10:40–12:23 | Lastochka express train from Moscow (railway terminal "Vostochny Vokzal") to Vladimir (Central Station)

12:30–13:30 Transfer from Vladimir (Central Station) to Suzdal (Hotel "Suzdal") 13:30–14:30 Lunch ¶ Main Restaurant "Suzdal"

CONFERENCE OPENING 🥊 Hall "Pokrovskiy" 16:00-17:00 Welcome Speech:

14:30-15:30 Room check-in

08:00-09:00

11:00 - 11:15

11:15 - 11:30

11:30-12:00

12:00 - 12:15

12:15 - 12:30

12:30 - 12:45

16:00-16:05 ALEXEY GVISHIANI, Academician RAS, Chairman of the Conference Program Committee, Scientific Director of the Geophysical Center of the RAS 16:05–16:10 ALEXANDER GLIKO, Academician RAS, Member of the Presidium of the RAS, Head of the Scientific Direction "Planetary Geophysics and Geodynamics" at the Schmidt Institute of Physics of the Earth

16:10–16:15 **ALEXANDER MAKSIMOV**, Deputy Governor of the Vladimir Region 16:15–16:20 NIKOLAY KASIMOV, Academician RAS, First Vice-President of the Russian Geographical Society, President of the Faculty of Geography of MSU, Deputy Chairman of the Conference Program Committee

16:25-16:30 ALEXEY SOBISEVICH, Corresponding Member RAS, Deputy Academician-Secretary of the Earth Sciences Division of the RAS

16:30–16:35 IGOR ROZENBERG, Corresponding Member RAS, Deputy Chairman of the Conference Program Committee, Scientific Director of the Russian University of Transport

16:35–16:40 ELENA ROVENSKAYA, International Institute for Applied Systems Analysis (IIASA), Laxenburg, Austria

16:45–16:55 NATALIA FOMENKO, Scientific Secretary of the Program Committee. Review of welcome telegrams

16:40–16:45 **NEL AMORÉ**, Ph.D., Applied Geomagnetic Researcher, The South African National Space Agency

16:20-16:25 VALERY BONDUR, Academician RAS, Scientific Director of the Research Institute "AEROKOSMOS"

PLENARY SESSION P Hall "Pokrovskiy"

Chairman: ALEXANDER GLIKO

17:30-18:00

18:00-18:30 XIAOTAO CHANG, Dr.Sc., Prof., Deputy Chief Designer, Land Satellite Remote Sensing Application Center, Ministry of Natural Resources of China VIACHESLAV GUSIAKOV, Doctor of Physical and Mathematical Sciences, Head of the Laboratory of Mathematical Modeling of Tsunami Waves, Institute of

18:30-19:00 Computational Mathematics and Mathematical Geophysics, SB RAS

19:00–19:30 MUSTAFA TOKER, Dr.Sc., Assoc. Prof., Yuzuncu Yıl University of Turkey 20:00–23:00 | Welcome Reception | Restaurant "Soviet"

September 26 Breakfast Photel's restaurant

Coffee break P Hall "Pokrovskiy"

ELENA ROVENSKAYA,

IIASA,Laxenburg, Austria

IGOR SHEREMET.

Academician RAS.

GC RAS, Moscow, Russia

GEORGII ALEXANDROV,

IAP RAS, Moscow, Russia

SERGEY AGAYAN,

GC RAS, Moscow, Russia

VLADIMIR CHEVERDA,

IM SB RAS, Novosibirsk, Russia

EVGENY KOLESNIKOV,

RIHMI-WDC, Obninsk, Russia

OKSANA MANDRIKOVA,

IKIR FEB RAS, Petropavlovsk-Kamchatsky,

BORIS DZEBOEV,

GC RAS, Moscow, Russia

SEMEN TEPLOUKHOV,

ASU, Maykop, Russia

BORIS DZERANOV,

GC RAS, Moscow, Russia

NINA FROLOVA,

IGE RAS, Moscow, Russia

SERGEY SOKOLOV,

Corresponding Member RAS,

GIN RAS, Moscow, Russia

ALEXEY MOROZOV.

IPE RAS, Obninsk, Russia

DARIA GUSHCHINA, prof. RAS,

MSU, Moscow, Russia

EVGENIY KOZLOVSKIY,

AARI, St. Petersburg, Russia

ROMAN SIDOROV.

GC RAS, Moscow, Russia

GALINA RESHETOVA.

IM SB RAS. Novosibirsk, Russia

TATIANA ALEKSEEVA,

AARI, St. Petersburg, Russia

MIKHAIL LATONIN,

ICERS, St. Petersburg, Russia

SVYATOSLAV MILANOVSKIY.

IEG RAS, Moscow, Russia

VLADISLAV PETROV.

Corresponding Member RAS, IGEM RAS, Moscow, Russia

YURI GOVORUKHIN.

IPKON RAS, Novokuznetsk, Russia

VALERIY PETROV,

IZMIRAN, Moscow, Russia

NIKOLAY MASHYANOV.

Lumex-Marketing, St. Petersburg, Russia

KIRILL ROMANEVICH,

VNIMI, St. Petersburg, Russia

VASILIY MINAEV,

IGEM RAS, Moscow, Russia

IGOR OGNEV,

KFU, Kazan, Russia

ANDREY KOSTIANOY,

GC RAS, Moscow, Russia

EUGENE MOROZOV.

IO RAS, Moscow, Russia

KSENIYA MYACHINA,

IS UrB RAS, Orenburg, Russia

OLGA RAKOVA,

SUSU, Chelyabinsk, Russia

ALEXANDER LINKOV.

IEC RAS, Sochi, Russia

LEV MURAVYEV,

IG UB RAS, Ekaterinburg, Russia

FAGIM GARAEV,

KFU, Kazan, Russia

SHAMIL BOGOUTDINOV,

GC RAS, Moscow, Russia

EKATERINA UVAROVA

TsNIGRI, Moscow, Russia

ANNA DOLGAYA, IVS FEB RAS,

Petropavlovsk-Kamchatsky, Russia

ALEXANDER STERIN

RIHMI-WDC, Obninsk, Russia

ALEXANDER LINKOV.

IEC RAS, Sochi, Russia

EVGENIYA PAVLOVA,

AARI, St. Petersburg, Russia

ANNA GVOZDEVA.

INM RAS, Moscow, Russia

GEORGII ALEXANDROV,

IAP RAS, Moscow, Russia

VLADIMIR CHEVERDA.

IM SB RAS, Novosibirsk, Russia

GRIGORY BOYARSHINOV,

GC RAS, Moscow, Russia

SCIENTIFIC SESSIONS (ORAL PRESENTATIONS) 09:00-19:30 ¶ HALL "SMOLENSKIY" ¶ HALL "VOSKRESENSKIY" **SESSION 3. Geoinformatics in Earth Sciences.**

SESSION 4. System Analysis and Big Data.
Conveners: ELENA ROVENSKAYA, ALEXEY GVISHIANI Conveners: GRIGORY STEBLOV, ROMAN KRASNOPEROV 9:00 - 9:15Variations of the effective elastic thickness of the LEV BURSHTEIN MIKHAIL KABAN. Forecast of hydrocarbon accumulation distribution by Corresponding Member RAS, lithosphere unveil diverse tectonic regimes in GC RAS, Moscow, Russia IPGG SB RAS, Novosibirsk, Russia Northeastern Eurasia

bodies

spatiotemporal processes

Kuril Islands"

a swamp crossed by a road

Method of separating potential fields by depth

Using Earth remote sensing data and ground-based

research to monitor the state of urban ecolandscapes

CKP "IKI-Monitoring" - a platform for working with

remote sensing data

Extreme Events in the Western Pacific - East Asia

Region

Hydroinformatics as a basis for data management,

modeling and analysis in water resources

management

On the methods of constructing a digital regional

geological and mathematical model for the territory of

systems based on geoinformation technologies and

processing of Earth remote sensing data using the

xample of individual areas of the Russian Federation

Volumetric modeling based on GIS INTEGRO

Using GIS technologies to assess the distribution of

icing in the southern geocryological zone

Russian software and technology complex GIS

INTEGRO and digital platform VNIGNI for

comprehensive support of geological research for oil

and gas

Geoinformation system "Arktika-M": current state

Remote sensing of archaeological sites in the

Southern Urals using geophysics and machine

Statistical Diagnostic of Regional Appraise of

Seismicity of North East India Himalaya

Limits of applicability of the Gutenberg-Richter law in

seismic hazard assessment tasks

On the applicability of the concept of seismotectonic

domains in the problem of seismic hazard

Locations of the strongest earthquakes in the Pacific

On the stages of manifestation of seismic regime

anomalies before earthquakes

A series of strong earthquakes in Chile at the

beginning of the 21st century: similarities, differences

relationships

United Catalogue of Earthquakes in the Russian

Arctic

New integrated approach to earthquake forecasting

Systematic Earthquake Forecasting Technology

Temporary seismological networks on

Kuril-Kamchatka volcanoes: data processing

Modeling of Mantle-Crust Migrant Systems – A New

Approach to Systems Analysis of Seismic Events

Determination of spectral parameters for earthquakes

of the Klyuchevskaya group of volcanoes

Formalized identification of earthquake preparation

features in the Baikal rift zone

Assessment of the development and carbon balance

of ecosystems in the territory of oil fields based on

satellite and UAV data Karst hazard in the vicinity of the Kurtatinsky gorge

(Republic of North Ossetia - Alania)

Geomechanical studies of rock masses for special

objects

Modeling the stress-strain state of epicentral zones of

strong crustal earthquakes

Geodynamic model of the northern part of the

Nizhnekansky massif

Geodynamic zoning based on system analysis of

geological and geophysical information of the territory

of the underground research laboratory in Krasnoyarsk Krai Changes in the seismic regime at engineering

acilities under the influence of natural and man-made

factors

Electronic scientific journal "Russian Journal of Earth

Sciences". 25 years in Earth Sciences

Satellite studies of anthropogenic film pollution of

Avacha Bay

Dependence of cloud droplet growth on their size and

the presence of an electric field

Geomagnetic observations to account for variations in

the external magnetic field during inclined and

horizontal directional drilling

Modeling the distribution of the magnetic field of the

pedestal on the magnetic observatory

Mercury analyzer "RA-915M"

Coffee break P Hall "Pokrovskiv"

Western Siberia Principles of creating regional structural weight forecast and exploration models of ore-forming

PETR MARTYSHKO, Parallel algorithms for solving direct and inverse 9:15 - 9:30 Corresponding Member RAS, problems of gravimetry IG UB RAS, Ekaterinburg, Russia

GULNARA VOROBEVA, Experience of using web GIS technologies in global 9:30 - 9:45 UUST, Ufa, Russia geophysical forecasting tasks IGOR ALESHIN. Application of kNN analysis to interpret geophysical measurements

9:45 - 10:00 GC RAS, Moscow, Russia Reproduction of the North Atlantic circulation in order to find the crash site of the AZZO airliner (flight AB NIKOLAY DIANSKY, 10:00 - 10:15 447 Rio de Janeiro - Paris. 01.06.2009) by MSU, Moscow, Russia calculating the reverse trajectories of the detected

Geoinformation technology for monitoring natural ALEXANDER DERENDYAEV, 10:15 - 10:30 IITP RAS, Moscow, Russia ANNA DOLGAYA, IVS FEB RAS, Geoinformation system "Thermomineral waters of the 10:30 - 10:45 Petropavlovsk-Kamchatsky, Russia Retrospective analysis of spectral properties of the DANIL ILYASOV, 10:45 - 11:00 underlying surface to assess the hydrological state of YUSU, Khanty-Mansiysk, Russia

DENIS BYZOV. IG RAS, Ekaterinburg, Russia TATYANA KRUPNOVA, SUSU, Chelyabinsk, Russia

EVGENY LOUPIAN, IKI RAS, Moscow, Russia LEONID MITNIK, POI FEB RAS, Vladivostok, Russia **VSEVOLOD MOREIDO,** WPI RAS, Moscow, Russia

ANDREW SIDOROV. RACRUS, Tyumen, Russia

BINM SB RAS, Ulan-Ude, Russia

EVGENIA CHEREMISINA

VNIGNI, Moscow, Russia

MIKHAIL KUCHMA,

FEC "SRC "Planeta", Khabarovsk, Russia

LEV MURAVYEV,

UrFU, Ekaterinburg, Russia

DAYA SHANKER, prof.

IIT, Roorkee, India

PETR SHEBALIN,

Corresponding Member RAS, IEPT RAS, Moscow Russia

RUBEN TATEVOSSIAN,

IPE RAS, Moscow, Russia

ALEXANDER GORSHKOV.

IEPT RAS, Moscow, Russia

VLADIMIR SMIRNOV.

MSU, Moscow, Russia

IRINA VLADIMIROVA,

IO RAS, Moscow, Russia

INESSA VOROBEVA,

IEPT RAS, Moscow, Russia

MIKHAIL RODKIN,

IEPT RAS, Moscow, Russia

VALERI GITIS,

IITP RAS, Moscow, Russia

SERGEI ABRAMENKOV,

IPGG SB RAS, Novosibirsk, Russia

VLADIMIR VASILYEV.

GI SB RAS, Ulan-Ude, Russia

ALISIYA MOLOKOVA,

IEPT RAS, Moscow, Russia

ELENA LEVINA,

IEC RAS, Irkutsk, Russia

ALEXANDER KAVERIN,

YUSU, Khanty-Mansiysk, Russia

KSENIA KOCHUBEY,

GC RAS, Moscow, Russia

DASTAN AKMATOV,

GC RAS, Moscow, Russia

ALEXANDER MANEVICH.

GC RAS, Moscow, Russia

ROMAN SHEVCHUK,

GC RAS, Moscow, Russia

ILIYA LOSEV,

GC RAS, Moscow, Russia

BORIS TRIFONOV.

IEG RAS, Moscow, Russia

NATALYA FOMENKO.

GC RAS, Moscow, Russia

VALERY BONDUR,

Academician RAS,

DMITRY GABYSHEV.

GC RAS, Moscow, Russia

VALERIY PETROV.

IZMIRAN, Moscow, Russia

SERGEY KHOMUTOV.

ICR RAS, Paratunka, Russia

NATALIIA MAIOROVA,

11:15-11:45 | CONFERENCE CLOSING CEREMONY | Hall "Spasskiy"

x-Marketing, Moscow, Russia

SESSION 6. System analysis of seismic hazard.
Conveners: PETR SHEBALIN, ALEXANDER PONOMAREV

SESSION 1. Natural and anthropogenic disasters.

SESSION 2. Environment and transport

SESSION 8. Instrumentation for research in geosciences.

12:45 - 13:00 STEPAN USTINOV, 13:00 - 13:15 IGEM RAS, Moscow, Russia EGOR BOLSHAKOV RRGOI, Moscow, Russia BAIR TSYDYPOV.

13:15 - 13:30 13:30 - 13:45 13:45 - 14:00

14:00-15:00 15:00 - 15:15 15:15 - 15:30 15:30 - 15:45

15:45 - 16:00 16:00 - 16:15 16:15 - 16:30

16:45 - 17:00 17:00 - 17:15 17:15 - 17:30 17:30-18:00

18:00 - 18:15 18:15 - 18:30 18:30 - 18:45

18:45 - 19:00 19:00 - 19:15 20:00-23:30

09:30-11:00

11:45–12:00 Room check-out

12:00–13:00 Lunch P Main Restaurant "Suzdal"

13:00–15:30 Tour of Suzdal 15:30–17:00 Transfer from Suzdal to Vladimir (Central Station) 17:44–19:28 | Lastochka express train from Vladimir (Central Station) to Moscow (railway terminal "Vostochny Vokzal")

ANATOLY SOLOVIEV, Corresponding Member RAS, Co-Chairman of the Conference Program Committee, Director of the GC RAS; ALEXEY GVISHIANI, Academician RAS, Chairman of the Conference Program Committee, Scientific Director of the GC RAS

70 YEARS OF THE GEOPHYSICAL CENTER OF THE RAS: HISTORY OF FORMATION AND MODERN STATUS VALERIY VERNIKOVSKIY, Academician RAS, Dean of the Faculty of Geology and Geophysics of the Novosibirsk State University, Head of the Laboratory of the SYSTEMIC STUDIES OF TECTONIC PROCESSES AND GEODYNAMIC MODELING OF KEY STRUCTURES OF THE RUSSIAN ARCTIC Institute of Oil and Gas Geology and Geophysics of the SB RAS

September 25

EASTERN ANATOLIA, TURKEY

size. Status and problems

Data-Intense Modeling for Informed Resource

Management Decisions Under Uncertainty

Multiset methods for assessing the stability and

recoverability of systems

Patterns of Decline in Arable Land Area in the Central

Russian Plain, According to HILDA+ Data

About the latest results in DMA

Multiparameter inverse problems of multiwave

seismic exploration

On the maintenance of the Unified State Fund of Data

on the State of the Environment and its Pollution

System analysis in space weather problems based on

the results of the Aurora system

Geodynamic research in the problem of systemic

assessment of seismic hazard of the Ossetian sector

of the Greater Caucasus

Using climate and geospatial data in assessing greer

energy potential and designing renewable energy

systems

About the activities of World Data Centers

Systematic Research for Seismic Risk Management

Using Big Data

Tectonics of the Eastern Arctic and the origin of the

Amerasian Basin

Seismicity of the Western Sector of the Russian Arctic

Thermodynamic response to El Niño/La Niña in the

Northern Hemisphere polar latitudes

Distributed ship instrumental observation system

STMK

Multicomponent geophysical model of the lithosphere

and upper mantle of the Arctic

Modeling the temperature-dependent variability of

seismic properties of frozen multi-phase media

Monitoring sea ice characteristics to study ice

navigation conditions

Enhanced convergence of atmospheric and oceanic

heat fluxes in the Barents Sea region under modern

global warming

Man-made talik as an indicator of the state of

permafrost interacting with hydraulic structures

Methodological aspects of forecasting and

mineragenic studies using Earth remote sensing data

An integrated approach to developing efficient gas

emission control systems in coal mine extraction

IZMIRAN magnetic field models for the oil and gas

New Possibilities of Gas-Mercury Surveying in the

Analysis of seismic activity characteristics in coal

mines and quarries

Analysis of fault tectonics of the

Taimyr-Severozemelsky orogen and its role in ore

formation based on the results of remote regional

Satellite gravimetry as a tool for forecasting oil and

gas potential

Geoinformation analysis of regional climatic changes

in the Central and Western Russian Arctic for railway

development

Abyssal flows of Antarctic Bottom Water in deep

channels of the Atlantic

Analysis of spatial heterogeneity of ecosystem carbon

sink capacity based on satellite data

Using Earth remote sensing data and ground-based

studies of snow cover conditions in monitoring coal

mines

Holistic Model of the Arctic as an Object of

Anthropogenic Pollution

Magnetometry for searching for archaeological,

man-made objects and extraterrestrial matter

DEM analysis for the purposes of forecasting the oil

and gas potential of large areas

Fuzzy spectra of time series

Using NextGIS Web network GIS systems to analyze

geological data and identify promising areas during

tasks in Artic

The influence of El Niño on the troposphere of the

Arctic latitudes according to reanalysis data, the

Russian climate model of the Institute of Numerical Mathematics of the RAS and CMIP6 models

Impact of permafrost retreat on carbon balance in

ecosystems

Seismic monitoring of permafrost rocks of the

Russian Arctic shelf

Platform of interactive 3D (spherical) visualization

global geospatial data "ORBUS-PRO"

studies

Near-Earth Atmosphere

SESSION 5. System studies of natural processes in the Arctic.

Conveners: VALERIY VERNIKOVSKIY, MIKHAIL KABAN

Lunch ¶ Main Restaurant "Suzdal"

SESSION 9. Oil and gas and mining complexes.
Conveners: SERGEY KRIVOVICHEV, DASTAN AKMATOV

SESSION 2. Environment and transport. Conveners: IGOR ROZENBERG, ANDREY KOSTIANOY

September 27

Breakfast ¶ Hotel's restaurant POSTER SCIENTIFIC SESSION. EXHIBITION OF SCIENTIFIC PRODUCTS, EQUIPMENT AND SERVICES | Hall "Kaminniy"

Chairman: VLADISLAV PETROV

SESSION 3. Geoinformatics in Earth Sciences

EXHIBITION

MONITORING OF ARCTIC SEA ICE CHANGES BASED ON ICESAT-2 AND SENTINEL-2 SATELLITES

THE LARGEST NATURAL DISASTERS IN THE HOLOCENE AND THEIR IMPACT ON CLIMATE VARIATIONS AND EARTH'S ECOSYSTEMS

DECEMBER 31TH, 2023 CONSECUTIVE EARTHQUAKE RUPTURES (Mw 4.5, 4.5) INTO N-END OF THE ARABIAN PLATE BOUNDARY, SE-CORNER OF

VALENTIN MIKHAILOV

Corresponding Member RAS,

IPE RAS, Moscow, Russia

ALEXEY SOBISEVICH,

Corresponding member RAS,

IPE RAS, Moscow, Russia

OLGA GIRINA, IVS FEB RAS,

Petropavlovsk-Kamchatsky, Russia

MARIA VOLKOVA.

IPE RAS, Moscow, Russia

PETR DOKUNIN,

RUDN, Moscow, Russia

ALEKSEI LISEIKIN,

GS RAS, Novosibirsk, Russia

VLADIMIR KAFTAN.

GC RAS, Moscow, Russia

SVETLANA KISHKINA,

IDG RAS, Moscow, Russia

ALEXEY ZAVYALOV.

IPE RAS, Moscow, Russia

VIKTOR PUPATENKO,

ITG RAS, Khabarovsk, Russia

VLADISLAV ZAALISHVILI,

GPI VSC RAS, Vladikavkaz, Russia

TATIANA MALOVA,

IO RAS, St. Petersburg, Russia

ALEKSEI DIDENKO.

Corresponding Member RAS,

GI RAS, Moscow, Russia

AMORÉ NEL,

SANSA, Hermanus, South Africa

ANDREI VOROBEV,

UUST, Ufa, Russia

ANATOLY BRONNIKOV.

ITG RAS, Khabarovsk, Russia

VIKTOR GETMANOV.

GC RAS, Moscow, Russia

RUSLAN RYTOV.

IZMIRAN, Obninsk, Russia

VYACHESLAV PILIPENKO

GC RAS, Moscow, Russia

ELENA SOKOLOVA,

VNIGNI, Moscow, Russia

EDWARD UTEMOV.

KFU, Kazan, Russia

YURIY TURBIN,

AARI, St. Petersburg, Russia

YURY VINOGRADOV,

GS RAS, Obninsk, Russia

SERGEY KHOMUTOV,

ICR RAS, Paratunka, Russia

VLADIMIR MINLIGAREEV.

IAG, Moscow, Russia

DMITRY KUDIN

GC RAS, Moscow, Russia

SERGEY GACHENKO,

INRTU, Irkutsk, Russia

VLADISLAV LOPATIN,

VNIIFTRI, Mendeleevo, Russia

SERGEY SERDYUKOV,

CIM SB RAS, Novosibirsk, Russia

MURAT MURZABEKOV,

VNIIFTRI, Mendeleevo, Russia

DMITRIY GOGLEV,

Geoscan, St. Petersburg, Russia

KAMIL UZBEKOV,

TSU, Tolyatti, Russia

RUSLAN DAVLATOV,

VNIIFTRI, Mendeleevo, Russia

ALEXANDER GORSHKOV,

IEPT RAS, Moscow, Russia

NATALIA SERGEEVA,

GC RAS, Moscow, Russia

ELENA SOKOLOVA,

VNIGNI, Moscow, Russia

VIKTOR PUPATENKO,

ITG RAS, Khabarovsk, Russia

HALL "SPASSKIY"

SESSION 1. Natural and anthropogenic disasters. Conveners: VALERY BONDUR, VIKTOR TATARINOV

Coffee break P Hall "Kaminniy"

SESSION 7. Geomagnetism and space weather Conveners: ALEKSEI DIDENKO, ANATOLY SOLOVIEV

SESSION 8. Instrumentation for research in geosciences.

Conveners: MIKHAIL LEBEDEV, DMITRY KUDIN

Coffee break P Hall "Kaminniy"

SESSION 6. System analysis of seismic hazard

SESSION 7. Geomagnetism and space weather

SESSION 9. Oil, gas and mining complexes

Problems of studying coseismic and postseismic

processes

New possibilities of morphometric analysis of relief

and computer geodynamic modeling for identifying

zones of possible earthquake foci in areas of active

recent tectogenesis

VolSatView information system for complex analysis

of volcanic activity

Some results of studies of volcanic processes using

satellite radar interferometry methods

Development of crustal internal displacement deficit

according to GNSS data before and during the

Hualien, Taiwan earthquake (03 April 2024, Mw=7.4)

Remote monitoring of hazardous processes at large

industrial facilities

Experimental recording of slow deformation waves

from GNSS data in connection with strong

earthquakes

Monitoring of strong man-made tectonic earthquakes.

Necessity and possibility

From the Round-the-World Seismic Echo to the

Omori Epoch and the Bifurcation of the Earthquake

Focal Zone

Prospects for Seismological Monitoring in the Amur

Region: Citizen Science and Neural Network Methods

of Data Processing

The influence of geodynamic processes on the

geoecological vulnerability of the territory

Representative Catalogue of Neva Floods. Principles

of Construction

Depths of the base and roof of the magnetically active

layer of the Amur plate

A comparative investigation of geomagnetic jerks

across the SAA during the period 2000-2020

An approach to non-hardware assessment of the

the Arctic region

Display of the fault network of the Sikhote-Alin

orogenic belt in geophysical fields

Digital processing of geomagnetic observations

based on approximation model methods

Application of artificial neural networks for

prolongation and restoration of vector anomalous

geomagnetic field

Electromagnetic response of near-Earth space to

thunderstorms and industrial activity Towards an assessment of the risks of hazardous

impacts of space weather on Arctic infrastructure

facilities: a study of the variability of magnetotelluric

fields along the Messoyakha-Norilsk gas pipeline

Methodology for decomposing models of the main

geomagnetic field into "free" eccentric magnetic

dipoles

Dynamics of anomalous magnetic field as a possible

indicator of changes in heat flow intensity

Application of mobile infrasound systems for solving

various problems Problems of processing primary data from magnetic

observatories: will modern mathematical technologies

help?

Instrumental support for ionospheric, magnetic and

heliogeophysical observations

The system for accumulation, processing and

analysis of geomagnetic data MAGNUS

Automation of data processing of robotic

UAV-geophysical systems using the "DDV" module

Using a bistatic radar system on GNSS signals

Methods and devices for diagnostics and monitoring

of rock massifs

Complex for high-precision measurements of the

parameters of the Earth's gravitational field

The potential of modern unmanned aircraft systems in

Earth exploration

Application of induction-dynamic drive in pulse

seismic sources

Quantum Space Accelerometer to Study Arctic

Gravity Field

Potential earthquake sites in the Central Asian mobile

belt

Databases on earthquakes in seismically active

zones of the USSR in the period 1911–1957

Analysis of the relationship between seismicity of the

Lena-Anabar trough region and the features of its

Isolation and analysis of swarm sequences in the

Amur region

An Intelligent Method for Detecting Forbush Effects in

Cosmic Ray Variations

Geomagnetic hyperactivity in the early

Neoproterozoic

Calculation of frequency characteristics of

geomagnetic signals based on the method of local

approximation models

A systematic approach based on a complex of

processes of formation and exploration of deep

hydrocarbon deposits

Well positioning methods

eochemical, geotectonic data and GIS to explain the

evel of geo-induced currents in the power systems of

geological exploration planning for diamonds, non-ferrous and precious metals Geoinformation system "Ecological and geochemical characteristics of Kamchatka rivers" SESSION 4. System Analysis and Big Data

Detailed climate trend assessment and their spatial

patterns as a Big Data problem in climatology General theory and technology of graphical structuring and presentation of knowledge as an

OKSANA MANDRIKOVA, IKIR FEB RAS, Petropavlovsk-Kamchatsky, Russia effective tool for system analysis SESSION 5. System studies of natural processes in the Arctic

INESSA GOLOVANOVA IG FRC RAS, Ufa, Russia VIKTOR GETMANOV, Spatial data analysis for ice information forecasting GC RAS, Moscow, Russia

> MIKHAIL RODKIN, IEPT RAS, Moscow, Russia ANDREJ VALCHUK. TechOFS, Oktyabrsky, Russia

DARIA SKRIPACHEVA,

UAV "Geoscan Gemini" Geoscan, Moscow, Russia