

Maya Todua

personal information

Contact Details

Full name: Maya Todua

Email address: mayatodua@iliauni.edu.ge

Gender: Female

Country: საქართველო (Georgia)

Citizenship: საქართველო
(Georgia)

City: Tbilisi

Languages

Language	Writing	Reading	Speaking
ქართული (Georgian)	C2	C2	C2
English	C2	C2	C2
Russian	C2	C2	C2

Education

Academic degree

Academic Degree: Doctoral/PhD, Ed.D or other equivalent

Year obtained: 29.05.2015

Education

Academic Degree	Name of the Institution	Country	Major discipline	Start year	End year
Doctoral/PhD, Ed.D or other equivalent	Ilia State University	საქართველო (Georgia)	physics	2009	2015
Master/MS, MA, MR, MBA, m.Ed or other equivalent	Rutgers University	United States	physics	2001	2003
Master/MS, MA, MR, MBA, m.Ed or other equivalent	Leningrad State University	Russian Federation	astronomy	1984	1989

Projects

Ongoing projects

Project title	Position	Project head	Start Date	Donor
Theory of sporadic E(Es) formation and localization under influence of neutral wind	member	Giorgi Dalakishvili	01.02.2022	Shota Rustaveli Georgian National Science Foundation
COSMOS2020plus (NCP space)	member	Adrien Klein	01.08.2017	Horizon2020

Completed projects

Project title	Position	Project head	Start Date	End Date	Donor
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Project title	Position	Project head	Start Date	End Date	Donor
Spatial and temporal behavior of the ionosphere F2 region electron density under the influence of atmospheric waves: travelling ionospheric disturbances	coordinator	Goderdzi Didebulidze	01.10.2017	01.04.2021	Shota Rustaveli Georgian National Science Foundation
A three-dimensional theoretical model of the formation and behavior of ionospheric sporadic E layers under the influence of atmospheric waves generated by horizontal shear flow	member	Goderdzi Didebulidze	01.10.2014	30.09.2017	Shota Rustaveli Georgian National Science Foundation
Long-term, annual and inter-annual changes of cloudless days and nights in Abastumani (41.75N, 42.82S) at different solar and geomagnetic activity conditions, as a model of cosmic factor climate change	member	Goderdzi Didebulidze	01.10.2012	30.09.2014	Shota Rustaveli Georgian National Science Foundation
Aerosols, Clouds and Trace Gases Research Infrastructure Network	associate member	ACTRIS	01.10.2011	30.09.2014	EU FP7
Long-term trends in the nightglow intensity of the midlatitude upper atmosphere and geocorona and their coupling at different helio-geophysical conditions	member	Goderdzi Didebulidze	01.10.2008	30.09.2010	Georgian National Science Foundation
Interaction between aerosols and climate: The relationship between desertification, aerosols and climate in the Caucasus	member	Goderdzi Didebulidze	01.04.2005	31.03.2007	ISTC

Scientific Fields (2018-2020)

Main Field

Field: 1. Natural sciences

Sub-Field: 1.3 Physical sciences

Subject area: 1.3.8 Astronomy (including astrophysics, space science)

Additional Field (1)

Field: 1. Natural sciences

Sub-Field: 1.3 Physical sciences

Subject area: 1.3.9 Other

Scientific Fields (2021-2024)

Main Field

Field: 1. Physical Sciences and Engineering

Sub-Field: 1.10 Earth System Science

Employment History

Current place(s) of employment

Workplace	Name of the work department	Position	Main responsibilities	Start Date
Ilia State University	Faculty of Natural Sciences and Medicine	Associated Professor	scientific research and education	15.10.2021
Evgeni Kharadze Georgian National Astrophysical Observatory	Department of Sun and Solar System Research	Assistant researcher	research	18.01.2021

Workplace	Name of the work department	Position	Main responsibilities	Start Date
Ilia State University	Faculty of Natural Sciences and Medicine	Associated Professor	Research, teaching, program coordination	08.10.2018

Work experience

Company/Institution	Name of the department	Position	Main responsibilities	Start Date	End Date
Evgeni Kharadze Georgian National Astrophysical Observatory	Institute	Executive Director	Directorship	28.10.2019	05.04.2020
Ilia State University	Faculty of Natural Sciences and Engineering	Associated Professor	Research, teaching, program coordination	10.10.2015	09.10.2018
Ilia State University Research Institute - E. Kharadze Abastumani Astrophysical Observatory	Institute	Director	directorship, research	09.12.2011	27.10.2019
Ilia State University	Faculty of Natural Sciences and Engineering	Assistant Professor	Research, teaching	03.10.2011	09.10.2015
Ilia State University Research Institute - E. Kharadze Abastumani Astrophysical Observatory	E. Kharadze Abastumani Astrophysical Observatory	Researcher	Research	07.01.2008	05.12.2011
Abastumani Astrophysical Observatory	Department of stellar and galactic research	Researcher	Research	15.10.1989	06.01.2008

Scientific Productivity

Article / Monograph / Manual

Type	Authors	Publication title	Source title	Year
Article	Didebulidze, Goderdzi G. ; Dalakishvili, Giorgi; Todua, Maya; Toriashvili, Lekso	The Role of Neutral Wind Velocity and Its Vertical Component on Predictability of Formation and Localization of Sporadic E (Es)	Atmosphere, vol. 14, issue 6, p. 1008	2023
Article	Dalakishvili, Giorgi, Didebulidze, Goderdzi G., Todua, Maya	Formation of sporadic E (Es) layer by homogeneous and inhomogeneous horizontal winds	Journal of Atmospheric and Solar-Terrestrial Physics, Volume 209	2020
Article	Didebulidze, Goderdzi G., Dalakishvili, Giorgi, Todua, Maya	Formation of Multilayered Sporadic E under an Influence of Atmospheric Gravity Waves (AGWs)	Atmosphere, vol. 11, issue 6, p. 653	2020
Article	Didebulidze, Goderdzi G., Dalakishvili, Giorgi, Todua, Maya	Formation of Multilayered Sporadic E under an Influence of Atmospheric Gravity Waves (AGWs)	Atmosphere, vol. 11, issue 6, p. 653	2020
Article	Todua, Maya	Astronomical research and public outreach in Georgia	Communications of the Byurakan Astrophysical Observatory (ComBAO), Volume 65, Issue 1, p. 115-123	2018
Article	Didebulidze, Goderdzi G, Todua, Maya	The inter-annual distribution of cloudless days and nights in Abastumani: Coupling with cosmic factors and climate change	Journal of Atmospheric and Solar-Terrestrial Physics, Volume 141, p. 48-55	2016
Article	Didebulidze, Goderdzi G, Todua, Maya	Investigation of presence of cosmic factors in the inter-annual distributions of cloudless days and nights in Abastumani	Sun and Geosphere, vol.10, no.1, p.59-63	2015
Article	Todua, Maya; Didebulidze, Goderdzi G	Cosmic factors influence on the inter-annual variations of the green 557.7 Nm line and red 630.0 Nm line nightglow intensities and their possible coupling with cloud covering at Abastumani (41.75°N, 42.82°E)	Acta Geophysica, Volume 62, Issue 2, pp.381-399	2014
Article	P. Kokkalis, R.E. Mamouri, M. Todua, G.G. Didebulidze, A. Papayannis, V. Amiridis, S. Basart, C. Perez, and J. M. Baldasano	Ground, satellite and simulation-based analysis of a strong dust event over Abastumani, Georgia during May 2009	International Journal of Remote Sensing, Volume 33, Issue 16. Special Issue	2012
Article	G. G. Didebulidze, L. N. Lomidze, N.B. Gudadze, A.D. Pataraya, M. Todua	The long-term changes in the nightly behavior of the oxygen red 630.0 nm line nightglow intensity and trend in the thermospheric meridional wind velocity	International Journal of Remote Sensing. International Journal of Remote Sensing, 32(11), 3093-3114	2011

Type	Authors	Publication title	Source title	Year
Article	Didebulidze, G. G.; Lomidze, L. N.; Gudadze, N. B.; Todua, M.	Multilayered structures in the ionosphere F2 region and impulse-like increase of the nightglow red 630 nm line intensity as a result of influence of shear excited atmospheric vortical perturbations	Journal of Geophysical Research, Volume 114, Issue A3, CiteID A03312	2009
Article	Gudadze, N. B.; Didebulidze, G. G.; Lomidze, L. N.; Javakhishvili, G. Sh.; Marsagishvili, M. A.; Todua, M.	Different long-term trends of the oxygen red 630.0 nm line nightglow intensity as the result of lowering the ionosphere F2 layer	Annales Geophysicae, Volume 26, Issue 8	2008
Article	Malasidze, G.; Todua, M.	A method for construction of orbits in the gravitational field of a plane galactic disk	Astronomy and Astrophysics, Volume 477, Issue 1, pp.133-137	2008
Article	Javakhishvili, G.; Kukhianidze, V.; Todua, M.; Inasaridze, R.	A method of open cluster membership determination	Astronomy and Astrophysics, Volume 447, Issue 3, pp.915-919	2006
Article	Anosova, Zh. P.; Orlov, V. V.; Todua, M. M.	The relative positions and proper motions of the components of 32 triple stars from the input catalog of the HIPPARCOS program	Kinematika i Fizika Nebesnykh Tel (Kinematics and Physics of Celestial bodies) (ISSN 0233-7665), vol. 6, Mar.-Apr.	1990

Participation in scientific events

Scientific event name	Title of the presentation	Event venue	Year
44th COSPAR Scientific Assembly	Influence of ions horizontal transport caused by AGWs on formation and characteristics of sporadic E	Online	2022
43rd COSPAR Scientific Assembly	Formation of multilayered sporadic E under an influence of atmospheric gravity waves (AGWs)	Online	2021
43rd COSPAR Scientific Assembly.	The behavior of the oxygen red 630.0 nm line nightglow intensity under an influence of thermosphere wind and atmospheric gravity waves	Online	2021
22th International Conference on Planetary and Atmospheric Physics	The Characteristics of Multilayered Sporadic E Formed under the Influence of Atmospheric Gravity Waves	Rome, Italy	2020
American Geophysical Union, Fall Meeting 2020	TIDs characteristic behavior of the oxygen red 630.0 nm line nightglow intensity caused by thermosphere wind and AGWs	Online	2020
Meeting of American Geophysical Union	Formation of Sporadic E (Es) Layer by Horizontal Wind	San Francisco, California, USA	2019
21st EGU General Assembly	Influence of AGWs on layered structure of the ionosphere F2 region	Vienna, Austria	2019
Virtual Alpine Observatory Symposium	Some peculiarities of interannual and long-term variations of total ozone content observed at Abastumani	Grenoble, France	2018
International solar conference "Our mysterious Sun: magnetic coupling between solar interior and atmosphere"	Cosmic factors indications in the variations of the atmosphere-ionosphere parameters by observations from Abastumani	Tbilisi, Georgia	2017
International conference at Samtskhe-Javakheti State University	Climate Change Signals in the Long-Term Variations of the Upper Atmosphere Parameters through Observations in Abastumani	Akhaltzikhe, Georgia	2016
70th Anniversary of Byurakan Astrophysical Observatory	Cosmic factors in the variations of the lower and upper atmosphere-ionosphere parameters observed from Abastumani	Byurakan, Armenia	2016
13th annual meeting of AOGS - Asia-Oseania Geoscience Union	Lower and upper atmosphere coupling through the inter-annual variations of the Hydroxyl OH(8-3) bands, the Oxygen 557.7 nm and 630.0 nm lines intensities of nightglow	Beijing, China	2016
EGU General Assembly	Mesosphere-thermosphere regions coupling with the lower atmosphere through the inter-annual variations of the hydroxyl OH(8-3) bands, the oxygen 557.7 nm and 630.0 nm lines nightglow intensities	Vienna, Austria	2016
Solar Variability and its Heliospheric Effects, SCOSTEP	Cosmic factors in the inter-annual variability of the lower and upper atmosphere-ionosphere parameters by observations from Abastumani	Athens, Greece	2015
4th ACTRIS General Meeting	Troposphere aerosols and long-term variations of cloud covering in Abastumani	Clermont-Ferrand, France	2014
6th Meeting of the Network for Detections of Mesopause Change (NDMC)	Seasonal peculiarities of the inter-annual distribution of cloudless days and nights in Abastumani and their possible coupling with cosmic factors and lower atmosphere dynamics	Grainau, Germany	2014

Scientific event name	Title of the presentation	Event venue	Year
Byurakan-Abastumani Colloquium	Peculiarities of the inter-annual and seasonal variations of cloudless days and nights in Abastumani	Byurakan, Armenia	2013
3rd Workshop of the FP7 Framework Program Project ACTRIS	Lidar investigation of tropospheric aerosols on the territory of Georgia	Limasol, Cyprus	2013
39th Annual European meeting on Atmospheric Studies by Optical Methods	Cosmic factors in the vertical coupling of the lower and upper atmosphere by nightglow observations at Abastumani	Sopot, Poland	2012
4th Meeting of the Network for Detections of Mesopause Change (NDCM)	Inter-annual variations in the oxygen green 557.7nm line nightglow intensity and their possible regional peculiarities	Oberpfaffenhofen, Germany	2011
8th EARLINET-ASOS (European Aerosol Research Lidar Network) and OTEM 2009 (Optoelectronic Techniques for Environmental monitoring) Workshop	Some results of the lidar monitoring of the atmospheric aerosol vertical distribution over the territory of Georgia	Bucharest, Romania	2009
European Geosciences Union General Assembly	Coupling between the night variations in the red 630.0 nm line nightglow intensity and long-term changes in the meridional wind velocity	Vienna, Austria	2008
European Geosciences Union General Assembly	Annual distributions of magnetically disturbed cloudless days and nights in Abastumani (41.75N, 42.82E)	Vienna, Austria	2008
European Geosciences Union General Assembly	Preliminary results on the tropospheric aerosol vertical distribution on the territory of Georgia	Vienna, Austria	2008

Productivity index

#	Citation index	h-index
Google scholar	71.00	5.00