

Institute of Hydrometeorology

Scientific Report

2017B

Department of Water Resources and Hydrological Prognosis

I. 1. Scientific-Research Projects Planned and Implemented in 2017 Funded by the State Budget of Georgia  
(Concerns to scientific-research institutes)

#	Planned and Implemented project with the indication of scientific field and direction	Financing Organization	Project Supervisor	Project Performers
1	Assessment of irrigation areas in Western Georgia and prospects for their possible increase in terms of climate change  Earth sciences, Hydrology	State Budget	O. Shvelidze	I. Geladze
2	Assessment of the nature of mudflow hazard in Adjara region and identification of distribution zones with the recommendations for damage mitigation.  Earth sciences, Hydrology	State Budget	M. Salukvadze	N. Kobakhidze, G. Pipia

I.2. Extensive annotation of the theoretical and practical results of the transition (perennial) project stage (in Georgian)

#	Planned and Implemented project with the indication of	Financing Organization	Project Supervisor	Project Performers
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	scientific field and direction			
1	<b>Assessment of mudflow hazard in Kakheti region, mapping of distribution zones and damage mitigation recommendations</b> Earth sciences, Hydrology	State Budget	G. Kherkheulidze	G. Kherkheulidze
2	<b>Forecasting methodology for the run-off of water shortage period for irrigation systems (on the example of the Alazani river)</b> Earth sciences, Hydrology	State Budget	<b>Ts. Basilashvili</b>	G. Grigolia
3	Preparation of hydrological and glaciological reference book of Georgia	State Budget	N. Begalishvili T. Tsintsadze	V. Tsomaia G. Kherkheulidze M. Salukvadze Ts. Basilashvili E. Elizbarashvili L. Intskirveli N. Arutiniani G. Grigolia R. Meskhia G. Gachechiladze I. Kruashvili N. Begalishvili S. Gorgijanidze N. Tsintsadze N. Khupenia

## Department of Climatology and agro-Meteorology

I.2. Extensive annotation of the theoretical and practical results of the transition (perennial) project stage (in Georgian)

№	Planned and Implemented project with the indication of scientific field and direction	Project Supervisor	Project Performers
1	2	3	4
1	Study of climate, climate and agro-climatic resources of separate administrative regions of Georgia (Racha-Lechkhumi-Kvemo Svaneti) (2016-2018)/  Earth Sciences - Climatology, agrometeorology	E. Elizbarashvili	E. Elizbarashvili, G. Meladze, R. Samukashvili, J. Vachnadze, M. Meladze, L. Kartvelishvili, Sh. Elizbarashvili, N. Chelidze, N. Pipia, N. Shavishvili, Ts. Diasamidze

## Department of Environmental Pollution Monitoring and Forecasting

I.2. Extensive annotation of the theoretical and practical results of the transition (perennial) project stage (in Georgian)

№	Planned and Implemented project with the indication of scientific field and direction	Project Supervisor	Project Performers
1	Determination of heavy metals background concentrations in ecosystems in the active impact regions of Eastern Georgia and evaluation of ecological conditions in urban centers through numerical modalities and natural observations.  <b>Natural sciences. Earth Science and related environmental sciences: meteorology, environmental chemistry</b>	Liana Intskirveli	GThe whole staff of the department

2	Elaboration of the text book "Basics of Hydrometeorological Aspects of Environmental Monitoring" for the study and teaching of ecology basics in higher and vocational institutions Natural sciences: Ecology, Geophysics, meteorology, climatology, agrometeorology	Gari Gunia	Gari Gunia
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**Department of Weather Forecast, Natural and Technogenic Disaster Modeling**

**I. 1. Scientific-Research Projects Funded by the State Budget of Georgia Planned and Implemented in 2017 by the Independent Scientific Research Institutes of Universities**

Nº	Planned and Implemented project with the indication of scientific field and direction	Project Supervisor	Project Performers
1	Weather and Climate Regional multilateral forecasting methods Georgian conditions (2014-17) 1.5. Earth and Environmental Sciences; Scientific direction - Meteorology, Climatology	Marika Tatishvili	D. Demetrashvili I. Mkurnalidze I. Samkharadze L. Chinchaladze
2	Evolution of glaciation of Georgia on the background of modern climate changes based on data from satellite remote methodologies and ground observations. 2014-2017. Scientific Field 1.5. Earth and Environmental Sciences; Scientific direction - oceanography, hydrology, water	Larisa Shengelia	Giorgi Kordzakhia Vasil Tsomaia

	resources		
3	Establishing potential adaptation to climate change for the priority sectors of the economy of Georgia. Scientific Field 1.5. Earth and Environmental Sciences; Scientific direction - water resources	Bakur Beritashvili	Naili Kapanadze Tengiz Tsintsadze Lia Kartvelishvili Nanuli Zotikishvili

I.2. Extensive annotation of the theoretical and practical results of the transition (perennial) project stage (in Georgian)

#	Planned and Implemented project with the indication of scientific field and direction	Financing Organization	Project Supervisor	Project Performers
	Modular calculations of kinetic energy of air flow for separate regions of Georgia, taking into consideration the interaction with local relief of the flow <b>Scientific Field 1.5. Earth and Environmental Sciences</b>	Ministry of Education and Science	Zurab Khvedelidze Senior Scientific Worker	Inga Samkharadze Scientific Worker Nanuli Zotikishvili Leading Engineer