

International Scientific Conference “Complex Geophysical Monitoring in Georgia: History, Modern Problems, Promoting Sustainable Development of the Country”

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ABSTRACT

Information about the international scientific conference “Complex Geophysical Monitoring in Georgia: History, Modern Problems, Promoting Sustainable Development of the Country” Dedicated to 180 Anniversary of the Organization in Georgia of Regular Magneto-Meteorological Observations, which was held on October 17-19, 2024 at Ivane Javakishvili Tbilisi State University is presented.

Key words: *Earth and its envelopes, geophysical processes, complex geophysical monitoring, natural disasters, earth ecology, mitigation, promoting sustainable development.*

Introduction

On October 17-19, 2024, Ivane Javakishvili Tbilisi State University hosted the International Scientific Conference "Complex Geophysical Monitoring in Georgia: History, Modern Problems, Promoting Sustainable Development of the Country" Dedicated to 180 Anniversary of the Organization in Georgia of Regular Magneto-Meteorological Observations.

The conference was attended by about 200 researchers from 37 organizations from 13 countries (Georgia, Armenia, Germany, Greece, Hungary, Italy, Poland, Russia (Chechen Republic), Slovenia, Spain, Sweden, USA, Uzbekistan).

The aim of the conference was to present the results of research in the field of complex geophysical monitoring in Georgia and other countries (history, modern problems, assistance to sustainable development of countries) at the plenary session (oral/poster/video). As well as presentation of reports selected by the scientific committee and their discussion at plenary, sectional sessions and in the form of poster reports.

The target group was Georgian and foreign scientific, educational, governmental and non-governmental organizations, which have direct contact with the theme of the conference (universities, research institutes, educational organizations, structures of emergency situations, etc.).

The conference participants were given certificates.

The collection of conference materials and all of its separate articles is available on the website of the National Scientific Library: <http://dspace.gela.org.ge/handle/123456789/10609>

Goal of the Conference

- Discovering the potential scientists in the field of complex geophysical monitoring;
- Establishing and strengthening connections of scientists;
- Defining the prospects for the development of scientific research;
- Identify opportunities for improving the scientific-educational field of secondary and higher

- education institutions in relation to the issues of the conference;
- Strengthening international scientific cooperation on conference topics;
- To acquaint the world scientific community, governmental structures, other interested organizations and individuals with the current state of the problems related to the fields of complex geophysical monitoring.

Conference Organizers

The conference was organized by the Mikheil Nodia Institute of Geophysics of the Tbilisi State University, Institute of Hydrometeorology of Technical University Of Georgia and the Georgian Geophysical Association.

Scientific Committee and Editorial Board

Tamaz Chelidze: Academician, Chairman of the Scientific Committee, Editor-in-Chief; **Nodar Varamashvili, Jemal Kiria:** Co-Chairmans of the Scientific Committee - TSU, M. Nodia Institute of Geophysics, Georgia; **Nana Bolashvili:** Co-Chairman of the Scientific Committee – TSU, Vakhushti Bagrationi Institute of Geography, Georgia; **Mikheil Pipia:** Co-Chairman of the Scientific Committee – GTU, Institute of Hydrometeorology, Georgia; **Avtandil Amiranashvili** (Deputy Editor-in-Chief), **Nugzar Ghloni, George Melikadze** - TSU, M. Nodia Institute of Geophysics, Georgia; **Liana Kartvelishvili** - National Environmental Agency, Georgia; **Marika Tatishvili** - GTU, Institute of Hydrometeorology, Georgia; **Ketevan Khazaradze** - Georgian State Teaching University of Physical Education and Sport, Georgia; **Nino Japaridze** - Tbilisi State Medical University, Georgia; **Laura Rustioni, Gianluca Pappaccogli** - University of Salento, Italy; **Janja Vaupotič** – Jožef Stefan Institute, Slovenia; **István Fórizs** - Institute for Geological and Geochemical Research, Hungary; **Sergey Nazaretyan** - Regional Survey for Seismic Protection, Ministry of Internal Affairs of the Republic of Armenia, Armenia.

Organizing Committee

Manana Nikolaishvili: Chairman of Organizing Committee; **Zamira Arziani** – Deputy Chairman of Organizing Committee; **Sophiko Matiashvili, Ekaterine Mepharidze, Dimitri Amilakhvari, Dimitri Tepnadze, Levan Laliashvili** – TSU, M. Nodia Institute of Geophysics, Georgia; **Nino Taniashvili** - Georgian Geophysical Association, Georgia; **Nazibrola Beglarashvili,** - GTU, Institute of Hydrometeorology, Georgia; **Inga Janelidze** – Georgian Technical University, Georgia.

Conference Themes – All problems of the complex geophysical monitoring in Georgia and other countries.

Expected Results

- Promoting historical and modern achievements in the field of complex geophysical monitoring;
- To acquaint the world community with the current state of the problems related to the complex geophysical monitoring;
- Enhance international cooperation for the scientific and practical application of modern achievements related to the conference topics;
- Assess the social and economic risks associated with the conference topics and identify opportunities for joint action to prevent these risks;
- Assess opportunities to expand the use of complex geophysical monitoring to support sustainable development of countries;
- Identify opportunities to improve the scientific-educational base of secondary and higher education institutions in the field of complex geophysical monitoring.

The conference was opened by the deputy rector of Ivane Javakhishvili Tbilisi State University Kakha Cheishvili, chairman of the scientific committee academician Tamaz Chelidze, co-chairman of the scientific committee, director of Mikheil Nodia Institute of Geophysics, TSU, Nodar Varamashvili and co-chairman of the scientific committee, director of Institute of Hydrometeorology, GTU, Mikheil Pipia.

Speakers made a general overview about the modern problems of the complex geophysical monitoring in Georgia and wished the conference participants fruitful work.

A total of 48 oral and poster presentations were considered at the conference. 46 reports published (see References). Two reports, at the request of the authors, will be published in another edition (Kharshiladze O., Amilakhvari D., Davitashvili T., Kobaidze D. - Non-Linear Theory of Thermal Conductivity in the Atmosphere; Elbakidze Kh., Sorriso-Valvo L., Kharshiladze O., Gurchumelia A., Tsulukidze L. - Fractal and Correlation Analysis of Geomagnetic Activity Data).

The proceedings of this conference as a whole, as well as its individual works, are published and posted on the portal of the Institute of Geophysics, which are included in the international electronic library data base DSpace, indexed in Google Scholar and Publish or Perish.

According to the results of the conference, a decision was made, in which the achievements and gaps in the directions of the complex geophysical monitoring in Georgia and other countries are discussed. Future meetings have been planned.

Photos from Conference







References

- [1] Gogua R. Dusheti (Tbilisi) Magnetic Observatory is One of the Oldest in the World. Int. Sc. Conf. “Complex Geophysical Monitoring in Georgia: History, Modern Problems, Promoting Sustainable Development of the Country”, Proceedings, ISBN 978-9941-36-272-9, Publish House of Iv. Javakhishvili Tbilisi State University, Tbilisi, Georgia, October 17-19, 2024, pp. 3 – 6, (in Georgian).
- [2] Varamashvili N., Darakhvelidze L. Academician Tamaz Chelidze – 90. Int. Sc. Conf. “Complex Geophysical Monitoring in Georgia: History, Modern Problems, Promoting Sustainable Development of the Country”, Proceedings, ISBN 978-9941-36-272-9, Publish House of Iv. Javakhishvili Tbilisi State University, Tbilisi, Georgia, October 17-19, 2024, pp. 7 - 8.
- [3] Chelidze T., Gogua R., Matiashvili T. The importance of the Dusheti (Tbilisi) Magnetic Observatory for the Georgian Scientific Environment. Int. Sc. Conf. “Complex Geophysical Monitoring in Georgia: History, Modern Problems, Promoting Sustainable Development of the Country”, Proceedings, ISBN 978-9941-36-272-9, Publish House of Iv. Javakhishvili Tbilisi State University, Tbilisi, Georgia, October 17-19, 2024, pp. 9 – 12, (in Georgian).
- [4] Kiria T., Nikolaishvili M., Chkhaidze T., Mebaghisvili N. Analysis of Geomagnetic Activity and Coronal Mass Ejections. Int. Sc. Conf. “Complex Geophysical Monitoring in Georgia: History, Modern Problems, Promoting Sustainable Development of the Country”, Proceedings, ISBN 978-9941-36-272-9, Publish House of Iv. Javakhishvili Tbilisi State University, Tbilisi, Georgia, October 17-19, 2024, pp. 13 – 16.
- [5] Nazaretyan S.N., Mirzoyan L.B., Nazaretyan S.S. – Basic Data for Compilation of a Special Macroseismic Scale for Assessing the Intensity of Historical Earthquakes in the Armenian Upland. Int. Sc. Conf. “Complex Geophysical Monitoring in Georgia: History, Modern Problems, Promoting Sustainable Development of the Country”, Proceedings, ISBN 978-9941-36-272-9, Publish House of Iv. Javakhishvili Tbilisi State University, Tbilisi, Georgia, October 17-19, 2024, pp. 17 – 20.
- [6] Nazaretyan S.N., Mirzoyan L.B. Important Features of the Methodology for Assessing the Maximum Seismic Risk of Large Territories (Based on the Example of Armenia). Int. Sc. Conf. “Complex Geophysical Monitoring in Georgia: History, Modern Problems, Promoting Sustainable Development of the Country”, Proceedings, ISBN 978-9941-36-272-9, Publish House of Iv. Javakhishvili Tbilisi State University, Tbilisi, Georgia, October 17-19, 2024, pp. 21 – 25.
- [7] Hovhannisyan S.R., Movsisyan A.D. Regularity of Periods of Tectonomagnetic Precursors. Int. Sc. Conf. “Complex Geophysical Monitoring in Georgia: History, Modern Problems, Promoting Sustainable Development of the Country”, Proceedings, ISBN 978-9941-36-272-9, Publish House of Iv. Javakhishvili Tbilisi State University, Tbilisi, Georgia, October 17-19, 2024, pp. 26 – 28.
- [8] Alania V., Ehlukidze O., Razmadze A. Tectonic Model of the Georgian Part of Lesser Caucasus Orogen Using Seismic Profile. Int. Sc. Conf. “Complex Geophysical Monitoring in Georgia: History, Modern Problems, Promoting Sustainable Development of the Country”, Proceedings, ISBN 978-9941-36-272-9, Publish House of Iv. Javakhishvili Tbilisi State University, Tbilisi, Georgia, October 17-19, 2024, pp. 29 – 29.
- [9] Arabidze V., Chkhikvadze K., Gigiberia M., Ghlonti N. Effect of Geological Faulting on Slope Stability. Int. Sc. Conf. “Complex Geophysical Monitoring in Georgia: History, Modern Problems, Promoting Sustainable Development of the Country”, Proceedings, ISBN 978-9941-36-272-9, Publish House of Iv. Javakhishvili Tbilisi State University, Tbilisi, Georgia, October 17-19, 2024, pp. 30 – 33, (in Georgian).
- [10] Karimova F.B., Dzhumaniyazov D.I. Small Intrusions and Dikes Associated with Ore Formation (Almalyk-Angren Mining District). Int. Sc. Conf. “Complex Geophysical Monitoring in Georgia: History, Modern Problems, Promoting Sustainable Development of the Country”, Proceedings, ISBN 978-9941-36-272-9, Publish House of Iv. Javakhishvili Tbilisi State University, Tbilisi, Georgia, October 17-19, 2024, pp. 34 – 36.
- [11] Gorgijandze S., Gorgodze T., Jincharadze G., Kobakhidze N., Gulashvili Z., Silagadze M., Dvalashvili G. Crucial Moment of Topographic Map for Effective Management of Natural Disasters. Int. Sc. Conf. “Complex Geophysical Monitoring in Georgia: History, Modern Problems, Promoting Sustainable Development of the Country”, Proceedings, ISBN 978-9941-36-272-9, Publish House of Iv. Javakhishvili Tbilisi State University, Tbilisi, Georgia, October 17-19, 2024, pp. 37 – 39.
- [12] Shengelia L., Kordzakhia G., Tvauri G., Guliashvili G., Dzadzamia M. Results of the Study of the Morphology and Exposure of Glaciers in the r. Rioni Basin on Satellite Remote Sensing. Int. Sc. Conf. “Complex Geophysical Monitoring in Georgia: History, Modern Problems, Promoting Sustainable Development of the Country”, Proceedings, ISBN 978-9941-36-272-9, Publish House of Iv. Javakhishvili

- Tbilisi State University, Tbilisi, Georgia, October 17-19, 2024, pp. 40 – 44, (in Georgian).
- [13] Gigiberia M., Kiria J. Results of the Geophysical Survey Conducted in the Vicinity of Lisi Lake. Int. Sc. Conf. “Complex Geophysical Monitoring in Georgia: History, Modern Problems, Promoting Sustainable Development of the Country”, Proceedings, ISBN 978-9941-36-272-9, Publish House of Iv. Javakhishvili Tbilisi State University, Tbilisi, Georgia, October 17-19, 2024, pp. 45 – 48, (in Georgian).
- [14] Varamashvili N., Gigiberia M. Study of the Reinforced Concrete Construction of Ricoti Bridge by Ultrasonic Method. Int. Sc. Conf. “Complex Geophysical Monitoring in Georgia: History, Modern Problems, Promoting Sustainable Development of the Country”, Proceedings, ISBN 978-9941-36-272-9, Publish House of Iv. Javakhishvili Tbilisi State University, Tbilisi, Georgia, October 17-19, 2024, pp. 49 – 52, (in Georgian).
- [15] Odilavadze D., Chelidze T., Yavolovskaya O. – Radio Images Investigated by the Method of Physical Modeling of an Archaeogeoradiolocationally Complex Building Object. Int. Sc. Conf. “Complex Geophysical Monitoring in Georgia: History, Modern Problems, Promoting Sustainable Development of the Country”, Proceedings, ISBN 978-9941-36-272-9, Publish House of Iv. Javakhishvili Tbilisi State University, Tbilisi, Georgia, October 17-19, 2024, pp. 53 – 56, (in Georgian).
- [16] Shavliashvili L., Kuchava G., Shubladze E., Kurtsikidze O., Gavardashvili G., Kordzakhia G. Results of Research of Natural Waters and Soils of Chiatura Municipality. Int. Sc. Conf. “Complex Geophysical Monitoring in Georgia: History, Modern Problems, Promoting Sustainable Development of the Country”, Proceedings, ISBN 978-9941-36-272-9, Publish House of Iv. Javakhishvili Tbilisi State University, Tbilisi, Georgia, October 17-19, 2024, pp. 57 – 63, (in Georgian).
- [17] Basilashvili Ts. Updated Maximum Flood Discharges for Hydrological Calculations of the Rivers in Western Georgia. Int. Sc. Conf. “Complex Geophysical Monitoring in Georgia: History, Modern Problems, Promoting Sustainable Development of the Country”, Proceedings, ISBN 978-9941-36-272-9, Publish House of Iv. Javakhishvili Tbilisi State University, Tbilisi, Georgia, October 17-19, 2024, pp. 64 – 68, (in Georgian).
- [18] Kerimov I.A., Bratkov V.V., Bekmurzaeva L.R. Assessment of Modern Agroclimatic Conditions of the North Caucasus in the Context of Climate Change. Int. Sc. Conf. “Complex Geophysical Monitoring in Georgia: History, Modern Problems, Promoting Sustainable Development of the Country”, Proceedings, ISBN 978-9941-36-272-9, Publish House of Iv. Javakhishvili Tbilisi State University, Tbilisi, Georgia, October 17-19, 2024, pp. 69 – 71.
- [19] Meladze M., Meladze G., Kapanadze N., Pipia M. Impact of Droughts on the Agricultural Sector of the Eastern Georgia Regions. Int. Sc. Conf. “Complex Geophysical Monitoring in Georgia: History, Modern Problems, Promoting Sustainable Development of the Country”, Proceedings, ISBN 978-9941-36-272-9, Publish House of Iv. Javakhishvili Tbilisi State University, Tbilisi, Georgia, October 17-19, 2024, pp. 72 – 75, (in Georgian).
- [20] Markarashvili E., Papiashvili K., Snesar A., Khakhutaishvili A. Construction Adhesive Cement Based on Household Glass Waste. Int. Sc. Conf. “Complex Geophysical Monitoring in Georgia: History, Modern Problems, Promoting Sustainable Development of the Country”, Proceedings, ISBN 978-9941-36-272-9, Publish House of Iv. Javakhishvili Tbilisi State University, Tbilisi, Georgia, October 17-19, 2024, pp. 76 – 78, (in Georgian).
- [21] Markarashvili E., Bazgadze Z., G., Chikvaidze I., Sidamonidze N., Snesar A. – Composites Based on Epoxy Resin and Rubber Waste. Int. Sc. Conf. “Complex Geophysical Monitoring in Georgia: History, Modern Problems, Promoting Sustainable Development of the Country”, Proceedings, ISBN 978-9941-36-272-9, Publish House of Iv. Javakhishvili Tbilisi State University, Tbilisi, Georgia, October 17-19, 2024, pp. 79 – 81, (in Georgian).
- [22] Kiknadze N., Davitadze L., Tavdgiridze G., Kuchava M., Gogitidze T. The Effect of the New Generation Fertilizer "Leonardite" on the Chemical Composition of Red Soil and Mandarin “Unshiu”. Int. Sc. Conf. “Complex Geophysical Monitoring in Georgia: History, Modern Problems, Promoting Sustainable Development of the Country”, Proceedings, ISBN 978-9941-36-272-9, Publish House of Iv. Javakhishvili Tbilisi State University, Tbilisi, Georgia, October 17-19, 2024, pp. 82 – 87, (in Georgian).
- [23] Kvaratskhelia D., Demetrashvili D. Numerical Investigation of Sensitivity of the Temperature Field to Initial Conditions in the Upper Turbulent Layer of the Black Sea Using the Numerical Model of the Sea Dynamics. Int. Sc. Conf. “Complex Geophysical Monitoring in Georgia: History, Modern Problems, Promoting Sustainable Development of the Country”, Proceedings, ISBN 978-9941-36-272-9, Publish House of Iv. Javakhishvili Tbilisi State University, Tbilisi, Georgia, October 17-19, 2024, pp. 88 – 91, (in Georgian).
- [24] Demetrashvili D. Monitoring and Short-Term Forecasting Systems for European Seas. Int. Sc. Conf.

- “Complex Geophysical Monitoring in Georgia: History, Modern Problems, Promoting Sustainable Development of the Country”, Proceedings, ISBN 978-9941-36-272-9, Publish House of Iv. Javakhishvili Tbilisi State University, Tbilisi, Georgia, October 17-19, 2024, pp. 92 – 95, (in Georgian).
- [25] Tatishvili M., Kapanadze N., Mkurnalidze I., Palavandishvili A. Drought Evaluation in Georgia using SPI and SpEI Indices. Int. Sc. Conf. “Complex Geophysical Monitoring in Georgia: History, Modern Problems, Promoting Sustainable Development of the Country”, Proceedings, ISBN 978-9941-36-272-9, Publish House of Iv. Javakhishvili Tbilisi State University, Tbilisi, Georgia, October 17-19, 2024, pp. 96 – 100.
- [26] Bliadze T. Statistical Analysis of the Weekly Fire Alerts Count in Georgia and its Regions in 2012-2023. Int. Sc. Conf. “Complex Geophysical Monitoring in Georgia: History, Modern Problems, Promoting Sustainable Development of the Country”, Proceedings, ISBN 978-9941-36-272-9, Publish House of Iv. Javakhishvili Tbilisi State University, Tbilisi, Georgia, October 17-19, 2024, pp. 101 – 104.
- [27] Bliadze T., Chkhitudze M., Kirkitadze D. Statistical Characteristics of Mean Monthly and Annual Concentrations of Particulate Matter PM_{2.5} and PM₁₀ in Tbilisi in 2017-2023. Int. Sc. Conf. “Complex Geophysical Monitoring in Georgia: History, Modern Problems, Promoting Sustainable Development of the Country”, Proceedings, ISBN 978-9941-36-272-9, Publish House of Iv. Javakhishvili Tbilisi State University, Tbilisi, Georgia, October 17-19, 2024, pp. 105 – 108.
- [28] Surmava A., Kukhalashvili V., Gigauri N., Intskirveli L. Numerical Modeling of Changes in Time and Space of the Concentration of PM₁₀ Dispersed in the Atmosphere of Kutaisi City During Calm. Int. Sc. Conf. “Complex Geophysical Monitoring in Georgia: History, Modern Problems, Promoting Sustainable Development of the Country”, Proceedings, ISBN 978-9941-36-272-9, Publish House of Iv. Javakhishvili Tbilisi State University, Tbilisi, Georgia, October 17-19, 2024, pp. 109 – 112, (in Georgian).
- [29] Matiashvili S., Chanqseliani Z. Soil Pollution in the Vicinity of Automobile Workshops, Near Populated Areas Across Tbilisi. Int. Sc. Conf. “Complex Geophysical Monitoring in Georgia: History, Modern Problems, Promoting Sustainable Development of the Country”, Proceedings, ISBN 978-9941-36-272-9, Publish House of Iv. Javakhishvili Tbilisi State University, Tbilisi, Georgia, October 17-19, 2024, pp. 113 – 116.
- [30] Takadze G., Larry D., Wascak J. Harnessing HAVOK and Machine Learning for Cosmic Ray Forecasting. Int. Sc. Conf. “Complex Geophysical Monitoring in Georgia: History, Modern Problems, Promoting Sustainable Development of the Country”, Proceedings, ISBN 978-9941-36-272-9, Publish House of Iv. Javakhishvili Tbilisi State University, Tbilisi, Georgia, October 17-19, 2024, pp. 117 – 120.
- [31] Uchaneishvili S., Kalmakhelidze S., Avalishvili A., Ivanishvili N., Gogebashvili M. Astrobiological Aspects of Ionizing Radiation-Induced Cognitive Impairments. Int. Sc. Conf. “Complex Geophysical Monitoring in Georgia: History, Modern Problems, Promoting Sustainable Development of the Country”, Proceedings, ISBN 978-9941-36-272-9, Publish House of Iv. Javakhishvili Tbilisi State University, Tbilisi, Georgia, October 17-19, 2024, pp. 121 – 123, (in Georgian).
- [32] Seperteladze Z., Davitaia E., Aleksidze T., Rukhadze N. The role of Physical-Geographical Factors in the Spatio-Temporal Distribution of Cardiovascular Diseases. Int. Sc. Conf. “Complex Geophysical Monitoring in Georgia: History, Modern Problems, Promoting Sustainable Development of the Country”, Proceedings, ISBN 978-9941-36-272-9, Publish House of Iv. Javakhishvili Tbilisi State University, Tbilisi, Georgia, October 17-19, 2024, pp. 124 – 128, (in Georgian).
- [33] Japaridze N., Khazaradze K., Chkhitudze M., Revishvili A. Variability of the Birth, Death and Population Growth Rates in Georgia in 1994-2023. Int. Sc. Conf. “Complex Geophysical Monitoring in Georgia: History, Modern Problems, Promoting Sustainable Development of the Country”, Proceedings, ISBN 978-9941-36-272-9, Publish House of Iv. Javakhishvili Tbilisi State University, Tbilisi, Georgia, October 17-19, 2024, pp. 129 – 132.
- [34] Japaridze N., Kartvelishvili L., Khazaradze K., Chkhitudze M., Nikolaishvili M., Revishvili A. Statistical Characteristics of the Daily Values of Air Effective Temperature According to Missenard in Batumi. . Int. Sc. Conf. “Complex Geophysical Monitoring in Georgia: History, Modern Problems, Promoting Sustainable Development of the Country”, Proceedings, ISBN 978-9941-36-272-9, Publish House of Iv. Javakhishvili Tbilisi State University, Tbilisi, Georgia, October 17-19, 2024, pp. 133 – 136.
- [35] Amiranashvili A., Kartvelishvili L., Matzarakis A. The Interval Forecasting of the Holiday Climate Index in Tsalka (Georgia) to 2026-2035. . Int. Sc. Conf. “Complex Geophysical Monitoring in Georgia: History, Modern Problems, Promoting Sustainable Development of the Country”, Proceedings, ISBN 978-9941-36-272-9, Publish House of Iv. Javakhishvili Tbilisi State University, Tbilisi, Georgia, October 17-19, 2024, pp. 137 – 140.
- [36] Varamashvili N., Pipia M. A Brief Overview of the Joint Works of the M. Nodia Institute of

- Geophysics, TSU and Institute of Hydrometeorology, GTU in the Last Five Years. Int. Sc. Conf. “Complex Geophysical Monitoring in Georgia: History, Modern Problems, Promoting Sustainable Development of the Country”, Proceedings, ISBN 978-9941-36-272-9, Publish House of Iv. Javakhishvili Tbilisi State University, Tbilisi, Georgia, October 17-19, 2024, pp. 141 – 144, (in Georgian).
- [37] Amiranashvili A. Analysis of Variability of Mean Annual Air Temperature in Tbilisi in 1844-2023 Against the Background of Climate Change. Int. Sc. Conf. “Complex Geophysical Monitoring in Georgia: History, Modern Problems, Promoting Sustainable Development of the Country”, Proceedings, ISBN 978-9941-36-272-9, Publish House of Iv. Javakhishvili Tbilisi State University, Tbilisi, Georgia, October 17-19, 2024, pp. 145 – 149.
- [38] Bolashvili N., Chikhladze V., Kartvelishvili L., Tatishvili M. Variability of Atmospheric Precipitation in Tbilisi in 1844-2023. Int. Sc. Conf. “Complex Geophysical Monitoring in Georgia: History, Modern Problems, Promoting Sustainable Development of the Country”, Proceedings, ISBN 978-9941-36-272-9, Publish House of Iv. Javakhishvili Tbilisi State University, Tbilisi, Georgia, October 17-19, 2024, pp. 150 – 154.
- [39] Amiranashvili A., Brocca L., Chelidze T., Svanadze D., Tsamalashvili T., Varamashvili N. Analysis of the Precipitation Regime that Triggered the Landslide in Nergeeti (Imereti, Georgia) on February 7, 2024. Int. Sc. Conf. “Complex Geophysical Monitoring in Georgia: History, Modern Problems, Promoting Sustainable Development of the Country”, Proceedings, ISBN 978-9941-36-272-9, Publish House of Iv. Javakhishvili Tbilisi State University, Tbilisi, Georgia, October 17-19, 2024, pp. 155 – 158.
- [40] Amiranashvili A., Chelidze T., Svanadze D., Tsamalashvili T., Varamashvili N. Comparison of Satellite and Ground-Based Data on Semi-Annual and Annual Sum of Atmospheric Precipitation for 26 Points in Georgia in 2001-2020. . Int. Sc. Conf. “Complex Geophysical Monitoring in Georgia: History, Modern Problems, Promoting Sustainable Development of the Country”, Proceedings, ISBN 978-9941-36-272-9, Publish House of Iv. Javakhishvili Tbilisi State University, Tbilisi, Georgia, October 17-19, 2024, pp. 159 – 163.
- [41] Beglarashvili N., Jamrishvili N., Janelidze I., Pipia M., Tavidashvili Kh. Some Results of Analysis of Heavy Precipitation in Tbilisi on July 7, 2024 Based on Ground-Level and Satellite Measurements. . Int. Sc. Conf. “Complex Geophysical Monitoring in Georgia: History, Modern Problems, Promoting Sustainable Development of the Country”, Proceedings, ISBN 978-9941-36-272-9, Publish House of Iv. Javakhishvili Tbilisi State University, Tbilisi, Georgia, October 17-19, 2024, pp. 164 – 167.
- [42] Amiranashvili A., Chikhladze V., Kekenadze E., Pipia M., Samkharadze I., Telia Sh., Varamashvili N. Meteorological Conditions for the Tornado Formation in Kakheti (Georgia) on June 25, 2024. . Int. Sc. Conf. “Complex Geophysical Monitoring in Georgia: History, Modern Problems, Promoting Sustainable Development of the Country”, Proceedings, ISBN 978-9941-36-272-9, Publish House of Iv. Javakhishvili Tbilisi State University, Tbilisi, Georgia, October 17-19, 2024, pp. 168 – 171.
- [43] Amiranashvili A., Bliadze T., Chikhladze V. Experimental Modeling of Atmospheric Processes in the Large Cloud Chamber of the M. Nodia Institute of Geophysics, TSU. Past, Present, Development Prospects. Int. Sc. Conf. “Complex Geophysical Monitoring in Georgia: History, Modern Problems, Promoting Sustainable Development of the Country”, Proceedings, ISBN 978-9941-36-272-9, Publish House of Iv. Javakhishvili Tbilisi State University, Tbilisi, Georgia, October 17-19, 2024, pp. 172 – 175.
- [44] Chikhladze V., Kartvelishvili L. Testing the “Slanting Rain” Recorder in a Thermobaric Chamber. Int. Sc. Conf. “Complex Geophysical Monitoring in Georgia: History, Modern Problems, Promoting Sustainable Development of the Country”, Proceedings, ISBN 978-9941-36-272-9, Publish House of Iv. Javakhishvili Tbilisi State University, Tbilisi, Georgia, October 17-19, 2024, pp. 176 – 178, (in Georgian).
- [45] Prus B., Bacior S. – Good Practices of Landslide Hazard Monitoring as a Support for Sustainable Space Development – Examples from Poland. Int. Sc. Conf. “Complex Geophysical Monitoring in Georgia: History, Modern Problems, Promoting Sustainable Development of the Country”, Proceedings, ISBN 978-9941-36-272-9, Publish House of Iv. Javakhishvili Tbilisi State University, Tbilisi, Georgia, October 17-19, 2024, pp. 179 – 182.
- [46] Bakradze T., Glonti N., Erkomaishvili T., Demurishvili Z., Takadze G., Barbakadze P., Gogua R., Alania E. Modulating Effects of Cosmic Rays on Solar Activities. Int. Sc. Conf. “Complex Geophysical Monitoring in Georgia: History, Modern Problems, Promoting Sustainable Development of the Country”, Proceedings, ISBN 978-9941-36-272-9, Publish House of Iv. Javakhishvili Tbilisi State University, Tbilisi, Georgia, October 17-19, 2024, pp. 183 – 188, (in Georgian).

**საერთაშორისო სამეცნიერო კონფერენცია
„კომპლექსური გეოფიზიკური მონიტორინგი საქართველოში:
ისტორია, თანამედროვე პრობლემები, ქვეყნის
მდგრადი განვითარების ხელშეწყობა“**

ნ. ვარამაშვილი, მ. ფიფია

რეზიუმე

წარმოდგენილია ინფორმაცია საერთაშორისო სამეცნიერო კონფერენციაზე „კომპლექსური გეოფიზიკური მონიტორინგი საქართველოში: ისტორია, თანამედროვე პრობლემები, ქვეყნის მდგრადი განვითარების ხელშეწყობა“ მიღწილი საქართველოში რეგულარული მაგნიტური და მეტეოროლოგიური დაკვირვებების ორგანიზების 180 წლის იუბილეს, რომელიც ჩატარდა 2024 წლის 17-19 ოქტომბერს ივანე ჯავახიშვილის სახელობის თბილისის სახელმწიფო უნივერსიტეტში.

საკვანძო სიტყვები: დედამიწა და მისი გარსები, გეოფიზიკური პროცესები, კომპლექსური გეოფიზიკური მონიტორინგი, ბუნებრივი კატასტროფები, დედამიწის ეკოლოგია, შედეგების შერბილება, მდგრადი განვითარების ხელშეწყობა.

**Международная научная конференция
“Комплексный геофизический мониторинг в Грузии: история,
современные проблемы, содействие устойчивому развитию
страны”**

Н. Варамашвили, М. Пипия

Резюме

Представлена информация о международной научной конференции „Комплексный геофизический мониторинг в Грузии: история, современные проблемы, содействие устойчивому развитию страны“, посвященной 180-летию организации в Грузии регулярных магнито-метеорологических наблюдений, которая прошла 17-19 октября 2024 года в Тбилиском государственном университете имени Ивана Джавахишвили.

Ключевые слова: Земля и ее оболочки, геофизические процессы, комплексный геофизический мониторинг, стихийные бедствия, экология Земли, смягчение последствий, содействие устойчивому развитию.