

TECHNOLOGY OF DEFINITION OF METRIC PARAMETERS OF TERRITORY OF THE RUSSIAN FEDERATION UNDER THE GEOSPATIAL DATA

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In article the description of the basic technological operations which are a part of developed technology of definition of metric parameters of territory of the Russian Federation under the geospatial data, including is given: creation on DTM in scale 1:100 000 Bases of the spatial data on territory of the Russian Federation, the basic and control definition of metric parameters of territory of the Russian Federation, an estimation of accuracy of the received results.

Key words: technology, definition of metric parameters of territory, Base of the spatial data, GIS-software.

RECONCILIATION OF BUILDING STRUCTURES WITH USING LASER DEVICES

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In the article is considered process of application laser theodolite with beam scan in the vertical plane, allowing to define position in plan and vertical of designs with method of lateral leveling.

Key words: a laser theodolite, adjustment of building constructions.

WORKING OUT AND RESEARCH OF THE SPECIALIZED SOFTWARE FOR DEFINITION OF METRIC PARAMETERS OF TERRITORY OF THE RUSSIAN FEDERATION

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In article the description and research specialised software GeoOper, intended for definition of metric parameters of territory of the Russian Federation and an estimation of accuracy of the received results on the algorithms and a technique developed by the author is given.

Key words: definition of metric parameters of territory of Russia, GIS, length of objects on a spheroid, length of objects on a topographical surface of the Earth, the area of objects on a surface spheroid, an estimation of accuracy of definition of metric parameters.

MODERN GEODYNAMICS OF FAR EAST REGION OF RUSSIA BY THE RESULTS OF GEOPHYSICAL AND GEODYNAMIC MEASUREMENTS

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In this paper we discussed the current geodynamic for Far-East region of Russia. There are situated three tectonic plates: North-America, Eurasia and Pacific plate and three small plates: Amur, Okhotsk-sea and Bering-sea. Different information about plate rotation poles and seismology situation were estimated. We discuss the structure of Far-East region observed by different geophysical methods. Seismic results were presented for Magadan-Vrangel profile.

Key words: geophysical method, tectonic plate, plates movement, interplate border location, seismological studies, the earth's crust, earthquake.

USING SATELLITE IMAGES OF FREE ACCESS FOR UPDATING DIGITAL MAPS OF SCALE 1 : 100 000

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The article describes using satellite images for updating maps of scale 1:100 000 for the purpose of anti-damage actions.

Key words: actualization, map, updating, satellite images, open source.

HIGH-SCALE PLAN CREATION TECHNIQUE BY MEANS OF AREAL IMAGES AND LIDAR DATA

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The technique of digital images and lidar data combine using for high-scale plan creation in TerraSolid software is presented in the article.

Key words: digital images, laser points, lidar scanning, methodic, plan, accuracy assessment.

DEFINING GEOMETRICAL INVARIANTS OF SPACE CURVE IN APPLIED GEOINFORMATICS

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In applied geoinformatics when studying some space-and-time properties of the systems every system of the is connected with some geometrical object (a multitude of points, a line, some surface, etc.), which is simply defined by a certain number of numerical values and geometrical images. If an object like a solid body is moved the values won't change, whereas the geometrical images will move together with the object and their relative disposition will remain unchanged.

The numerical values and the geometrical images possessing these properties are called the geometrical invariants of the object. The space curve is one of such geometrical objects. No difficulties of principle arise in calculating the geometrical invariants of the surface curve if its coordinate functions are known. Such cases are

extremely rare in applied geoinformatics. As a rule the curve is set up by a multitude of points with known coordinate parameters and it is next to impossible to define the geometrical invariants by these data. In order to overcome this difficulty and to solve the contradictory problem it is necessary to receive the analytical parametrical description of the space curve on the basis of the existing data. The solution of this problem will enable calculating the geometrical invariants of the curve and by their change to calculate the state of the objects in space and in time.

Key words: geoinformatics, spline interpolation, geometrical invariants, space curve.

IMPROVEMENT OF TECHNOLOGY OF THE STATE REGISTRATION OF THE RIGHTS WITH USE OF POSSIBILITIES OF THE MULTIPURPOSE CENTER

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In article questions of increase of overall performance on the state registration of the rights to real estate and transactions with it on the basis of interaction of Management of «Rosreestr» across the Novosibirsk region and the Multipurpose center for rendering of the state and municipal services are considered.

Key words: real estate, state registration, protection of a property, state inventory of real estate.

MAIN CONDITIONS OF RATIONAL USE OF LANDS OF WOOD FUND

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The task of rational use of lands (COPEs) is considered, questions of its decision are discussed and conditions of COPEs of the wood fund, the developments which were a basis of the corresponding criteria of an assessment of COPEs of specific wood (land) lots and forest areas are formulated.

Key words: rational use of lands, criteria of an assessment, wood (land) lots.

ECONOMIC TASKS OF TERRITORIAL PLANNING AND ECOLOGICAL REASONS FOR DESTINY OF THE EARTH

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The model of regulations of creation of STP according to local technical and economic, ecological and hygienic projects is offered. The complex analysis creates optimization of development of the territory as a social and economic cluster. Categories of land use prove eksternaliya, and in aggregate destiny of separate sites of the subject of federation. OVOS and ecological examination purchase bases of the proof of conclusions.

Key words: scheme of territorial planning, category of land use, sanitary-and-epidemiologic requirements.

MODELLING OF VOLCANIC ERUPTION PRODUCTS

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A model estimating the size of the particles of ash at different distances from the source of the volcanic eruption. In these field studies of tephra deposits in the vicinity of the volcano Chikurachki (Paramushir, Kuril Islands), a numerical reconstruction of fields of characteristic size of particles precipitated from the atmosphere.

Key words: volcanic eruption, volcanic ash, volcanic ash spreading, tephra.

INNOVATION TECHNOLOGIES FOR COMPLEX RECYCLING OF HYDROCARBON PRODUCTION WASTES: EFFICIENCY IMPROVEMENT

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The problems of oil and gas production efficiency improvement are considered.

Key words: innovations, oil, gas, complex processing

FEATUREA OF INTEGRATION OF THE ZOOLOGICAL DATA IN GIS ENVIRONMENT

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The using of the primary empirical data in GIS is the most informative for cognition. Various types of the zoological data are characterized by features of processing for creation of the spatial databases. It is possible to create databases with results of the calculation of animals without essential preliminary processing of the information. Preliminary statistical processing is necessary for storage and the analysis of morphological characteristics and reproductive parameters of populations.

Correct manipulations with the information about the meetings of rare species to carry out most difficult. Spatial objects and their borders are specific to each data type.

Key word: calculation of animals, population, animal assemblages, community, fauna, spatial database, zoological cartography, GIS, geoanalysis.

COMPLEX ECOLOGICAL MONITORING OF COAST OF DRYING SALTY LAKES BARABA

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Tendencies of climate change of Baraby are that that in the course of further numerous lakes considerable territories on the area will be released. Use of complex ecological monitoring allows to study a condition and dynamics of drying water objects and formed territories.

Key words: flood plains of salty lakes, remote methods, complex research, dynamics of ecosystems.

THE THERMAL IMAGING DEVICE BASED ON DOMESTIC ARRAY PHOTODETECTOR FOR SPECTRAL REGION 3–5 MKM

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The article describes the thermal imaging device based on the domestic array photodetector, features and characteristics of the thermal imager are given as well as the images obtained by the developed thermal imaging device.

Key words: thermal imaging device, photodetector, characteristics.

EXPERIMENTAL RESEARCHES HEAT-METER METHOD AND DEVICE FOR MEASURING OF HEAT CARRIER PARAMETERS

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In article are given the results of the experimental researches of the heat measurements method of heat carrier parameters. Described scheme of additional sensors and measuring system. Confirmed performance of the heat-meter method.

Key words: additional sensors, heating system, a heat-meter method, measuring system, heat carrier, heat power, mass consumption.

INCREASE OF ACCURACY OF CALIBRATION OF SENSORS OF THE HEAT FLUX AT THE EXPENSE OF THE EXCEPTION OF INFLUENCE OF HETEROGENEITY OF THE THERMAL FIELD

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In article questions of increase of accuracy of calibration sensors of a heat flux are considered.

The technique of definition of coefficient of transformation of sensors in the conditions of a heterogenous thermal field is offered.

Key words: calibration, a coefficient of transformation, a heterogenous thermal field.

RESULTS OF ACCEPTANCE-2012 IN SGGA – ORIYENTIR ON THE HIGH-QUALITY ENTRANT

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THE ROLE OF THE EDUCATIONAL AND METHODOLOGICAL ASSOCIATION (TMA) ON EDUCATION IN THE DIRECTION OF «LAND AND INVENTORIES» IN TRAINING FOR THE SIBERIAN REGION

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ABOUT THE PRESENT AND FUTURE OF THE CENTRE OF TELEMATICS AND TELECOMMUNICATIONS SSGA

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