [International conference - education, economy and sustainable development](#). Chalaati Glacier dynamics in the years 1960-2013. City of Gori - Gori State University.

31 Jan 2014 - [Second Scientific Conference in Exact and Natural Sciences](#). Evolution of glaciers on the northern slopes of the Caucasus at the end of the XX century. Tbilisi State University.

31 Jan 2014 - [Second Scientific Conference in Exact and Natural Sciences](#). Djankuat Glacier (North Caucasus) mass balance with climatic elements conjunction. Tbilisi State University.

2013

7-9 Nov 13 - International scientific conference - Modern problems of geography. Glacial-Geomorphological research of the glaciers of the Tergi River basin and glaciations evolution in Pleistocene. Georgian National Academy of Sciences.

4-11 Jul 13 - [The First Student Conference in Exact and Natural Sciences](#). Glacio-Geomorphological Study of Tergi River glaciers on the Background of Modern Climate Change and Evolution of Glaciations in the Late Pleistocene and Holocene. Tbilisi State University.

2-4 May 2013 - [The 2nd International Symposium on Kaz Mountains \(Mount Ida\) and Edremit. Human - Environment Interactions and Ecology of Mountain Ecosystems](#). Climate Change of Coastal Zone of the Black Sea on the Background of Global Warming (within the territory of Georgia). Edremit, Turkey.

22-26 Jan 2013 - The first Scientific Conference in Exact and Natural Sciences. Glacio-Geomorphological Study of the Glaciers of the Central Caucasus on the Background of Modern Climate Change and Evolution of Glaciations Late Pleistocene and Holocene (On the example of Mulkhura and Zopkhito River Basin). Tbilisi State University.

7-12 Apr 2013 - [EGU general assembly](#). Natural hazards in the Greater Caucasus range - risk maps for the Kazbegi and Mleta areas (Georgia). Vienna, Austria.

2012

16-18 Nov 2012 - [International conference. Education and Innovation](#). Issues of understanding and use of environmental-tourism resources (Glaciers of riv. Enguri). City of Gori - Gori State University.

16-18 Nov 2012 - A 100 year anniversary conference of Prof. Levan Maruashvili. Glacio-Geomorphological research of the Mestiachala River basin Glaciers. Geographical Society of Georgia. Tbilisi.

2011

28-30 Sep 2011 - International Conference on Environment and People. Dynamics of the glaciers. Kobuleti, Adjara AO.

15 Sep 2011 - [International Scientific Conference on Environment and Global Warming](#). Relief and Geodynamic Processes of High Mountainous Region of Caucasus (Stepantsminda region). Tbilisi State University.

15 Sep 2011 - [International Scientific Conference on Environment and Global Warming](#). Glaciological studies in the Zopkhito glacier (Central Caucasus). Tbilisi State University.

21 Jan 2011 - International Scientific Conference on Climate change and Environmental Problems. Glaciers dynamics of the Central Caucasus. Ilia State University.

Field trips:

2019-2021 - Southern Alps, New Zealand.

2017 - Rocky Mountains, Canada.

2003-2018 - Greater Caucasus, Georgia/Russia.

Scholarships and awards:

2019-2022 - [Doctoral Scholarship, Victoria University of Wellington, New Zealand](#).

2017-2021 - [Research Fellow of Georgian National Academy of Sciences \(Department of Earth Sciences\)](#).

2017 - [Best young scientist of the year 2017 in Georgian studies](#).

2016 - [The Tsinandali Award laureate of the Natural Sciences](#).

2014 - Medal of the Ivane Javakhishvili Tbilisi State University.

Languages:

Georgian

English

Russian

Official websites:

<https://scholar.google.com/citations?hl=en&user=PbWbMtQAAAAJ>

https://www.researchgate.net/profile/Levan_Tielidze

<https://glaciologygeorgia.wordpress.com/history/>

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