

## SUMMARY

***Barladin O., Yaroshuk P. Utilization of high spatial resolution space images for creation of a city spacephotoatlas (by the example of Kyiv) // Uchenye zapiski TNU. Series: Geography, 2006. – Vol. 19 (58). №.2 – P. 3-10***

Technical characteristics and capabilities of their montage are examined. The methodology of radiometric and geometric processing of images for minimization of distortions on high-resolution satellite images are stated. The stages of overlaying of images with information layers of electronic city-plan in GIS-Kyiv are considered. Updated vector layers were exported from ArcView shape format to Adobe Illustrator format for preparation of spacephotoatlas to poligraphic edition, where as a background the space image is used, which's color was converted from RGB to CMYK-scale.

Key words: spacephotoatlas, space images, geoinformation system.

***Danchenko A., Zorin S., Olijnyk T., Kozliti V., Seredinin E., Trokoz V. Using of modern GIS in region's management practice // Uchenye zapiski TNU. Series: Geography, 2006. – Vol. 19 (58). №.2 – P. 11-15***

This article describe creation of information-analytical center (IAC) for region's environmental management through GIS using. It describes main architectural principles, center's features and content

Key words: Environmental management, ArcIMS, IAC, ecology.

***Efimov S.A. Integration of the crimean repatriates into the ukrainean society: geoinformation point of view to the analysis // Uchenye zapiski TNU. Series: Geography, 2006. – Vol. 19 (58). №.2 – P. 16-24***

Potential of the geoinformation point of view in research of the processes of the integration of the repatriates are described. Features of the linguistic self-identification of Crimean Tatars and their distribution on the Crimea are analyzed. Various aspects of the one of key problems of the integration – investment of repatriates with land resources are investigated.

Key words: repatriates, integration, land resources, geoinformation mapping.

***Ischuk O., Pavelchak T. GIS for efficient control of the city territories // Uchenye zapiski TNU. Series: Geography, 2006. – Vol. 19 (58). №.2 – P. 25-29***

The primary goals and components of information base municipal Ukraine GIS are resulted in the article. It is paid attention to the basic problems, braking development of municipal GIS and ways of their decision are offered.

Keywords: geographic information systems, municipal economy, communications, emergency situations.

***Kaydanskiy V.V., Kolotuhin V.A., Koltukhov S.G. Use of GIS-technologies as a necessary stage of creation of a cadastre of monuments of archeology on an example of region Sivash // Uchenye zapiski TNU. Series: Geography, 2006. – Vol. 19 (58). №.2 – P. 30-37***

In clause(article) use of GIS is described at creation of the information cadastral system reflecting a level of a modern condition of monuments of archeology in territory of region Sivash.

Key words: GIS-technologies, a cadastre, monuments of archeology, region Sivash.

**Kostrikov S.V. Geoecological zoning by the determination of the fluvial topography watershed organization on the base of GIS-tools // Uchenye zapiski TNU. Series: Geography, 2006. – Vol. 19 (58). №.2 – P. 38-47**

This paper introduces some constituents of the author's methodological concept of the geoinformation modeling for different components of the watershed environment. The parameters of the fluvial topography system organization have been firstly implemented for applied geoecological task solutions – the forest trees zoning within a large water-divide area in a mountain region. The general scheme of the combined geoinformation model has been depicted. It represents the base for geoecological zoning. The predictive analysis for spatial classification is outlined and illustrated with the software user's interface.

Key words: geoinformation model, fluvial topography, a watershed, geoecological zoning.

**Krisenko S.V., Krisenko M.V., Gorodisskij G.O. Application of GIS-technologies from ESRI for needs of the forestry // Uchenye zapiski TNU. Series: Geography, 2006. – Vol. 19 (58). №.2 – P. 48-53**

In article the considered ways of creation digital cartographical material for conducting the forestry. It is describes technology of use of the complex approach of using different sources of receipt of the data and their data in uniform system.

The attention is drew to orientation of the created material on state level of conducting, both in cadastre forestry is stressed, by creation of the allocated GIS.

Key words: cadastre, ESRI, GIS-technologies, remote sensing, electronic map, monitoring automatic methods.

**Lychak A.I., Lementa V.A., Lementa A.A. Geoinformational ensuring procedure of geographical bases of subject organization natural protected areas (on example regional landscape park 'Caralarskyi') // Uchenye zapiski TNU. Series: Geography, 2006. – Vol. 19 (58). №.2 – P. 54-61**

This article is devoted to questions about geoinformational ensuring procedure of geographical bases of subject organization natural protected areas in regional landscape park 'Caralarskyi', necessity deeper inculcation GIS-technology in practice of protected areas proves.

Main subjects: object of natural protected areas, landscape park, GIS (geoinformational systems), geoinformational ensuring, Crimea.

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***Lyuta N.G., Krasnozhan M.D., Sanina I.V. Definition in GIS of toxic chemical elements regional geochemical background concentrations in bottom sediments within Ukraine // Uchenye zapiski TNU. Series: Geography, 2006. – Vol. 19 (58). №.2 – P. 62-69***

On the basis of analysis in GIS information concerning chemical compound of Ukraine's small rivers bottom sediments, the toxic chemical elements regional geochemical background concentrations of this component of landscapes (within landscape bioclimatic subareas) are determined. The main regularities of chemical elements distribution in bottom sediments within the bounds of Ukraine are established.

Key words: bottom sediments, background concentration, landscape bioclimatic subarea, GIS

***Lyalko V.I. Ukrainian Contribution to International Program “Global Earth Observation System of Systems” // Uchenye zapiski TNU. Series: Geography, 2006. – Vol. 19 (58). №.2 – P. 70-74***

The directions of participation of Ukraine in realization of international project GEOS are discussed. The framework of management of regional Ukrainian system GEOS-GMES and block-diagram of remote sensing data management are given. The advantages, which Ukraine has from participation in project, are considered.

Key words: Remote Sensing, Environment Monitoring, Arospace Information, Geoinformation Technologies.

***Neposhivalenko N.A., Karpenko O.A. Geoinformation estimation of the reasons of sinking and revealing of its influence on an ecological condition in city of Dneprodzerzhinsk // Uchenye zapiski TNU. Series: Geography, 2006. – Vol. 19 (58). №.2 – P. 75-82***

In clause with the help of geoinformation systems and software ArcGIS of a level ArcINFO the interaction natural and technical of the factors essentially influencing a problem of sinking in city of Dneprodzerzhinsk is investigated with the purpose of completion of an electronic card of sinking and development of the recommendations concerning reduction of negative influence of sinking on an ecological condition in city.

Key words: Sinking, of industrial waters, ecological condition, geoinformation system, electronic card.

***Nikolaev V.M., Toporova E.A., Kashaoba I.A. Means of an operative press of maps and plans in ArcGIS 9 // Uchenye zapiski TNU. Series: Geography, 2006. – Vol. 19 (58). №.2 – P. 83-87***

In clause are considered questions of an operative press of cards and plans by means of program complex ArcGIS 9 on an example of Kharkov.

Key words: ArcGIS 9, an operative press.

***Palekha Y.N. The GIS-technologies using in monetary estimation of city territories and their investment appeal // Uchenye zapiski TNU. Series: Geography, 2006. – Vol. 19 (58). №.2 – P. 88-97***

The summary: in article the general approaches to an estimation of investment appeal of city territories are described. Influence of results of a monetary estimation on investment appeal of territories and the grounds of various functional and target use is opened. Examples of GIS-technologies introduction in an estimation of investment appeal of city territories in Kharkov are considered.

Key words: GIS-technologies, investment appeal of city territories, a normative monetary estimation.

***Panasyuk M.I., Pidberesniy S.S., Skorbun A.D., Alfyorov A.M., Orujiy A.P., Levin G. V., Klyuchnikov A.A., Kanchenko V.A. Use of GIS-technologies for forecasting of radioactive wastes quantities in soils on the industrial site around destroyed 2-th unit of Chornobyl NPP // Uchenye zapiski TNU. Series: Geography, 2006. – Vol. 19 (58). №.2 – P. 98-103***

An example of construction of geoinformation system, created using ArcGIS 8.3 for analyze of soils radioactive contamination in the “Shelter” object area of Chornobyl NPP have been examined. For the first time a scientific founded calculation of the radioactive wastes (radioactive soils) quantities at the places of New Safety Confinement building has been given, and a map of bedding is shown.

Key words: ChNPP, NSC, RAW, GIS.

***Polishchuk O. Approbation of software product ArcGis9 in works under the analysis of a condition and possible directions of development of regions of Ukraine // Uchenye zapiski TNU. Series: Geography, 2006. – Vol. 19 (58). №.2 – P. 104-110***

In the article the essence of geoinformatsioonih technologies and their value is considered in the management of regional development taking into account existing normatively – legal base. The methodological and methodical bases of development of thematic informative blocks are lighted up as component elements of geoinformatsionnogo proekta. It is offered structurally – graphic chart of the «GIS region of Ukraine». Possibilities of integration of offered proekta in National are marked GIS Ukraine. The method of functioning «GIS region of Ukraine» in ArcGis 9 is described.

Key words: regional development, Ukrainian region GIS, subject structure of data base.

***Popov M.A., Markov S.Y. Modern Approaches for Remote Sensing Portal // Uchenye zapiski TNU. Series: Geography, 2006. – Vol. 19 (58). №.2 – P. 111-118***

The approaches to develop remote sensing (RS) data portal are considered that based on IT achievements, international experience and existing standards. Particular attention is focused on creation of catalogue service that provides effective storing and processing metadata for RS data. The profile of RS metadata standard and structure of digital RS data catalogue are offered.

Key words: Remote Sensing, Catalogue Service, Metadata, Data Profile.

***Saltovets A., Nikolaev V., Lomonosova O. An example of the approach to formation of structure of National Spatial Data of Ukraine // Uchenye zapiski TNU. Series: Geography, 2006. – Vol. 19 (58). №.2 – P. 119-131***

In clause questions of construction of models spatial given are considered by means of language UML. «Administrative-territorial division and settlements» the model of creation of segment NSDI is developed for a set of classes ArcGIS.

Key words: language UML, classes ArcGIS, NSDI, spatial data.

***Sanina I.V. The using GIS for complex estimation of an ecological condition of geological environment of frontier territories // Uchenye zapiski TNU. Series: Geography, 2006. – Vol. 19 (58). №.2 – P. 132-139***

Significant technogeny loading has caused changes of an ecological condition of geological environment. This influence has got scales touching frontier with Ukraine of territory, and has caused necessity of performance of an estimation of an ecological condition of geological environment.

Generalization of a plenty of the saved information have enabled to define the tasks and criterion of an estimation of an ecological condition of geological environment of boundary territories.

The analysis facts has allowed to execute an estimation of an ecological condition of geological environment of frontier territories.

The executed researches of an ecological condition of geological environment of territory of frontier areas allow to define negative changes of geological environment and at a modern level to make conclusions about directions of ecological monitoring of geological environment and to develop the recommendations of its improvement.

Key words. Ecological condition, geological environment, integrated estimation, pollution, GIS.

***Stadnikov V.V., Shpilevoy A.A., Stepovaya O.Y., Piskareva I.A., Lozinskiy A.E. Mining of a master plan of firm of an oil refining complex with usage of geoinformation technologies // Uchenye zapiski TNU. Series: Geography, 2006. – Vol. 19 (58). №.2 – P. 140-143***

In this article the practical experience of mining of a master plan of firm of an oil refining complex with usage of geoinformation technologies is generalized.

Key words: GIS, cartographical information, master plan.

***Stankevich S.A., Kozlova A.A. Specifics of Shannon diversity index calculation by results of aerospace images statistical classification*** // Uchenye zapiski TNU. Series: Geography, 2006. – Vol. 19 (58). №.2 – P. 144-150

Influence of classes' probabilities distribution as output of digital aerospace images statistical classification algorithms to quantitative estimations of a biodiversity is considered. Considering of this information allow to increase accuracy of determination entropic index or other biodiversity marks by aerospace images up to 5-15 %.

Key words: species diversity, Shannon index, statistical classification, aerospace images.

***Shypulin V. Creating the basic set of geospatial data*** // Uchenye zapiski TNU. Series: Geography, 2006. – Vol. 19 (58). №.2 – P. 151-156

The classifier and technology of creating the basic set of geospatial data has developed as the part of whole task of building the components of geospatial data infrastructure. This technology is based on results of digital mapping with base map scale 1:2000 obtained with the help of "Digitals/Delta" software.

Key words: SDI, geospatial data, classification.