INTERNATIONAL CONFERENCE
"Data Intensive System Analysis for Geohazard Studies"
18–21 July 2016
Sochi region, Mountain cluster, Russia
SCIENTIFIC PROGRAM

Monday, 18.07.2016
Business Meetings (part 1) 14:00–16:30
Opening Ceremony 17:00–18:30
- **Welcoming Notes 17:00–18:00**

  - **Prof. Alexey Gvishiani** – Co-chair of the conference, Director of the Geophysical Center of RAS (GC RAS), President of the National Geophysical Committee of Russia (NGC), Russia
  - **Prof. Pavel Kabat** – Co-chair of the conference, Director General and Chief Executive Officer of the International Institute for Applied Systems Analysis (IIASA), Austria/The Netherlands
  - **Mr. Anatoly Pahomov** – Sochi Mayor, Russia
  - **Prof. Alexander Gliko** – Academician Secretary of the Earth Science Branch of the Russian Academy of Sciences, Russia
  - **Prof. Geoffrey Boulton** – President of the ICSU Committee on Data for Science and Technology (CODATA), United Kingdom
  - **Dr. Elena Shmeleva** – Member of the Presidential Council for Science and Education, Russia
  - **Dr. Alevtina Chernikova** – Rector of the National University of Science and Technology "MISiS" (NUST "MISiS"), Russia

- **"Introduction to the International Council for Science" 18:00–18:30**

  Dr. Heide Hackmann – Executive director of the International Council for Science (ICSU), South Africa

Welcome Reception 18:30–21:00
Tuesday, 19.07.2016 08:30–10:30
Oral Session (part 1)
Geophysical systems dynamics, data analysis and extreme events (I) XEV 1
Moderators: **Dr. Heide Hackmann (South Africa)*, Dr. Alexey Malovichko (Russia)**

08:30–08:50	**Prof. Pavel Kabat** International Institute for Applied Systems Analysis (IIASA), Austria/The Netherlands TBA
08:50–09:10	**Dr. Simon Hodson** ICSU Committee on Data for Science and Technology (CODATA), United Kingdom/France CODATA: A DATA STRATEGY FOR A BIG DATA WORLD

09:10–09:30	**Prof. Fred Roberts** Department of Homeland Security Center of Excellence: Command, Control and Interoperability Center for Advanced Data Analysis (CCICADA), United States WHAT IS BIG DATA AND HOW HAS IT CHANGED?
09:30–09:45	**Dr. Elena Rovenskaya** International Institute for Applied Systems Analysis (IIASA), Austria/Russia RECONCILING INFORMATION FROM CLIMATE-ECONOMIC MODEL ENSEMBLES
09:45–10:00	**Dr. Stefan Hochrainer-Stigler** International Institute for Applied Systems Analysis (IIASA), Austria MODELLING DEPENDENT RISK WITH COPULAS: AN APPLICATION ON FLOODING USING AGENT-BASED MODELLING
10:00–10:15	**Prof. Igor Sheremet** Russian Foundation for Basic Research (RFBR), Russia MULTISET APPROACH TO THE ESTIMATION OF CONSEQUENCES OF NATURAL DISASTERS IMPACTS ON INDUSTRIAL SYSTEMS
10:15–10:30	**Dr. Nadejda Komendantova** International Institute for Applied Systems Analysis (IIASA), Austria/Russia IMPACTS OF GEOPHYSICAL HAZARDS ON CRITICAL INFRASTRUCTURE: CASE STUDY OF ELECTRICITY TRANSMISSION NETWORKS

<u>Tuesday, 19.07.2016 11:00–13:00</u>
Oral Session (part 2)
Geophysical systems dynamics, data analysis and extreme events (II) XEV 2
<u>Moderators:</u> **Dr. Heide Hackmann (South Africa)*, Dr. Alexey Malovichko (Russia)**

11:00–11:15	**Dr. Alexander Sterin** Russian Research Institute for Hydrometeorological Information – World Data Center (RIHMI–WDC), Russia SYSTEM ANALYSIS IN RIHMI-WDC FOR THE MULTI-PURPOSE DATA COLLECTION, STATISTICAL PROCESSING AND ANALYSIS OF HYDROMETEOROLOGICAL HAZARDOUS PHENOMENA

Hazards in the Earth's electro-magnetic environment and geomagnetic observations MAG
<u>Moderators:</u> **Prof. Alexey Gvishiani (Russia), Dr. Jeffrey Love (United States)***

11:15–11:35	**Prof. Mioara Mandea** National Centre for Space Studies (CNES), France THE 2015 NEPAL EARTHQUAKE – A SIGNATURE ON THE MAGNETIC SWARM SATELLITES DATA?

11:35–11:55	**Prof. Alexey Gvishiani / Dr. Anatoly Soloviev** Geophysical Center of RAS (GC RAS), Russia GEOINFORMATIC ADVANCES IN GEOMAGNETIC DATA STUDIES AND RUSSIAN INTERMAGNET SEGMENT
11:55–12:15	**Dr. Jeffrey Love** US Geological Survey (USGS), United States USGS INDUCTION HAZARD SCIENCE
12:15–12:30	**Mr. Evgenii Narkhov** Ural Federal University (UrFU), Russia GEOMAGNETIC MONITORING OF GAS AND OIL PIPELINES FOR PREVENTION OF TECHNOGENIC ACCIDENTS
12:30–12:45	**Dr. Olga Kozyreva** Schmidt Institute of Physics of the Earth of RAS (IPE RAS), Russia CONSTRUCTION AND VALIDATION OF ULF WAVE INDICES AS INDICATORS OF TURBULENT ENERGY TRANSFER INTO THE MAGNETOSPHERE
12:45–13:00	**Prof. Danis Nurgaliev** Kazan Federal University (KFU), Russia STUDYING OF THE EVOLUTION OF OIL-SOURCE STRATA USING SATELLITE SYSTEMS: ASSESSMENT OF AFFECTION ON GLOBAL CLIMATE AND WORLD'S OIL AND GAS RESERVES

Tuesday, 19.07.2016 14:30–16:30
Oral Session (part 3)
Earth surface hazards: tectonic and induced earthquakes, volcano activity, landslides, sandstorms (I) HAZ 1
Moderators: **Prof. Alexander Gliko (Russia), Prof. Mioara Mandea (France)**

14:30–14:50	**Dr. Alexey Malovichko** corr. member of RAS, Geophysical Survey of RAS (GS RAS), Russia SEISMIC MONITORING AND PREDICTION OF LARGE SCALE CATASTROPHIC EVENTS AT MINES OF THE VERKHNEKAMSKOYE POTASH DEPOSIT
14:50–15:10	**Prof. Petr Shebalin** Institute of Earthquake Prediction Theory of RAS (IEPT RAS), Russia SEISMIC HAZARD FROM AFTERSHOCKS OF LARGE EARTHQUAKES
15:10–15:30	**Prof. Alexey Gvishiani** full member of RAS, Geophysical Center of RAS (GC RAS), National Geophysical Committee (NGC), Russia SEISMIC ZONATION AND SYSTEMS ANALYSIS

15:30–15:45	**Dr. Vyacheslav Gusiakov**
	Institute of Computational Mathematics and Mathematical Geophysics SB of RAS (ICMMG SB RAS), Russia
	ASSESSMENT OF TSUNAMI HAZARD FOR THE BLACK SEA COAST BASED ON HISTORICAL DATA AND NUMERICAL MODELING
15:45–16:00	**Prof. Mikhail Gokhberg**
	Schmidt Institute of Physics of the Earth of RAS (IPE RAS), Russia
	THE DYNAMICS OF THE STRESS STATE OF SOUTHERN CALIFORNIA BASED ON GEOMECHANICAL MODEL AND CURRENT SEISMICITY: SHORT-TERM EARTHQUAKE PREDICTION
16:00–16:15	**Dr. Viktor Seleznev**
	Geophysical Survey of RAS (GS RAS), Russia
	NANOSEISMOLOGY AS A TOOL FOR THE STUDY OF NATURAL AND TECHNOGENIC HAZARDS
16:15–16:30	**Dr. Antonella Peresan**
	University of Trieste, Italy
	TBA

Tuesday, 19.07.2016 17:00–19:00
Oral Session (part 4)
Earth surface hazards: tectonic and induced earthquakes, volcano activity, landslides, sandstorms (II) HAZ 2
<u>Moderators:</u> **Prof. Valery Bondur (Russia), Dr. Antonella Peresan (Italy)**

17:00–17:20	**Prof. Valery Bondur**
	full member of RAS, "Aerocosmos" Research Institute, Russia
	SATELLITE MONITORING OF NATURAL HAZARDS
17:20–17:40	**Prof. Vladislav Petrov**
	corr. member of RAS, Institute of Geology of Ore Deposits, Petrography, Mineralogy and Geochemistry of RAS (IGEM RAS), Russia
	INTEGRATION OF GEOSTRUCTURAL AND TECTONOPHYSICAL DATA INTO THE 2D/3D GIS-BASED GEODYNAMIC MODELS OF THE ARGUN TERRANE, TRANSBAIKALIA, RUSSIA
17:40–18:00	**Prof. Alik Ismail-Zadeh**
	International Union of Geodesy and Geophysics (IUGG), Germany/Russia
	GEOHAZARD MODELING AND ASSESSMENTS FOR DISASTER RISK REDUCTION
18:00–18:15	**Prof. Matthias Holschneider**
	University of Potsdam, Germany
	MAXIMUM MAGNITUDE: THE LIMITS OF WHAT CAN BE LEARNED FROM DATA

18:15–18:30	**Prof. Valentin Mikhailov**
	Schmidt Institute of Physics of the Earth of RAS (IPE RAS), Russia
	GRACE DATA ON TEMPORAL VARIATIONS OF THE EARTH GRAVITY FIELD REVEALED LARGE-SCALE ASEISMIC CREEP IN THE AREA OF MAJOR EARTHQUAKES
18:30–18:45	**Dr. Kusumita Arora**
	National Geophysical Research Institute (NGRI), India
	TECTONIC REGIME OF KOYNA-WARNA INTRAPLATE RESERVOIR TRIGGERED SEISMIC ZONE FROM SURFACE AND SUBSURFACE FEATURES
18:45–19:00	**Prof. Vladimir Kossobokov**
	Institute of Earthquake Prediction Theory of RAS (IEPT RAS), Russia
	STATE-OF-THE-ART ASSESSMENT OF SEISMIC HAZARD AND RISKS

Tuesday, 19.07.2016 19:00–20:30
Poster Session
Poster Session PST
Moderators: **Dr. Viktor Tatarinov (Russia), Dr. Srinagesh Davuluri (India)***

Wednesday, 20.07.2016 08:30–10:30
Oral Session (part 5)
GIS technology for Earth science and practical applications GIS
Moderators: **Mr. John Broome (Canada)*, Dr. Anatoly Soloviev (Russia)**

08:30–08:50	**Prof. Geoffrey Boulton**
	ICSU Committee on Data for Science and Technology (CODATA), United Kingdom
	EARTH OBSERVATION DATA FOR GEO-RISK REDUCTION
08:50–09:05	**Dr. Evgenia Cheremisina**
	VNIIGeosystem, Russia
	NEW GIS-TECHNOLOGIES FOR ENVIRONMENTAL MONITORING AND NATURE-USE PROBLEMS
09:05–09:20	**Dr. Oleg Petrov**
	Karpinsky Russian Geological Research Institute (VSEGEI), Russia
	ADVANCED INTERNATIONAL STUDIES IN THE CIRCUMPOLAR ARCTIC
09:20–09:40	**Dr. Seyed Neser Hashemi**
	Damghan University, Iran
	SEISMOGENIC POTENTIAL AND EARTHQUAKE HAZARD ASSESSMENT IN IRAN: A GIS-BASED APPROACH

Climate, geophysical and ecological extremes in the Arctic region (I) ARC 1
Moderators: **Prof. Geoffrey Boulton (United Kingdom)*, Prof. Valery Vernikovsky (Russia)**

09:40–10:00	**Dr. Ivan Frolov / Dr. Alexander Klepikov** Arctic and Antarctic Research Institute (AARI), Russia NATURAL AND CLIMATIC RISKS IN THE ARCTIC
10:00–10:15	**Dr. Alexander Gelfan** Water Problems Institute of Russian Academy of Sciences (WPI RAS), Russia HYDROLOGICAL EXTREME PROJECTIONS IN THE LENA BASIN: MODELING AND UNCERTAINTY ISSUES
10:15–10:30	**Dr. Sergey Sokratov** Lomonosov Moscow State University (MSU), Russia THE CHANGING CLIMATE AND ECONOMICAL POTENTIAL OF THE RUSSIAN ARCTIC

Wednesday, 20.07.2016 11:00–13:00
Oral Session (part 6)
Climate, geophysical and ecological extremes in the Arctic region (II) ARC 2
Moderators: **Prof. Geoffrey Boulton (United Kingdom)*, Prof. Valery Vernikovsky (Russia)**

11:00–11:20	**Prof. Leopold Lobkovsky** corr. member of RAS, Shirshov Institute of Oceanology of RAS (IO RAS), Russia SWEDISH-RUSSIAN-US ARCTIC OCEAN INVESTIGATION OF CLIMATE-CRYOSPHERE-CARBON INTERACTIONS THE SWERUS-C3 PROGRAM
11:20–11:40	**Dr. Hanna Lappalainen** University of Helsinki, Finland PAN-EURASIAN EXPERIMENT (PEEX) PROGRAM OVERWIEV - TOWARDS COORDINATED COHERENT DATA SYSTEMS ENABLING SERVICES FOR THE SOCIETY
11:40–12:00	**Prof. Valery Vernikovsky** corr. member of RAS, Institute of Petroleum Geology and Geophysics SB of RAS (IPGG SB RAS), Russia COMPLEX GEOLOGICAL AND GEOPHYSICAL DATA TO SUPPORT THE EXTERNAL BORDER CONTINENTAL SHELF OF THE RUSSIAN ARCTIC
12:00–12:15	**Dr. Anni Reissell** International Institute for Applied Systems Analysis (IIASA), Austria IIASA ARCTIC FUTURES INITIATIVE AND FINLAND, COUNTRY OF/ON EXTREMES?

12:15–12:30	**Prof. Vasily Bogoyavlenskiy**
	corr. member of RAS, Oil and Gas Research Institute of RAS (OGRI RAS), Russia
	NATAURAL AND TECHNOGENIC THREATS DURING OIL & GAS FIELDS DEVELOPMENT IN THE ARCTIC AND WORLD OCEAN
12:30–12:45	**Dr. Vladimir Ivanov**
	Hydrometeorological Center of Russia, Russia
	OBSERVED AND PREDICTED CLIMATE CHANGE IN THE ARCTIC BARENTS REGION AND POSSIBLE CONSEQUENCES FOR ENVIRONMENTAL AND SOCIO-ECONOMIC CONDITIONS

Geoinformatic maintenance of safety of mining and underground construction (I) UND 1
Moderators: **Dr. Alevtina Chernikova (Russia), Prof. Leonid Vaysberg (Russia)**

12:45–13:00	**Prof. Valery Zakharov / Prof. Vasily Malinnikov**
	Institute of Comprehensive Exploitation of Mineral Resources of RAS (IPKON RAS), / Moscow State University of Geodesy and Cartography (MIIGAiK), Russia
	EXPERIENCE OF USE OF THE AUTOMATED LINEAMENTARY ANALYSIS OF SPACE IMAGES FOR STUDYING OF MODERN GEODYNAMICS

Wednesday, 20.07.2016 14:15–16:35
Oral Session (part 7)
Geoinformatic maintenance of safety of mining and underground construction (II) UND 2
Moderators: **Dr. Alevtina Chernikova (Russia), Prof. Leonid Vaysberg (Russia)**

14:15–14:30	**Prof. Vladimir Melnik**
	National University of Science and Technology "MISiS" (NUST "MISiS"), Russia
	GEOINFORMATIC MAINTENANCE OF SAFETY OF UNDERGROUND MINING OF SHALLOW COAL SEAMS
14:30–14:45	**Dr. Viktor Tatarinov**
	Geophysical Center of RAS (GC RAS), Russia
	MODERN CRUSTAL MOVEMENTS IN THE AREA OF UNDERGROUND ISOLATION OF HIGH-LEVEL RADIOACTIVE WASTE (NIZHNE-KANSKY MASSIF)
14:45–15:05	**Prof. Leonid Vaysberg**
	corr. member of RAS, REC "Mekhanobr-tekhnika", Russia
	CONTROLLED MAGNETIC ANOMALY APPLICATION IN TECHNOLOGY
15:05–15:20	**Prof. Sergei Kubrin**
	Institute of Comprehensive Exploitation of Mineral Resources of RAS (IPKON RAS), Russia
	GEOINFORMATION MONITORING OF GEODYNAMIC AND GAS-DYNAMIC STATE OF THE ROCK MASS

15:20–15:35	**Prof. Konstantin Kolikov** National University of Science and Technology "MISiS" (NUST "MISiS"), Russia GEOINFORMATIONAL SUPPORT OF ESTIMATES AND FORECAST HAZARDOUS NATURAL PROCESSES IN MINING COAL SEAMS
15:35–15:50	**Prof. Andrian Batugin** National University of Science and Technology "MISiS" (NUST "MISiS"), Russia ANALYSIS OF DATA ON THE MANIFESTATION OF EXTREME EVENTS DURING DEVELOPMENT OF MINERAL RESOURCES AND THEIR RELATIONSHIP WITH THE DYNAMICS OF THE BLOCKS OF THE EARTH CRUST
15:50–16:05	**Dr. Anton Bychkov** National University of Science and Technology "MISiS" (NUST "MISiS"), Russia STUDY OF ROCK SAMPLES USING LASER ULTRASONIC STRUCTUROSCOPY AND TOMOGRAPHY
16:05–16:20	**Prof. Vitaly Adushkin** full member of RAS, Institute of Geosphere Dynamics of RAS (IDG RAS), Russia UPGROWTH OF STRONG INDUSED TECTONIC EARTHQUAKES IN CONDITIONONS OF TECHNOGENIC LOADING ACCUMULATION
16:20–16:35	**Prof. Ramin Doostmohammadi** University of Zanjan, Iran SUPPORT PRESSURE ANALYSIS IN SWELLING ROCK

Wednesday, 20.07.2016 16:45–18:00
The Great Debate
The Great Debate TGD

Thursday, 21.07.2016
Business Meetings (part 2) 09:30–11:30
Business Meetings (part 3) 12:00–13:30

List of Posters:
Geophysical systems dynamics, data analysis and extreme events
XEV

XEV-01	**Dr. Shamil Bogoutdinov** THE STUDYING OF TIME SERIES BY METHODS OF DISCRETE MATHEMATICAL ANALYSIS
XEV-02	**Mr. Sergej Belov** THE ANALYSIS OF MONITORING DATA OF THE PARAMETER SCATTERING POWER THE EARTH'S SURFACE IN THE SHORT-WAVE RANGE OF RADIO WAVES

XEV-03	**Dr. Vladimir Makarov** COASTAL MONITORING USING UNMANNED GROUND VEHICLES
XEV-04	**Dr. Denis Zeziulin** MODULAR AMPHIBIOUS VEHICLES FOR COASTAL RESEARCH
XEV-05	**Dr. Anna Timonina-Farkas** ACCURACY AND COMPUTATIONAL EFFICIENCY FOR RISK-MANAGEMENT OF NATURAL DISASTERS
XEV-06	**Mr. Andrey Sergeev** ON PERSPECTIVES OF INTERMAGNET OBSERVATORIES USAGE FOR RESEARCH IN SPIN GRAVITATIONAL INTERACTIONS AND COSMOLOGY
XEV-07	**Dr. Alexander Sterin** QUANTILE REGRESSION AS AN INSTRUMENT TO DETAILED CLIMATE TREND ASSESSMENT
XEV-08	**Dr. Alexander Sterin** TECHNOLOGIES OF RIHMI-WDC IN OLD DATA RESCUE, MANAGEMENT AND QUALITY ASSUREMENT
XEV-09	**Dr. Aleksei Liseikin** MONITORING OF EQUIPMENT AND BUILDINGS OF HYDROELECTRIC POWER PLANTS BY USING THE DATA OF SEISMIC OBSERVATIONS
XEV-10	**Dr. Viktor Seleznev** NANOSEISMOLOGY AS A TOOL FOR THE STUDY OF NATURAL AND TECHNOGENIC HAZARDS
XEV-11	**Prof. Victoria Kulikova** MODERN GEOLOGICAL KNOWLEDGE AS THE BASIS FOR THE ACCOUNTABILITY OF POLITICAL LEADERS FOR THE PROVOKED MAN – MADE GLOBAL CATASTROPHE
XEV-12	**Dr. Alexander Gelfan** CAN GLOBAL GEOPHYSICAL DATA BE USEFUL IN HYDROLOGY OF RIVER BASINS? EXAMPLE OF THE GRACE SATELLITE GRAVIMETRY

**Hazards in the Earth's electro-magnetic environment and geomagnetic observations
MAG**

MAG-01	**Mr. Evgeniy Uchaikin** DEVELOPMENT OF PORTABLE "NOISEMETER" TO PERFORM MAGNETIC AREA NOISE SURVEY
MAG-02	**Mr. Dmitry Kuleshov** PROBLEM OF GEOMAGNETIC SECULAR VARIATION ACCOUNTING FOR TECTONOMAGNETIC STUDIES
MAG-03	**Dr. Anatoly Soloviev** KLIMOVSKAYA: A NEW GEOMAGNETIC OBSERVATORY

MAG-04	**Dr. Khadidja Ferrat** CORRELATION BASED MODELING OF THE IONSPHERIC MAGNETIC FIELD
MAG-05	**Dr. Roman Sidorov** APPLICATION OF GENERALIZED REGRESSION ANALYSIS TECHNOLOGY FOR GEOMAGNETIC DATA FILTERING
MAG-06	**Prof. Viktor Getmanov** SPECTRAL-TIME ANALYSIS OF «SERPENTINE EMISSION» GEOMAGNETIC PULSATIONS
MAG-07	**Mr. Evgenii Narkhov** ABSOLUTE VECTOR OVERHAUSER MAGNETOMETERS POS-3&4 FOR GEOMAGNETIC MONITORING
MAG-08	**Dr. Renata Lukianova** EXTREMES IN THE SUBSTORM AURORAL ELECTROJET DURING THE TO EXCEPTIONALLY HIGH SOLAR WIND STREAMS
MAG-09	**Dr. Alexander Zaitsev** MAGNETIC STORMS ON YAMAL, EASTERN ARCTIC
MAG-10	**Dr. Roman Krasnoperov** NEW HARDWARE AND SOFTWARE COMPLEX FOR MONITORING AND ANALYSIS OF THE EARTH'S MAGNETIC ENVIRONMENT
MAG-11	**Dr. Nikolai Semakov** "SUPERSONIC" MAGNETIC POLES
MAG-12	**Prof. Vyacheslav Pilipenko** CHARACTERING THE GEOMAGNETIC FIELD VARIABILITY FOR THE STUDY OF GEOMAGNETIC STORM IMPACT ON ELECTRIC POWER LINES
MAG-13	**Dr. Valeriy Petrov** THRESHOLD SENSITIVITY OF QUARTZ TORSION MAGNETOMETERS ON A BASE OF VICALLOY AND SAMARIUM-COBALT
MAG-14	**Dr. Andrei Vorobev** ANALYTICAL INFORMATION SYSTEM FOR CONTROL AND SPECTRAL ANALYSIS OF GEOMAGNETIC FIELD AND SPACE WEATHER PARAMETERS
MAG-15	**Dr. Igor Aleshin** REAL TIME DATA ACQUISITION AND REMOTE CONTROL SYSTEM FOR STATIONARY GEOMAGNETIC OBSERVATIONS
MAG-16	**Mr. Oleg Nikiforov / Dr. Igor Aleshin** VISUALIZATION OF CHARACTERISTICS OF A MAGNETIC FIELD OF EARTH ON THE BASIS OF THE ARRIVING LAND AND SATELLITE GEOMAGNETIC DATA ON A DIGITAL DEMONSTRATION COMPLEX WITH THE SPHERICAL SCREEN
MAG-17	**Dr. Andrey Kotikov** MAGNETIC STATION «RED LAKE» (IAGA code: SPG). CONTINUATION OF A NUMBER OF PERMANENT MAGNETIC OBSERVATIONS IN THE VICINITY OF ST. PETERSBURG (RUSSIA) SINCE 1726

Earth surface hazards: tectonic and induced earthquakes, volcano activity, landslides, sandstorms

HAZ

HAZ-01	**Dr. Andrey Kotikov** DEFINITION OF FORTHCOMING STRONG EARTHQUAKE EPICENTER POSITION USING THE METHOD OF PASSIVE ULF MAGNETIC LOCATION
HAZ-02	**Dr. Andrey Kotikov** MAGNETIC FIELD VARIATIONS INDUCED BY TSUNAMI 11.03.2011 IN COASTAL ZONE
HAZ-03	**Mr. Yuri Isaev** SAR MONITORING OF LANDSLIDES IN THE BIG SOCHI REGION (THE GREAT CAUCASUS)
HAZ-04	**Dr. Anastasia Nekrasova** EARTHQUAKE HAZARD AND RISK ASSESSMENT BASED ON UNIFIED SCALING LAW FOR EARTHQUAKES THE GREATER CAUCASUS AND CRIMEA
HAZ-05	**Dr. Boris Dzeboev** RECOGNITION OF MODERATE EARTHQUAKE-PRONE AREAS IN CRIMEA AND WESTERN PART OF THE NORTH CAUCASUS
HAZ-06	**Dr. Boris Dzeboev** RECOGNITION OF EARTHQUAKE-PRONE AREAS IN KAMCHATKA BASED ON THE CLUSTERIZATIONAL RESEARCH OF EARTHQUAKE EPICENTER
HAZ-07	**Dr. Boris Dzeboev** SEISMIC ACTIVITY MONITORING OF CALIFORNIA BASED ON THE METHODS OF DISCRETE MATHEMATICAL ANALYSIS
HAZ-08	**Dr. Viktor Tatarinov** GEODYNAMIC HYPOTHESIS OF CATASTROPHIC EARTHQUAKES IN SUBDUCTION ZONES
HAZ-09	**Dr. Sandeep Sengar Singh** REMOTE SENSING FOR DISASTER RESPONSE AT SUB-PIXEL LEVEL
HAZ-10	**Prof. Grigory Steblov** SEISMOLOGY AND SATELLITE GEODESY: MULTISYSTEM APPROACH TO THE EARTHQUAKE MONITORING
HAZ-11	**Mr. Dmitry Kudin** AN APPROACH TO DEVELOP AUTONOMOUS MODULE OF LOCAL INFRASOUND MEASUREMENT NETWORK
HAZ-12	**Mr. Artyom Krylov** AUTOMATED EARTHQUAKE DETECTION AND PHASE PICKING FOR THE RECORDS OF BOTTOM SEISMOGRAPHS NETS
HAZ-13	**Dr. Alexander Ponomarev** VARIABILITY OF RESERVOIR INDUCED SEISMIC RESPONSE IN KOYNA-WARNA: FROM FIELD OBSERVATIONS TO LABORATORY SIMULATION

HAZ-14	**Dr. Alexey Sobisevich** FLUID-MAGMATIC SYSTEMS AND VOLCANIC CENTERS IN NORTHERN CAUCASUS: RESULTS OF GEOPHYSICAL AND GEOLOGICAL STUDIES
HAZ-15	**Dr. Srinagesh Davuluri / Mr. Rajender Chadha Kumar** SEISMICITY DATA AND LABORATORY EXPERIMENTS ON CORE SAMPLES FROM SEISMICALLY ACTIVE KOYNA REGION, INDIA
HAZ-16	**Dr. Seyed Neser Hashemi** STATISTICAL MODELING OF THE TEMPORAL PATTERN OF SEISMICITY IN THE ZAGROS REGION, IRAN
HAZ-17	**Dr. Vladimir Kaftan** DEFORMATION PRECURSORS OF LARGE EARTHQUAKES DERIVED FROM LONG TERM GNSS OBSERVATION DATA
HAZ-18	**Dr. Sergey Shopin** ON THE DEVELOPMENT OF A NEW SEISMOLOGICAL PARADIGM
HAZ-19	**Dr. Vyacheslav Gusiakov** EVALUATION OF TSUNAMI INTENSITY BASED ON RUN-UP DATA IN TSUNAMI CATALOGS
HAZ-20	**Prof. Leonid Vaysberg** TO THE THEORY OF TECHNOGENETIC SEISMICITY

Climate, geophysical and ecological extremes in the Arctic region
ARC

ARC-01	**Dr. Renata Lukianova** THERMAL AND DYNAMIC PERTURBATIONS IN THE WINTER POLAR ATMOSPHERE ASSOCIATED A MAJOR SUDDEN STRATOSPHERIC WARMING
ARC-02	**Ms. Elena Pizhankova** REMOTE SENSING DATA IN SMALL-SCALE PERMAFROST-HYDROGEOLOGICAL MAPPING PECHORA ARTESIAN BASIN
ARC-03	**Ms. Elena Pizhankova** PERMAFROST DYNAMICS ALONG THE COASTLINE OF THE AREA OF DMITRY LAPTEV STRAIT
ARC-04	**Dr. Anastasia Emelyanova** ESTIMATING THE ARCTIC FUTURES FROM THE ANGLE OF POPULATION DYNAMICS AND EDUCATIONAL PROGRESS
ARC-05	**Dr. Vladimir Kostsov** MONITORING AND MODELING OF ESSENTIAL ATMOSPHERIC PARAMETERS IN THE SUBARCTIC REGION
ARC-06	**Prof. Leopold Lobkovsky** GEODYNAMIC MODEL OF THE ARCTIC EVOLUTION AND THE OUTER LIMITS OF THE RUSSIAN CONTINENTAL SHELF IN THE ARCTIC OCEAN

ARC-07	**Prof. Marat Zakhidov** ANALITICAL SOLUTIONS FOR NON-LINEAR PARTIAL DIFFERENTIAL EQUATIONS

GIS technology for Earth science and practical applications
GIS

GIS-01	**Ms. Anastasia Odintsova** DEVELOPMENT OF GEOSPATIAL DATABASE ON HYDROCARBON EXTRACTION METHODS IN THE 20TH CENTURY FOR LARGE AND SUPERLARGE OIL AND GAS DEPOSITS IN RUSSIA AND OTHER COUNTRIES
GIS-02	**Ms. Gulshat Gilmanova** DEVELOPMENT OF GIS-PROJECT "GEODYNAMIC MODEL OF THE SIKHOTE-ALIN OROGENIC BELT AND ADJACENT AREAS AS A BASIS FOR STUDYIND, MONITORING AND FORECASTING NATURAL DISASTERS IN THE SOUTH OF THE RUSSIAN FAR EAST"
GIS-03	**Ms. Julia Zharkikh** METHODS OF DATA MINING FOR EARTH SCIENCE DATA ANALYSIS IN GIS ENVIRONMENT
GIS-04	**Mr. Alexander Koshkarev** ENSURING ENVIRONMENTAL SAFETY BY MEANS OF GIS
GIS-05	**Ms. Arina Uruzbiyeva** THE METHOD OF ESTIMATION AND PREDICTION OF ANTHROPOGENIC IMPACT OF MINING OBJECTS ON ENVIRONMENT
GIS-06	**Dr. Tatiana Khromova** GIS APPLICATIONS FOR GLACIOLOGICAL STUDIES
GIS-07	**Dr. Nina Frolova** KNOWLEDGE BASE ABOUT PAST EARTHQUAKES CONSEQUENCES
GIS-08	**Mr. Nikolay Nikiforov** GIS MODELING AND MACHINE LEARNING TECHNIQUES FOR HAZARD EVENT PREDICTION USING ENGINEERING SURVEY DATA
GIS-09	**Prof. Petr Martyshko** 3D DENSITY MODEL OF TIMAN PECHORA REGION
GIS-10	**Dr. Natalia Sergeyeva** DATA PUBLISHING UNDER THE "EARTH SCIENCE DATABASE" PROJECT

Geoinformatic maintenance of safety of mining and underground construction
UND

UND-01	**Dr. Boris Sterligov** UAV MONITORING OF A GEOTHERMAL FIELD IN OPERATION: KHANKALA RESERVOIR, NORTHERN CAUCASUS

UND-02	**Dr. Irina Chizhova** LOGICAL-INFORMATION MODELS OF GOLD ORE DEPOSITS AS THE TOOL FOR THEIR PREDICTION AND PROSPECTING
UND-03	**Mr. Vasiliy Cheskidov** DEVELOPMENT OF AN INTEGRATED SYSTEM OF ENGINEERING-GEOLOGICAL AND HYDROGEOLOGICAL MONITORING OF SAFETY OF OPERATION OF MINING AND TECHNICAL FACILITIES
UND-04	**Mr. Vasiliy Cheskidov** LANDSLIDE AREAS ENGINEERING-GEOLOGICAL ASSISTANCE DEVELOPMENT
UND-05	**Dr. Viktor Tatarinov** MODERN GEODYNAMICS OF SOUTH YENISEI RIDGE, ACCORDING TO GNSS OBSERVATIONS
UND-06	**Dr. Viktor Tatarinov** SYSTEMATIC APPROACH TO THE EVALUATION OF GEODYNAMIC STABILITY OF PLACEMENTS OF THE NUCLEAR FUEL CYCLE
UND-07	**Dr. Ilya Kolesnikov** UNIFIED NON-ALGEBRAIC FIELD/GEOMETRICAL APPROXIMATIONS FOR COMPUTATIONS
UND-08	**Mr. Alexander Chernikov** DEVELOPMENT AND UTILIZATION OF NEW GEOINFORMATIC ROCK ARRAY STRUCTURE AND PROPERTIES PREDICTION TECHNOLOGIES
UND-09	**Mr. Evgeny Zhuravlev** A MARKING AND FORECASTING METHODS OF DANGEROUS DYNAMIC PHENOMENA IN COAL SEAMS TO ENSURE SAFE CONDITIONS OF MINING OPERATIONS AT COAL MINES
UND-10	**Dr. Mikhail Eremin** FRACTAL CHARACTERISTICS OF SEISMIC PROCESS IN ROCK MASS AT MINING. MATHEMATICAL MODELLING AND ANALYSIS
UND-11	**Ms. Valeria Musina** JUSTIFICATION OF THE CHOICE OF LOCATIONS FOR THE COAL ROCK DUMPS ON THE BASIS OF DATA GEODYNAMIC ZONING
UND-12	**Dr. Vladislav Morozov** STRESS-STRAIN STATE (SSS) OF THE EPICENTRAL AREA OF THE 1992 M = 6,8 ERZINCAN EARTHQUAKE (TURKEY)

confirmation expected