

Software framework of web-oriented production and research center for monitoring and forecasting of regional climatic and ecological changes and lifelong education support "Climate"

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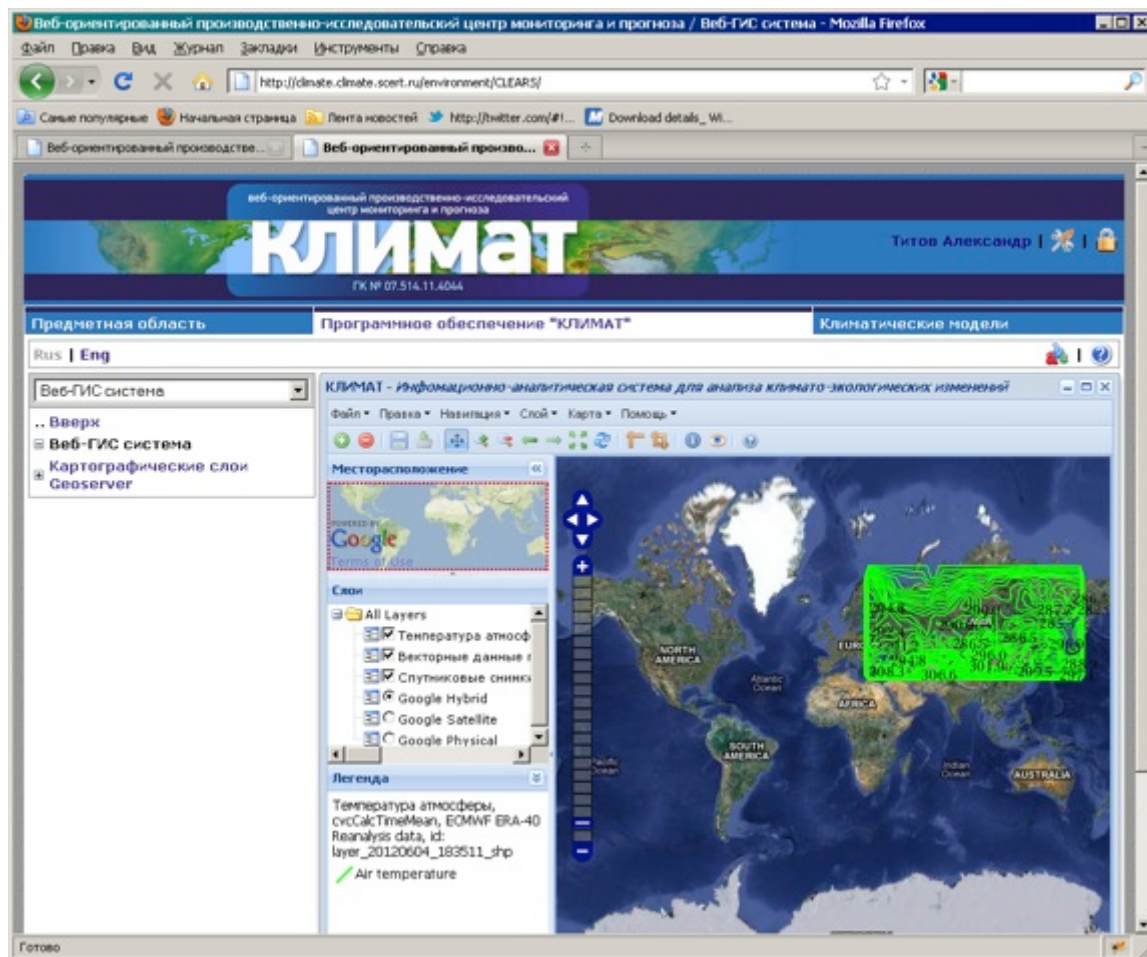
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- The task of information support of integrated scientific research in the area of Earth Science for complex usage of heterogeneous georeferenced datasets
- Software framework of web-oriented production and research center “CLIMATE” is based on web mapping (Web-GIS) technologies to provide the functionality required
- Program infrastructure basic components:
 - Structured georeferenced datasets
 - Computational kernel
 - Specialized web-portal
 - Browser-based graphic user interface

Web-portal “CLIMATE”

- Framework middleware
- User authorization
- Database integration
- Content management system
- Localization
- Employing OGC standards
- Implemented using PHP, JavaScript, and DHTML technologies



Graphic user interface

- Provides Web-GIS functionality

- Map window

- Layers

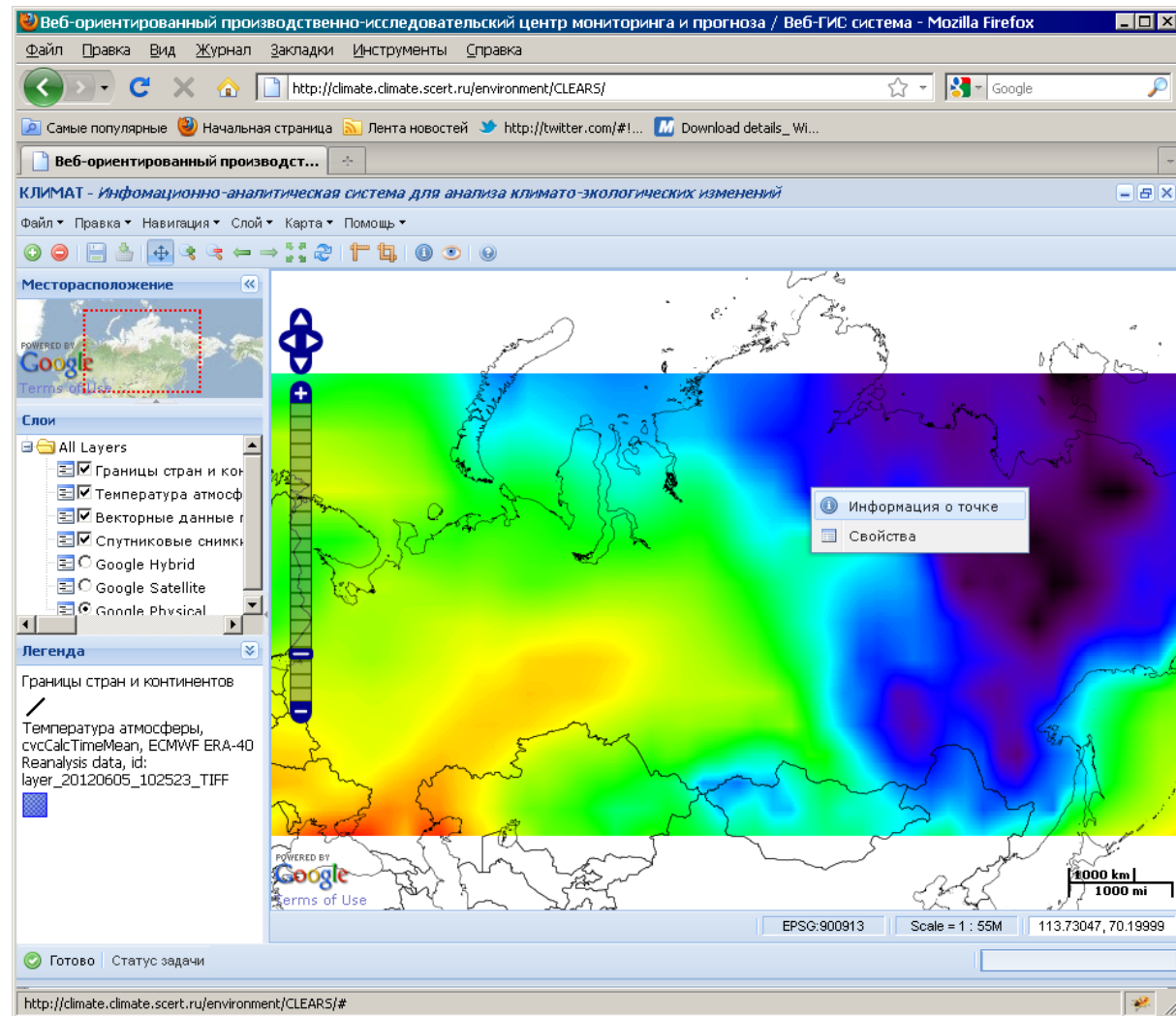
- Navigation

- Information panel

- Context menu

- Etc...

- Based on ExtJS, OpenLayers, GeoExt software



- Finalizing second version of JavaScript library of GUI elements
- Completion of the unified library of PHP-controllers providing API for working with computational kernel, cartographical web services and GUI
- Creation of the distribution kit

***Thank you for your
attention***

References

- OpenLayers: Free Maps for the Web, <http://openlayers.org>
- Shea Frederick, Colin Ramsay, and Steve Cutter Blades. Learning Ext JS / Packt Publishing. 2008. 299p.
- GeoExt, JavaScript Toolkit for Rich Web Mapping Applications, <http://www.geoext.org/>.
- What is GeoServer, <http://geoserver.org/display/GEOS/What+is+GeoServer>