

Web-oriented production and research center “Climate” for monitoring of regional climatic and ecological changes and education support

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Outlines:

- Introduction
ICT for environmental sciences
- Data&models
- Information-computational systems
- Climate platform
- Conclusions

ICT and Earth Science

Information-computational technologies are instruments for research and form Earth Science infrastructure (cyberinfrastructure, SDI, etc.).

Information-computational web-systems are elements of the infrastructure

Data

- Instrumental data
- Meteorological and climatic modeling data
- Data centers (access, search and visualization)

WDC Obninsk



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Обновления

- ▶ **27.06.2011**
Справочные издания: (июнь)
- ▶ **23.06.2011**
Каталоги МЦД за июнь:
(Метеорология)
- ▶ **24.03.2010**
Представлены [173](#) и [175](#) выпуски
"Трудов ВНИИГМИ-МЦД"

Москва, 28 июня

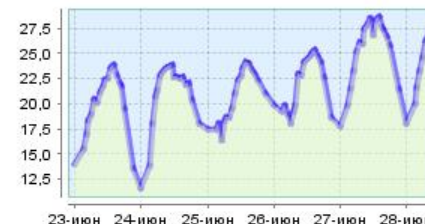
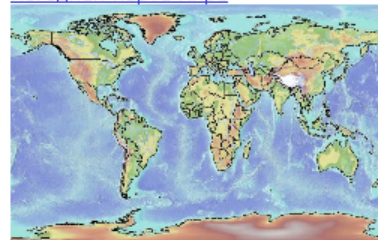
+27.0 °C облачно
Ветер: **В; 2 м/с**
Давление: **мм.рт.ст.** Влажность: **53.3%**
Особые явления:

По данным [clwarc](#) на 08:00(GMT). Местное время: +3ч

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Дата	Температура, °C		Давление, мм. рт. ст.	
28.06	18.0	27.0	746.2	746.8
27.06	17.7	28.6	743.1	745.5
26.06	18.1	25.4	740.8	742.9
25.06	16.4	24.1	741.5	743.0
24.06	11.6	23.8	743.1	745.2
	мин.	макс.		

[Погода на территории Российской Федерации в 2010 году.](#)

Новости:

1. Сильную жару ждут синоптики в столичном регионе во вторник после обеда
[Москва, 28 июня. INTERFAX.RU - Столичные синоптики предупреждают, что К...](#)
2. Метеостанции установлены в нефтепорте "Козьмино" в Приморье
[ВЛАДИВОСТОК, 28 июн - РИА Новости. Метеостанции установлены в приморском...](#)
3. В Хабаровском крае под 40 градусов жары
[ИА "МетеонОВОСТИ" / Понедельник, 27 июня В Хабаровском крае установилась...](#)
4. В Москву приходит жара
[ИА "МетеонОВОСТИ" / Понедельник, 27 июня Москвичам на текущей неделе...](#)
5. Тропический циклон принесет в Приморье сильные дожди
[ВЛАДИВОСТОК, 27 июн - РИА Новости. Тропический циклон Meari в ближайшие...](#)

Заседания Ученого совета ГУ "ВНИИГМИ-МЦД"

[23 марта в ГУ «ВНИИГМИ-МЦД» состоялось торжественное заседание Ученого Совета, посвященное Всемирному метеорологическому дню и Дню гидрометеорологов России](#)

[Единый государственный фонд данных о состоянии окружающей природной среды, ее загрязнении \(ЕГФД\)](#)

Участники деятельности ЕГФД
Правовые и методические документы ЕГФД
Аналитическая информация по ЕГФД
Совещания, конференции, семинары
Получение сведений о составе и размещении информации ЕГФД
Учет информационных ресурсов ЕГФД

Совещания

- Оперативно-производственное совещание
[«Состояние формирования ИНТЕРНЕТ-ресурсов](#)



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Мониторинг сбора данных оперативных наблюдений: синоптические, судовые, аэрологические, морские метеорологические, глубоководные, климатические наблюдения.

[Данные судовых метеорологических наблюдений](#)

Данные по Мировому океану полученные по Глобальной сети телесвязи, ежеквартально поставляемые в глобальные центры сбора (ГЦС в Германии и Англии) в рамках схемы морских климатических сборников (СМКС).

[Специализированные массивы данных для климатических исследований](#)

Массивы данных суточной температуры воздуха и количества осадков на 223 метеорологических станциях на территории бывшего СССР. Массив данных среднемесячной температуры воздуха на 476 станциях России.

[Каталог Единого государственного фонда данных о состоянии окружающей природной среды, ее загрязнении](#)

Каталог верхнего уровня семейства каталогов о состоянии окружающей природной среды, ее загрязнении предназначенный для информирования широкого круга пользователей о составе информационных ресурсов ЕГФД.

[Режимно-справочные банки данных по гидрометеорологии](#)

Сведения об исторических гидрометеорологических данных хранящихся в Российском государственном фонде данных о состоянии природной среды.

[Каталог гидрологических постов](#)

✉ webmaster@meteo.ru

[In English](#)

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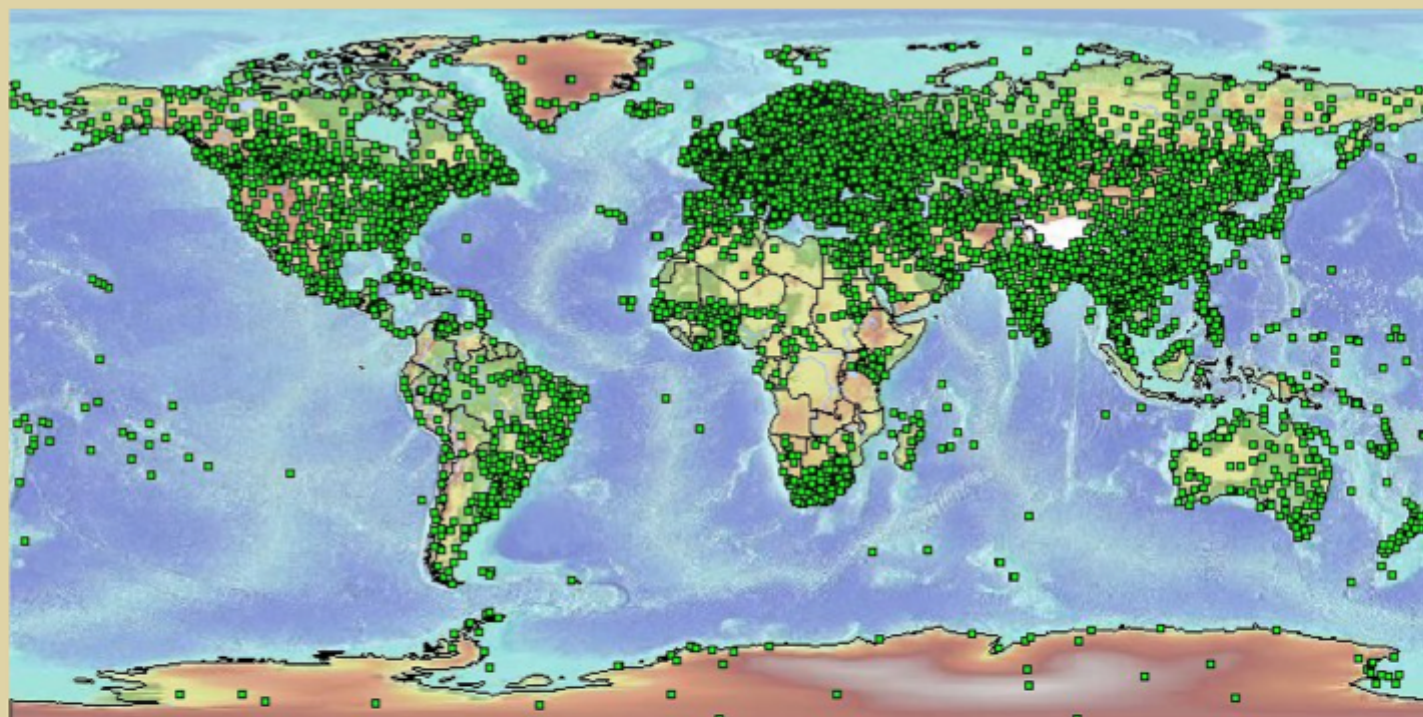
«ВНИИГМИ— МЦД» ●

| объявление [снять квартиру без посредников](#). | Наша [мебель впишется в любое офисное помещение](#) - приходите!

CliWare

Синоптические данные

Количество синоптических сообщений: 6060



2011 ▾ Июнь ▾ 28 ▾ 00 ▾

Обновить

☐ Автоматическое обновление (5 мин.)



Russia referent meteorological stations (454), part (red dots) is participating in data exchange



Siberia “validated” meteostations network

**NOAA Satellite and Information Service**
National Environmental Satellite, Data, and Information Service (NESDIS)

**National Climatic Data Center**
U.S. Department of Commerce

**World Data Center for Meteorology, Asheville**
ICSU

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Introduction

The World Data Center (WDC) for Meteorology, Asheville is one component of a global network of discipline subcenters that facilitate international exchange of scientific data. Originally established during the **International Geophysical Year (IGY)** of 1957, the **World Data Center System** now functions under the guidance of the **International Council of Scientific Unions (ICSU)**.

The WDC for Meteorology, Asheville is maintained by the **U.S. Department of Commerce (DOC)**, **National Oceanic and Atmospheric Administration (NOAA)** and is colocated and operated by the **National Climatic Data Center (NCDC)** in Asheville, NC, USA.

In accordance with the principles set forth by ICSU, WDC for Meteorology, Asheville acquires, catalogues, and archives data and makes them available to requesters in the international scientific community. Data are exchanged with counterparts, **WDC for Meteorology, Obninsk** and **WDC for Meteorology, Beijing** as necessary to improve access. **All data and special data sets contributed to the WDC are available to scientific investigators without restriction.**

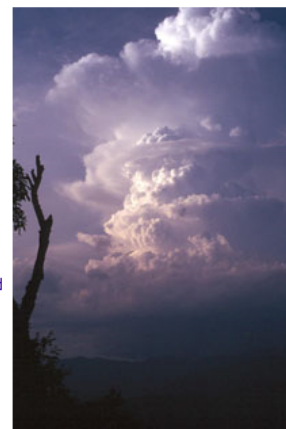


Photo courtesy Grant Goodge/NCDC

News:

- For 10th Series WWR 2001-2010 country submission information please contact Russel Vose (Russell.Vose@noaa.gov)
- The NOAA/NCDC Climate Analysis Branch is pleased to announce the release of the **Global Historical Climatology Network - Monthly (GHCNM) version 3.0 (beta)**. The public is encouraged to provide feedback during this beta phase to help improve and enhance the dataset. More information can be found at:
 - <http://www.ncdc.noaa.gov/ghcnm>
 - <ftp://ftp.ncdc.noaa.gov/pub/data/ghcnv3/>

To direct questions, comments, or feedback, specific to the GHCNM please e-mail NCDC.GHCNM@noaa.gov

- **World Weather Record (WWR) clearinghouse page** (<http://www.ncdc.noaa.gov/oa/wdc/index.php?name=worldweatherrecords>). Users can find information, and references as well as access and download WWR data either unformatted or in table format. Data available are from 1755 to 2000.

- **WMO Regional Association (RA) Climate Normals for 1961 to 1990** were added to the



NOAA Satellite and Information Service

National Environmental Satellite, Data, and Information Service (NESDIS)

National Climatic
Data Center
U.S. Department of Commerce



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Land Based



Upper Air



Marine



Satellite



Weather/Climate,
Events,
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Assessments



Paleoclimatology

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<http://www.ncdc.noaa.gov/oa/ncdc.html>

Downloaded Thursday, 16-Jun-2011 03:28:46 EDT

Last Updated Friday, 10-Jun-2011 09:01:41 EDT

Please see the [NCDC Contact Page](#) if you have questions or comments.

← →  <http://gosc.org/ios/MATRICES/ECV/ecv-matrix.htm> ☆ ↻  IPCC data

* Added or modified per 'Implementation Plan for the Global Observing System for Climate in Support of the UNFCCC - August 2010, GCOS-138 (GOOS-184, GTOS-76, WMO-TD/No. 1523)' (page 19) (pdf)

** Not an official GCOS ECV

Models

Global®ional climatic (Earth System) models

Reanalysis

- Problems:
- Huge amount of data&papers
- Black box for external user (WRF example)
- GIGO!

Virtual “reality” as result



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The European Centre for Medium-Range Weather Forecasts (ECMWF, the Centre) is an intergovernmental organisation supported by 34 States, based in Reading, west of London, in the United Kingdom.

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We are an international organisation supported by 34 States.



Find out about our forecasts

We run different types of forecasts at different resolutions.



Find out about our research

We have a wide ranging programme of research.



Find out about our archive

Our archive contains meteorological fields and observations.



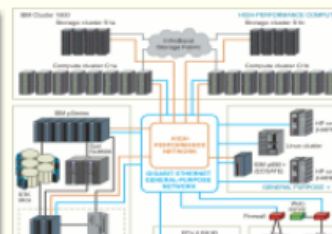
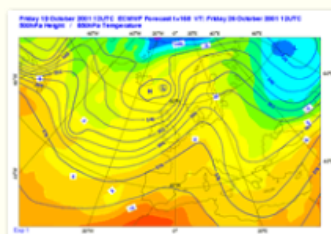
Find out about our computers

Our computing system includes several supercomputers.



Find out about our EPS

Our Ensemble Prediction System provides 51 possible weather forecasts.





http://www.ecmwf.int/research/era/do/get/index



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ERA-Interim is the latest ECMWF global atmospheric reanalysis of the period 1989 to present. ERA-Interim products can be retrieved from MARS (class=ei, expver=1) or downloaded from the [ECMWF Data Server](#). Please see the [ERA-Interim archive document](#) for a full description of the available products. When using the data server, please refer to our list of [frequently asked questions](#).

An open-access [journal article](#) describing the ERA-Interim reanalysis is now available from the Quarterly Journal of the Royal Meteorological Society.

ERA-Interim products on MARS and the data server are normally updated once per month, allowing a two-month delay for quality assurance and for correcting technical problems with the production, if any. Product updates will be announced here as soon as they occur.

Product availability as of 7 June 2011:

ERA-Interim data are now available for dates from 1 January 1989 to 31 March 2011.

For technical questions related to the modeling and data assimilation system used to produce ERA-Interim, please consult the [IFS Cy31r1 documentation](#). We are aware of several known [quality issues with ERA-Interim data](#).

NEW: Climate monitoring products



Time series of global 2m-temperature anomalies, and many other [climate indicators](#) produced from ERA-Interim and ERA-40 monthly data. Plots are updated monthly. The most recent two months of ERA-Interim data shown are provisional and therefore subject to change.

[Support for reanalysis activities at ECMWF](#) is provided by various institutions and externally funded research programmes, as well as the [ECMWF Member States](#).

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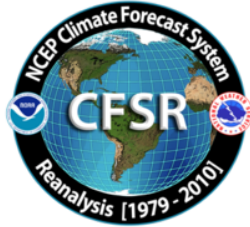
CISL RESEARCH DATA ARCHIVE
MANAGED BY NCAR'S DATA SUPPORT SECTION
DATA FOR ATMOSPHERIC AND GEOSCIENCES RESEARCH

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NCEP CLIMATE FORECAST SYSTEM REANALYSIS (CFSR)



The National Centers for Environmental Prediction (NCEP) Climate Forecast System Reanalysis (CFSR) was completed over the 31-year period of 1979 to 2009 in January 2010. The CFSR was designed and executed as a global, high resolution, coupled atmosphere-ocean-land surface-sea ice system to provide the best estimate of the state of these coupled domains over this period. The current CFSR will be extended as an operational, real time product into the future.

The CFSR relative to most, if not all, previous reanalyses include (1) coupling of atmosphere and ocean during the generation of the 6 hour guess field, (2) an interactive sea-ice model, and (3) assimilation of satellite radiances by the Grid-point Statistical Interpolation scheme over the entire period. The CFSR global atmosphere resolution is ~38 km (T382) with 64 levels extending from the surface to 0.26 hPa. The global ocean is 0.25° at the equator, extending to a global 0.5° beyond the tropics, with 40 levels to a depth of 4737m. The global land surface model has 4 soil levels and the global sea ice model has 3 levels. The CFSR atmospheric model contains observed variations in carbon dioxide (CO₂) over the 1979-2009 period, together with changes in aerosols and other trace gases and solar variations. With these variable parameters, the analyzed state will include estimates of changes in the Earth system climate due to these factors.

All available conventional and satellite observations were included in the CFSR. Satellite observations were used in radiance form and were bias corrected with "spin up" runs at full resolution, taking into account variable CO₂ concentrations. This procedure enabled smooth transitions of the climate record due to evolutionary changes in the satellite observing system.

CFSR atmospheric, oceanic and land surface output products are available at an hourly time resolution and 0.5° horizontal resolution. This reanalysis will serve many purposes, including providing the basis for most of NCEP Climate Prediction Center's operational climate products by defining the mean states of the atmosphere, ocean, land surface and sea ice over the next 30-year climate normal (1981-2010); provide initial conditions for historical forecasts required to calibrate operational NCEP climate forecasts (from week 2 to 9 months); and provide estimates and diagnoses of the earth's climate state, over the satellite data period, for community climate research.

Preliminary analysis of the CFSR output indicates a product far superior in most respects to the reanalysis of the mid-1990s. The previous NCEP reanalyses have been one of the most used NCEP products in history; there is every reason to believe the CFSR will supersede these older products both in scope and quality, because it is higher in time and space resolution, covers the atmosphere, ocean, sea ice and land, and was executed in a coupled mode with a more modern assimilation system and forecast model.

For additional information about the CFSR, please visit: <http://cfs.ncep.noaa.gov/cfsr>.

Component datasets in the CISL RDA:

- ds093.0: NCEP Climate Forecast System Reanalysis (CFSR) 6-hourly Products, January 1979 to March 2011
- ds093.1: NCEP Climate Forecast System Reanalysis (CFSR) Selected Hourly Time-Series Products, January 1979 to March 2011
- ds093.2: NCEP Climate Forecast System Reanalysis (CFSR) Monthly Products, January 1979 to March 2011

The Research Data Archive is managed by the Data Support Section of the Computational and Information Systems Laboratory at the National Center for Atmospheric Research in Boulder,

Data Distribution Centre

ipcc
INTERGOVERNMENTAL PANEL ON climate change



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Welcome to the IPCC Data Distribution Centre

Location: DDC Home

Welcome to the Data Distribution Centre (DDC) of the [Intergovernmental Panel on Climate Change \(IPCC\)](#). The DDC provides climate, socio-economic and environmental data, both from the past and also in scenarios projected into the future. Technical guidelines on the selection and use of different types of data and scenarios in research and assessment are also provided.

The DDC is designed primarily for climate change researchers, but materials contained on the site may also be of interest to educators, governmental and non-governmental organisations, and the general public.

The DDC web site has the following areas (all accessible from the menu in the left hand column of most pages):

- [About the DDC](#): who we are and what we do,
- [Climate observations](#), as global mean time series and gridded fields,
- Climate model projections and simulations: [Monthly means](#) and [climatologies](#) (decadal and 30-year means),
- [Socio-economic data](#),
- [Environmental data and Scenarios](#),
- [Guidelines and other supporting material](#).

The identification, selection, and application of baseline and scenario data are crucial steps in the assessments of the potential impacts of future climate change. The need to provide a consistent collection of data covering a great diversity of different scenario elements can pose substantial challenges to researchers. The IPCC DDC seeks to provide access to such a collection of data and scenarios and to offer guidance on their application.

The DDC is overseen by the IPCC [Task Group on Data and Scenario Support for Impact and Climate Analysis \(TGICA\)](#) and jointly managed by [the British Atmospheric Data Centre \(BADC\)](#) in the United Kingdom, the [CSU World Data Center Climate \(WDCC\)](#) in Germany, and the [Center for International Earth Science Information Network \(CIESIN\)](#) at Columbia University, New York, USA. The data are provided by co-operating modelling and analysis centres.

Feedback from users is welcome and can be made by completing the [feedback form](#).

Latest News

[TGICA members](#) for the 5th Assessment Round appointed. (02/2010)

User survey results [available](#). (20/07/2009)

Data in spreadsheet format now available: [observed](#) and [projected](#) climatologies. (15/04/2009)

Location: DDC Home

☐ A (Excellent)

☐ B

☐ C

☐ D

☐ E (Very poor)

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General

- [Seminar] Introduction to the NCEP Climate Forecast System Version 2
- [Project] APCC supports NCHMF project
- Experimental 6-month MME outlook for MAM-JJA 2011
- Experimental 6-month MME outlook for DJF 2010-MAM 2011

Press Release

- APEC Climate Center Revamps Website to Better Serve its User Community - 31.03/2010 (doc)
- APEC Climate Center hosts an international workshop on climate information and prediction of electricity demand - 03.03/2010 (doc)
- Celebration of New APCC Building Provides Fresh Momentum to Climate Change Lead Center for Asia-Pacific - 17/11/2009 (pdf)

Opportunities

- (Local hiring) Recruitment in Research scientist, Computer system and Administration
- Research scientists in climate prediction/climate change/climate application

2011 JJA

The APEC CLIMATE CENTER *Climate Outlook for June - August 2011*

BUSAN, 25 May 2011 - Synthesis of the latest model forecasts for June-to-August (JJA) 2011 at the APEC Climate Center (APCC), located at Busan, Korea, indicates warmer than normal conditions over Northeast Asia, while colder than normal signals are expected in South and Southeast Asia. Drier than normal conditions over the East Asian coast and most of Indochina, with wetter than normal signals in southern Mexico, Florida key region, Caribbean Sea and northern South America, are expected.

Current Climate Conditions

La Niña condition continued to weaken across the equatorial Pacific. The tropical Pacific Ocean warmed further and the magnitude of Niño 3 index, which has been negative, began to decrease and approached neutral values. In like manner, the magnitude of southern oscillation index (SOI), which has remained highly positive, also began to decrease, reflecting a transition from La Niña condition to neutral.

It has been warm and dry over Siberia, Central Asia, southern North America, and Arctic region for the period from March through the first half of April 2011. Below-average temperature was found over the part of South, Northeast and Southeast Asia, Australia, and northern North America. The Philippines and the southern Polynesian Islands saw wetter than normal conditions. Suppressed rainfall was found over parts of China, Mongolia, and southern South America. Severe drought persisted in southeastern China.

Forecast

- Forecast
 - ▶ Latest Monthly
 - ▶ Past Monthly
 - ▶ Past Seasonal
- Verification
 - ▶ Hindcast
 - ▶ Past Forecast
- State of our climate
 - ▶ Highlight
 - ▶ Tropical Indo-Pacific Monitoring
 - ▶ Global Extreme Drought / Flood Monitoring
- Documentation
 - ▶ Experimental 6Month lead coupled MME Outlook
 - ▶ Enso Prediction
 - ▶ Latest Seasonal
 - ▶ Past Seasonal
- Invitation to join semi-operational coupled 1 to 6 month lead prediction
 - ▶ CLIK
 - ▶ TRACE

Information-computational systems as the answer

- Storage of reliable prepared for processing data
- Algorithms for quick data search and access
- Validated algorithms for data processing
- User friendly web interface to process data and analyze results

Giovanni

You are here: [GES DISC Home](#) » Giovanni

GIOVANNI

Giovanni is a Web-based application developed by the GES DISC that provides a simple and intuitive way to visualize, analyze, and access vast amounts of Earth science remote sensing data without having to download the data.

Giovanni is comprised of a number of interfaces, called instances, each tailored to meet the needs of different Earth science research communities. To access a Giovanni instance, click on one of the four categories below.

- **Atmospheric Instances:** A-Train along CloudSat Track; Aerosol Optical Thickness Measurement and Model Comparison *Daily* and *Monthly*; Aqua/AIRS Global *Daily* and *Monthly*; Aura High Resolution Dynamics Limb Sounder (HIRDLS); Aura Microwave Limb Sounder (MLS); Aura OMI *Level 3* and *Level 2G*; MISR *Daily* and *Monthly*; Clouds and the Earth's Radiant Energy System (CERES FM4); Modern Era Retrospective-Analysis for Research and Applications (MERRA) *3D Monthly* and *2D Monthly*; MODIS Terra and Aqua *Daily* and *Monthly*; Earth Probe and Nimbus-7 TOMS; Tropospheric Emission Spectrometer (TES); Upper Atmosphere Research Satellite (UARS) Halogen Occultation Experiment (HALOE).
- **Environmental Instances:** Agriculture; Air Quality; Monsoon Asia Integrated Regional Study (MAIRS) *Monthly* and *8-Day*; Northern Eurasia Earth Science Partnership Initiative (NEESPI) *Daily* and *Monthly*.
- **Ocean Instances:** Ocean Color Radiometry (SeaWiFS, MODIS, and derived and model products); Ocean Model *Daily* and *Monthly*.
- **Hydrology Instances:** Modern Era Retrospective-Analysis for Research and Applications (MERRA) *3D Monthly*, *2D Monthly*, *Monthly Analysis*, and *Chemical Forcing*; MODIS Terra and Aqua *Daily* and *Monthly*; Northern Eurasia Earth Science Partnership Initiative (NEESPI) *Daily* and *Monthly*; TRMM Online Visualization and Analysis System (TOVAS); Global Land Data Assimilation System (GLDAS) *Monthly*.

If you already know which instance to choose, please select it from the table below.

A-Train	Aerosol Daily	Aerosol Monthly	Agriculture	Air Quality
Aqua/AIRS Daily	Aqua/AIRS Monthly	Aura HIRDLS	Aura MLS	Aura OMI L3
Aura OMI L2G	CERES (FM4)	GLDAS Monthly	MAIRS Monthly	MAIRS 8-Day
MERRA MONTH 2D	MERRA MONTH 3D	MERRA MONTH ANA	MERRA MONTH CHM	MERRA HOUR 2D
MERRA HOUR 3D	MISR Daily	MISR Monthly	MODIS Daily	MODIS Monthly
NEESPI Daily	NEESPI Monthly	Ocean Color Radiometry	Ocean Model Daily	Ocean Model Monthly
TOMS	TRMM/TOVAS	TES	UARS HALOE	

MORE! [Introductory chapter of our online user's manual for beginning Giovanni users](#)

Latest News



Jun 16, 2011 - [GES DISC scientists attend recent scientific meetings and workshops](#)

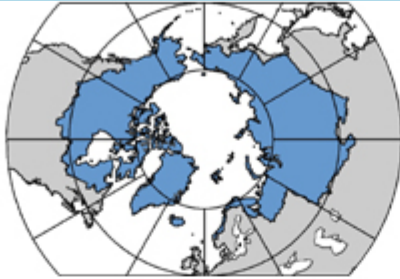
Meetings examine data from NASA instruments and applications around the world

[+ Read More...](#)

Giovanni (Goddard Interactive Online Visualization ANd aNalysis Infrastructure)

RIMS Rapid Integrated Mapping System

Гидрология метеорология: данные, модели, анализ



ArcticRIMS

A Regional, Integrated Hydrological
Monitoring System for the
Pan -Arctic Land Mass

<http://rims.unh.edu/>

Home

Background

Tour

Data

Institutions

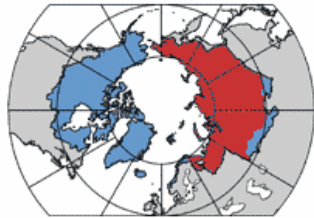
Site Map



Switch to Horizontal View

Data Explorer

ArcticRIMS



Static Data ☐ SWE ☐

Temperature ☐ Temperature ☒

Precipitation ☐ Atmosphere ☐

Runoff ☐ Subsurface ☐

Snowcover ☐ ☐ Core RIMS Data

Political Units	Time Series			Climatology		
	DAILY	MONTHLY	YEARLY	DAILY	MONTHLY	YEARLY
National						
Sub-National						
Admin.						

For spatial navigation click map below or choose ☐ RIMS ☐ WALE

Country ☐ State (SubNation) ☐ Admin Division ☐ HYDRO ☒ ADMIN

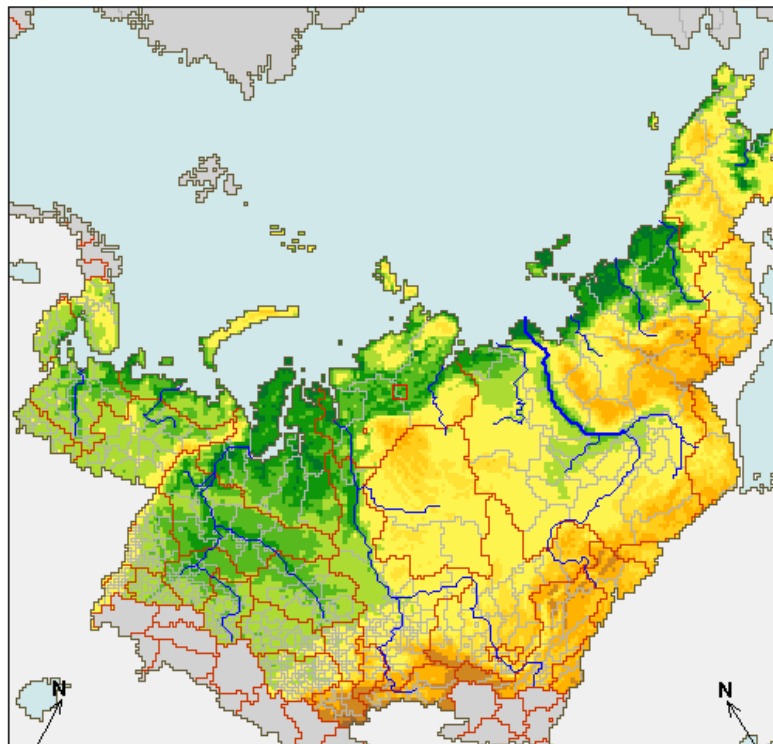
[Data Page](#)

Elevation for Russia

[Citations](#)

Show ☐ Towns ☐ Operational Sites ☐ Re-Analysis Sites

☒ Elevation- Mean ☐ Minimum ☐ Maximum



Basin Name	Russia		
Mouse over			
Longitude			
Latitude			
Sub Nation			
Administrative Division			
Elevation- Mean, m ☐		Data not Loaded	
Minimum, m ☐		Data not Loaded	
Maximum, m ☐		Data not Loaded	

Data for Selected Grid Cell		
RIMS ID	22084	
Longitude	95.8	
Latitude	72.0	
Sea Basin	Kara Sea	
Basin	Pyasina	
Elevation- Mean, m	61	
Minimum, m	29	
Maximum, m	110	

Web-system for climatic and meteorological data processing and visualization (prototype)

<http://climate.risks.scert.ru/reanalysis/>

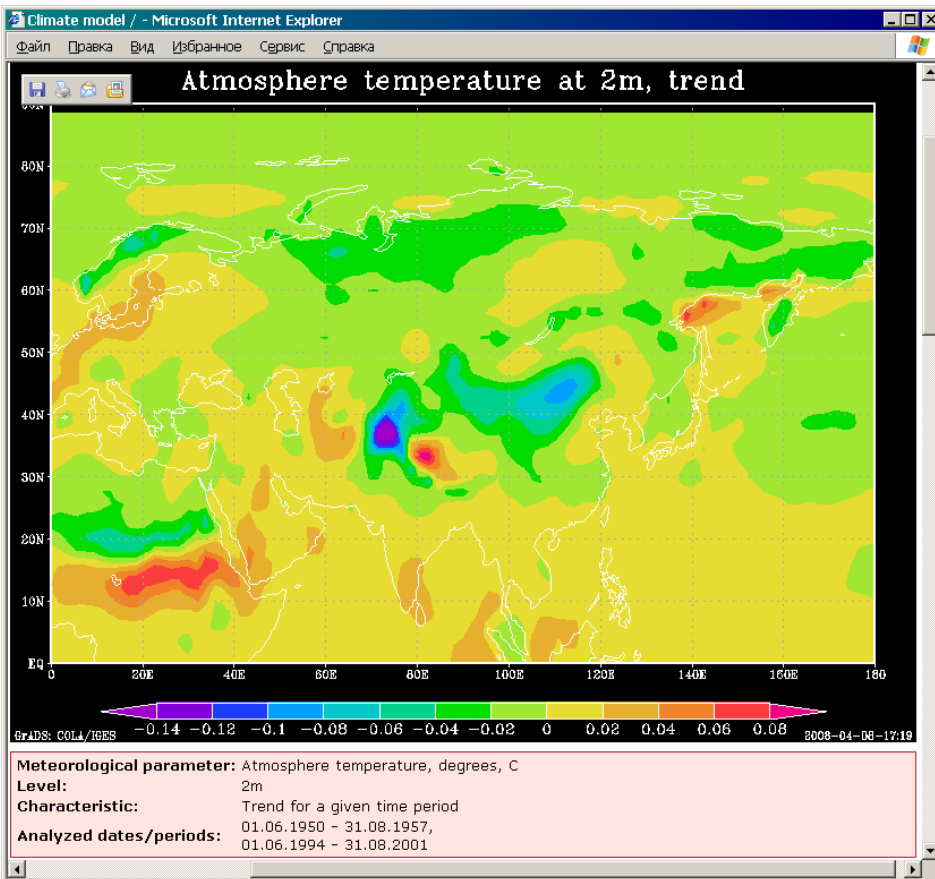
Graphical user interface (ATMOS engine)

GrADS and IDL based computation modules

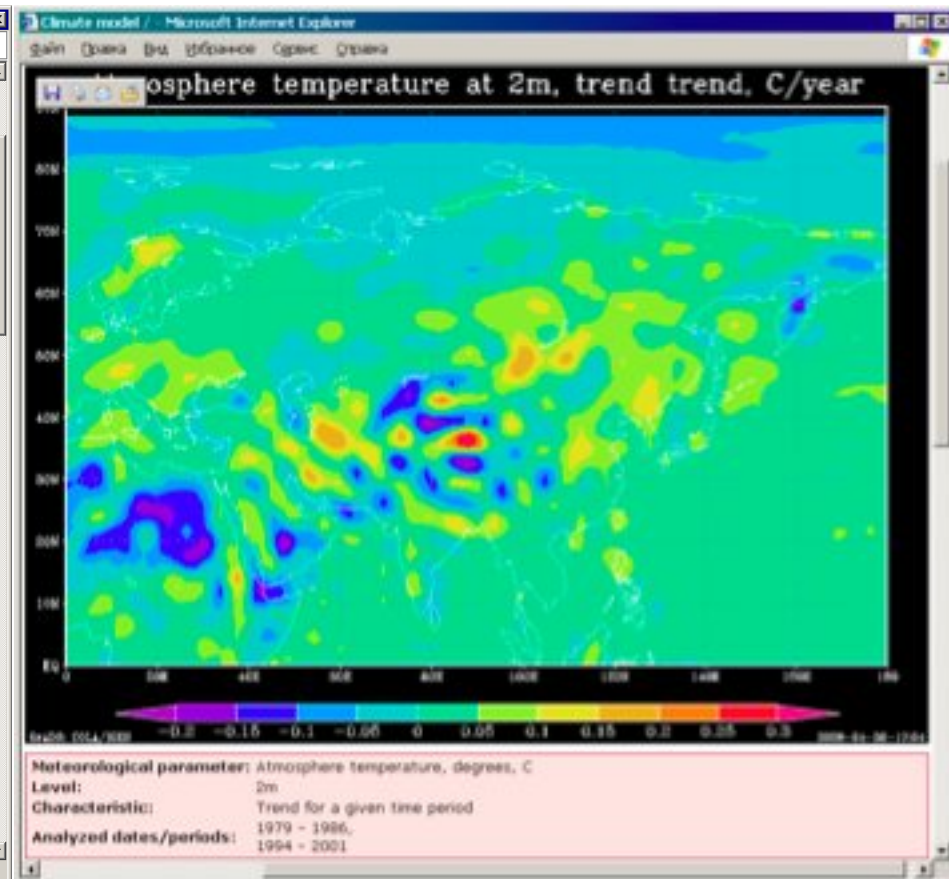
Graphical output of results

Datasets: NCEP/NCAR, NCEP/DOE AMIP II, ERA-40 и JRA-25
Reanalysis.

Trends of Summer temperatures



NCEP/NCAR,
1950-1957/1994-2001

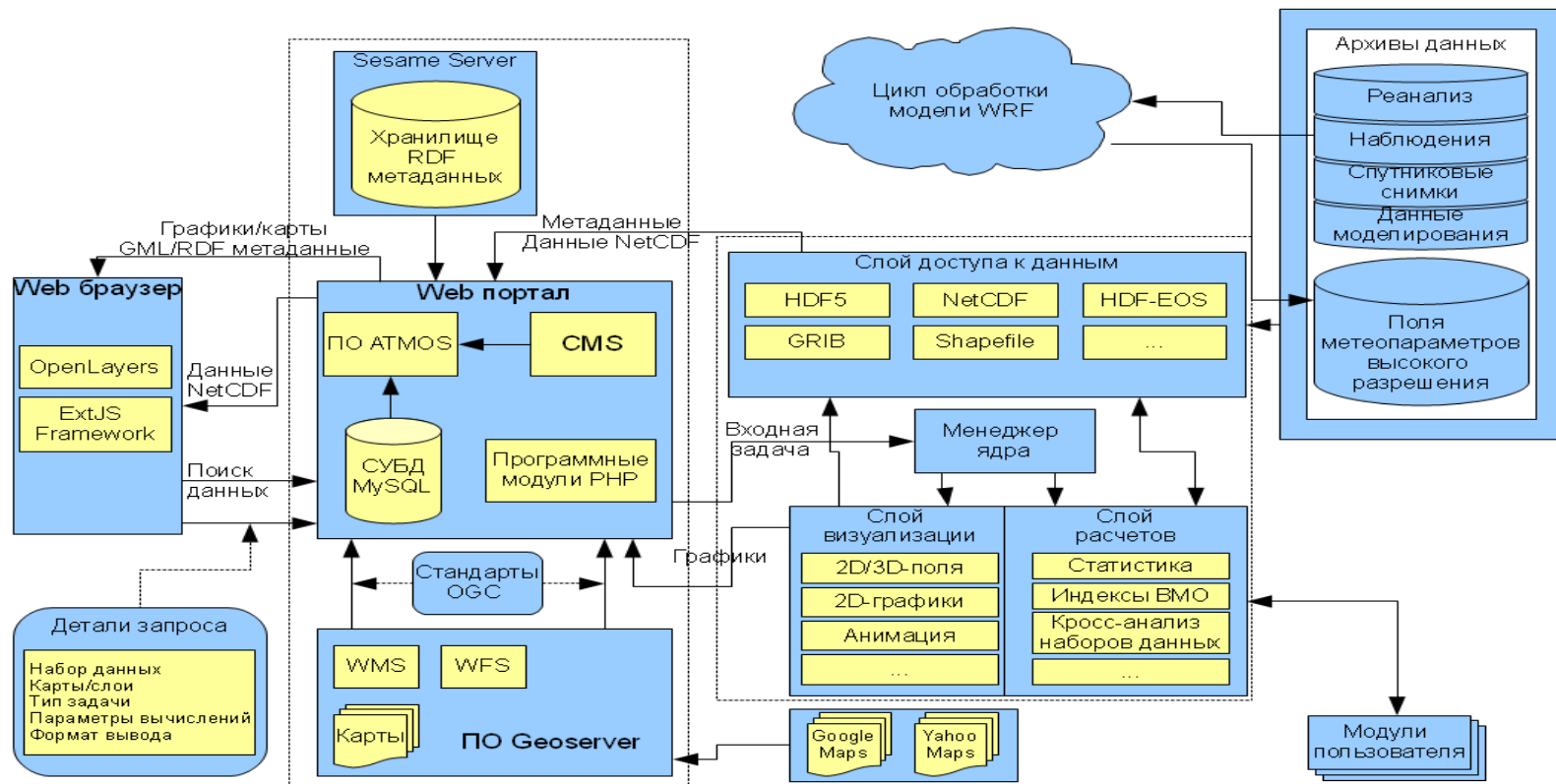


NCEP/DOE AMIP II,
1979-1986/1994-2001

Web-oriented production and research center “Climate” for monitoring of regional climatic and ecological changes and education support

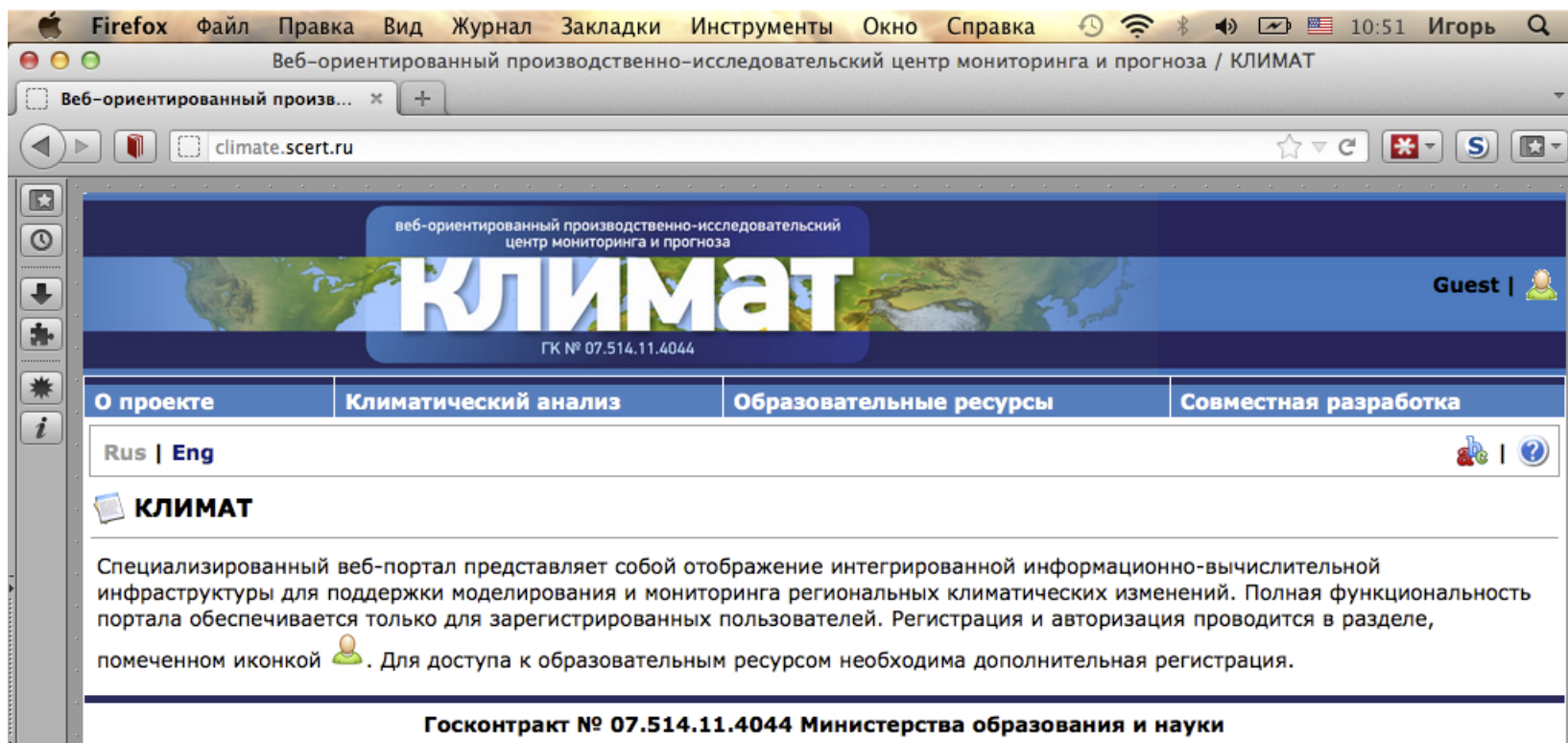
Cooperation of IMCES, ICM&MG and ICT SB RAS, TSU, INM RAS, RCC MSU and SibNIGMI

Objective: Development of software-hardware infrastructure of web-oriented production and research center for monitoring regional climatic changes which combines Web 2.0 approach, GIS-techniques elements, internet-access to applied models, databases, procedures for visualization of research results, tools for software co-design and conducting scientific research by distributed teams, as well as supports education of students and post-graduates.

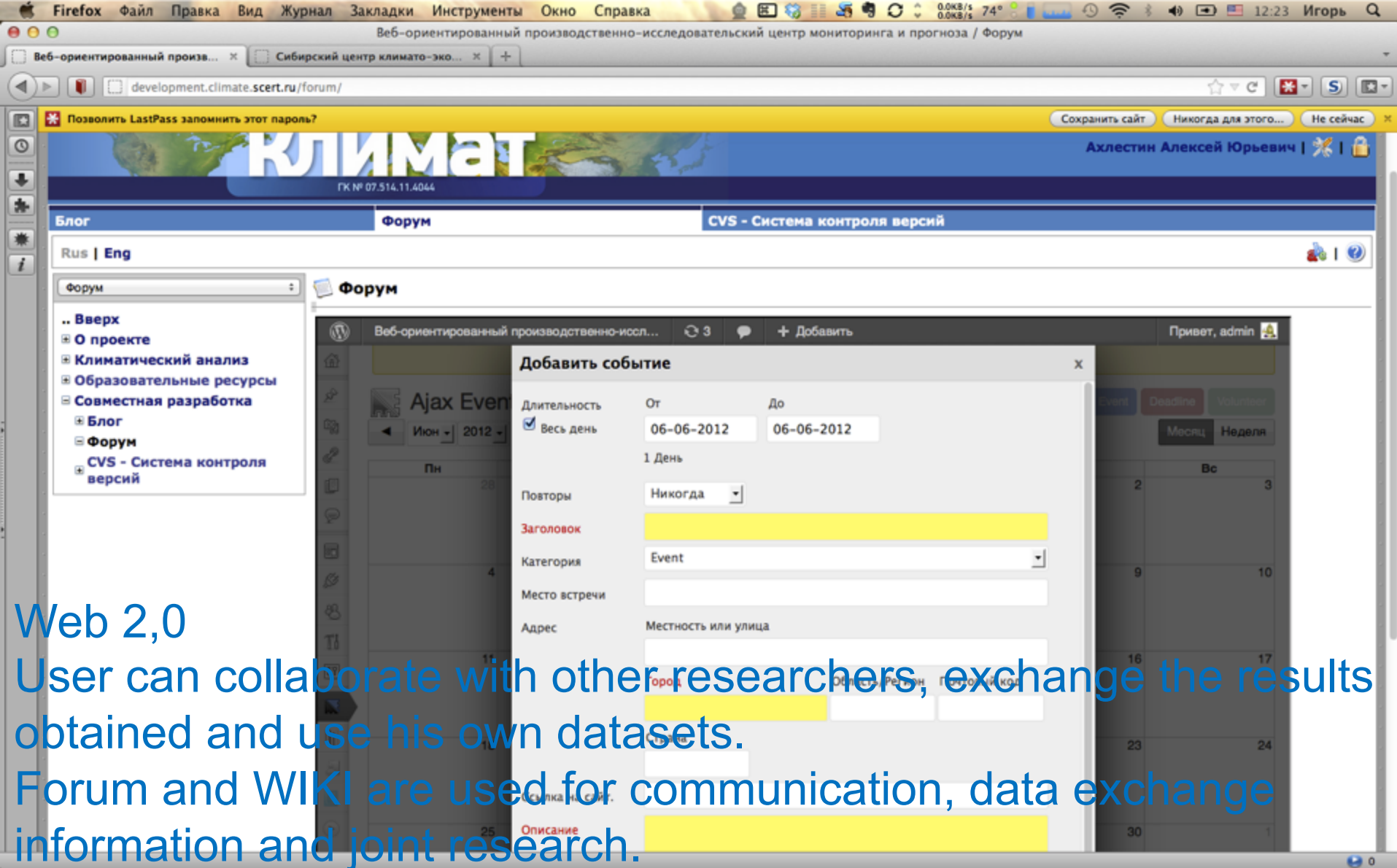


The **architecture** of the software-hardware infrastructure includes four main components:

- distributed structured archives of georeferenced data;
- server computational module;
- web-GIS portal realizing web-applications' logic and link to cartographic web-services;
- graphic user interface.



Portal start page



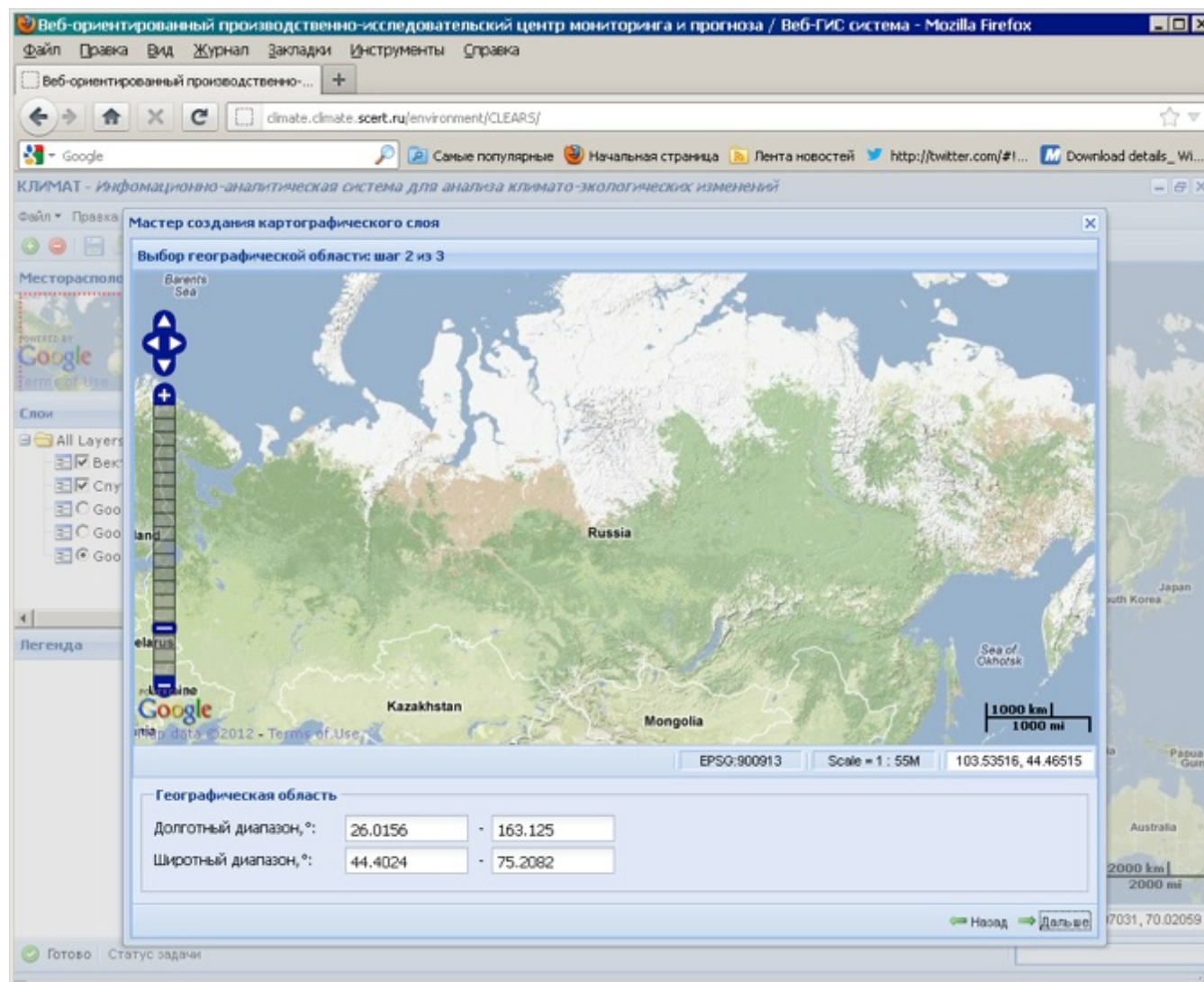
Web 2,0

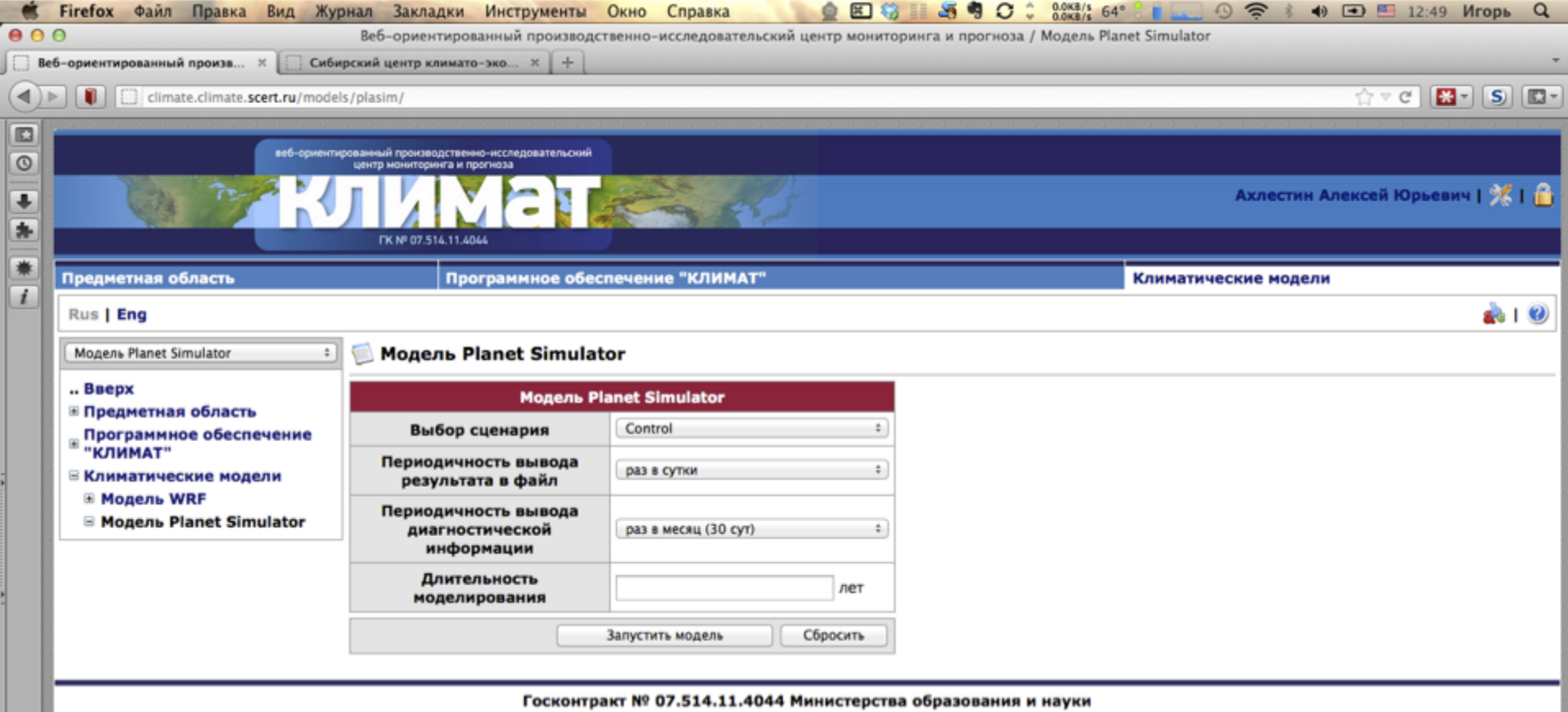
User can collaborate with other researchers, exchange the results obtained and use his own datasets.

Forum and WIKI are used for communication, data exchange information and joint research.

Web portal also contains special section with education materials and interactive training courses intended for training students and post-graduates in area of Earth Sciences.

User has an access to the basic, preliminary prepared layers. To make investigations, user can choose a geographical region, make scaling, get values from all layers in the point, process results obtained (i.e., compare different layers).

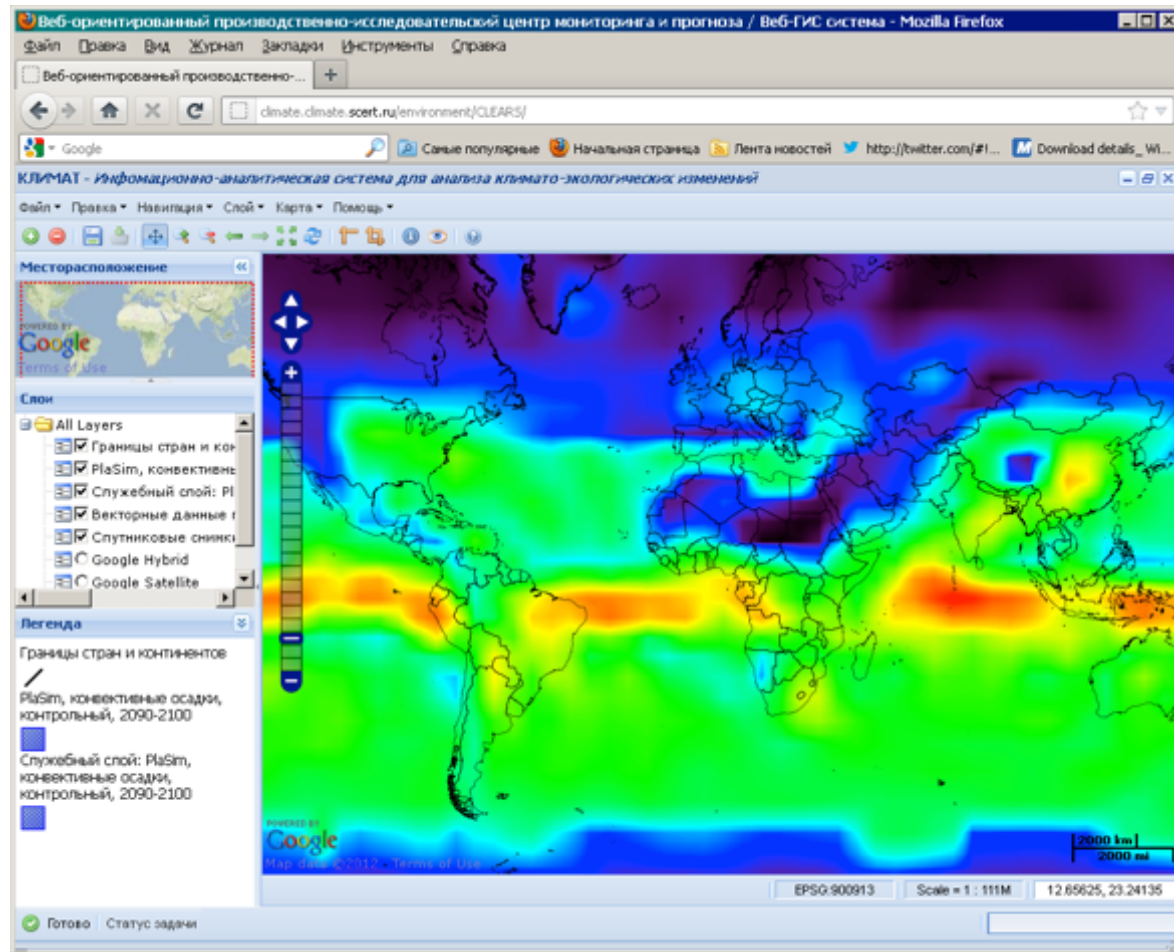




User also can add new layers obtained when processing geophysical data archives and run numerical models.

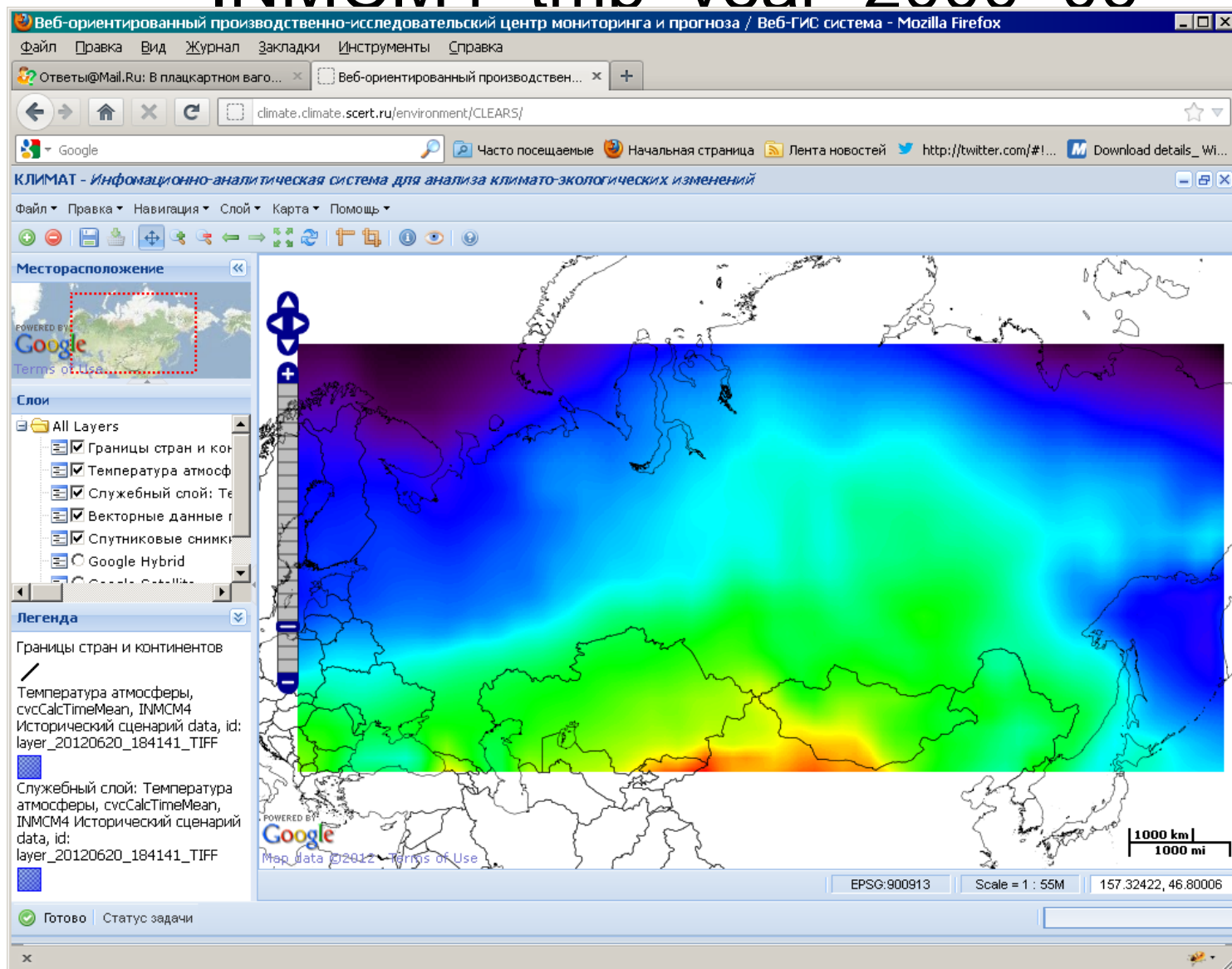
Initiation of Planet Simulator model

Plasim_convectivePrecip_contr ol_sfc_2090_2100

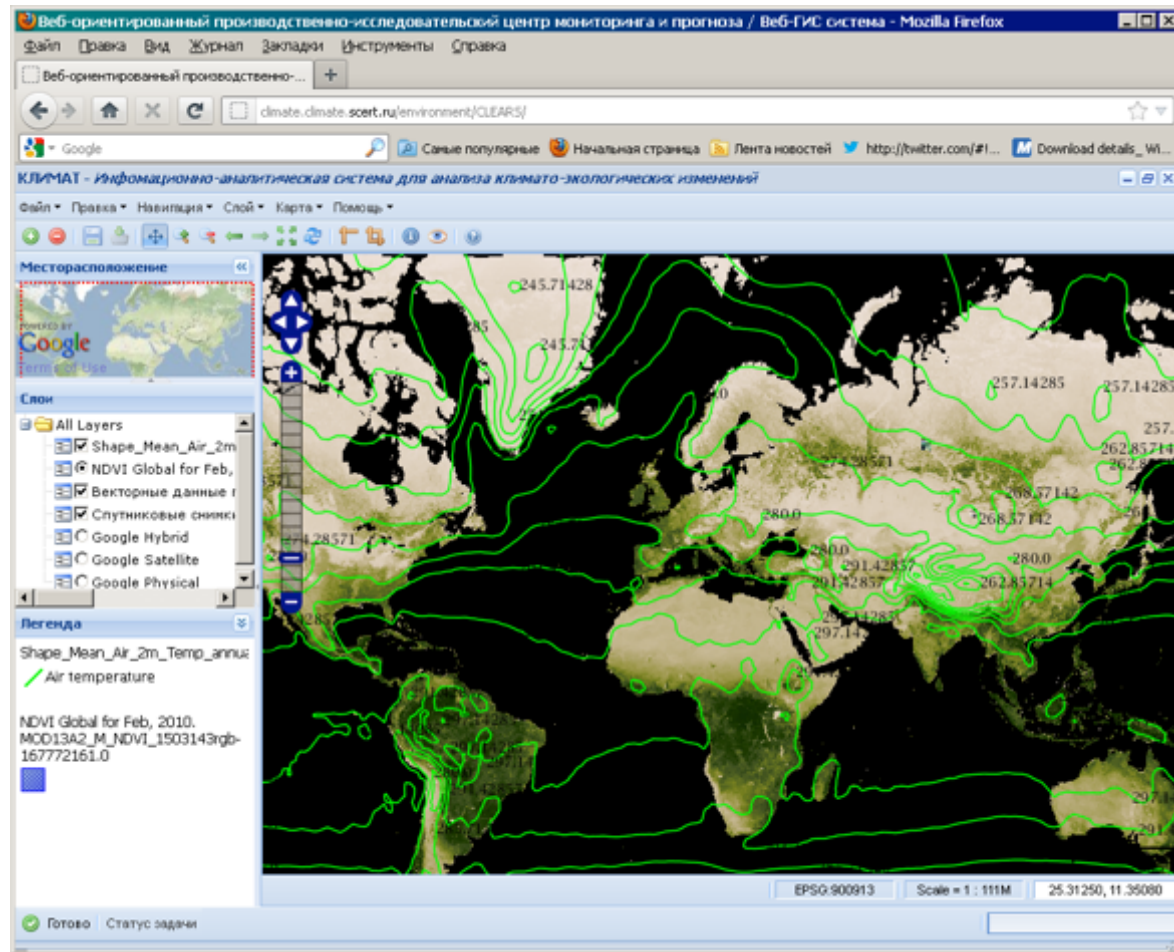


INM climate model output

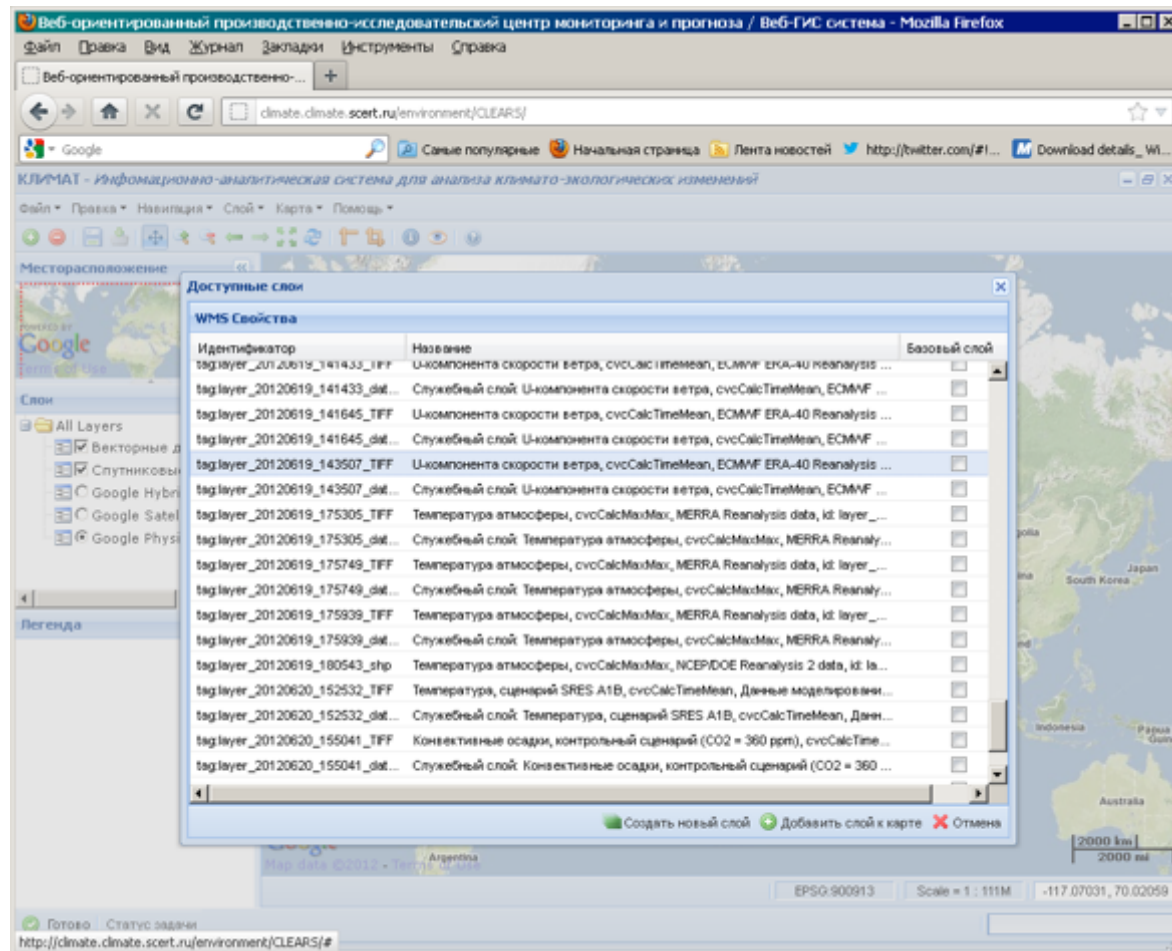
INMCM4 tmp year 2000 06



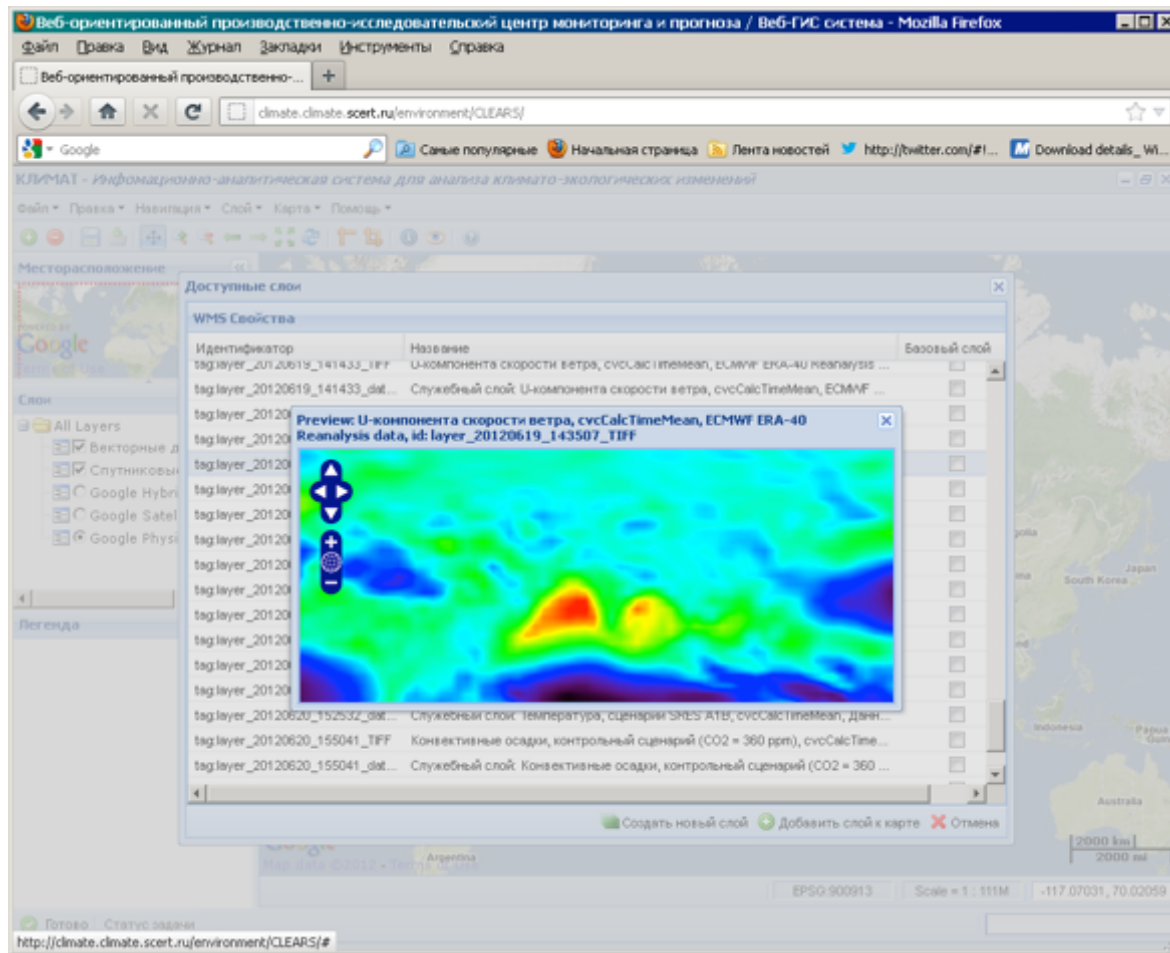
NDVI_Base_layer_plus_mean_ air temperature



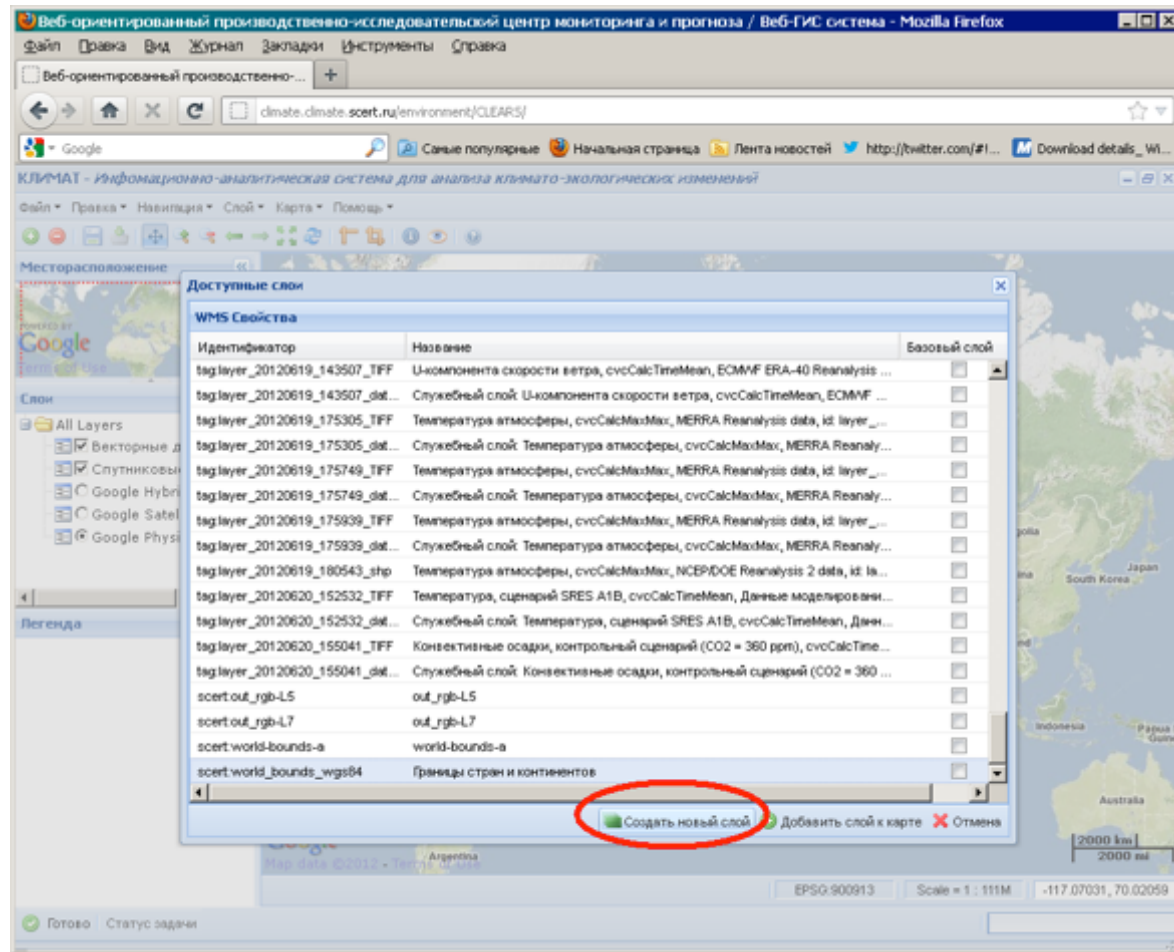
1_WMS_Layers_List



WMS_Layer_Preview



WMS_Layers_Create_Layer_Highlight



Wizard_1

Веб-ориентированный производственно-исследовательский центр мониторинга и прогноза / Веб-ГИС система - Mozilla Firefox

Файл Правка Вид Журнал Закладки Инструменты Справка

Веб-ориентированный производственно-...

climate.climate.scert.ru/environment/CLEAR5/

Google

Самые популярные Начальная страница Лента новостей http://twitter.com/#!... Download details_Wi...

КЛИМАТ - Информационно-аналитическая система для анализа климато-экологических изменений

Мастер создания картографического слоя

Выбор метеорологического параметра и типа обработки: шаг 1 из 3

Характеристика

Метеорологический параметр: Температура атмосферы

Набор данных: ECMWF ERA-40 Reanalysis

Уровень высоты: 2m

Временной шаг: 6h

Обработка данных

Тип обработки: Минимум

Период за диапазон лет: Нет

Временной интервал

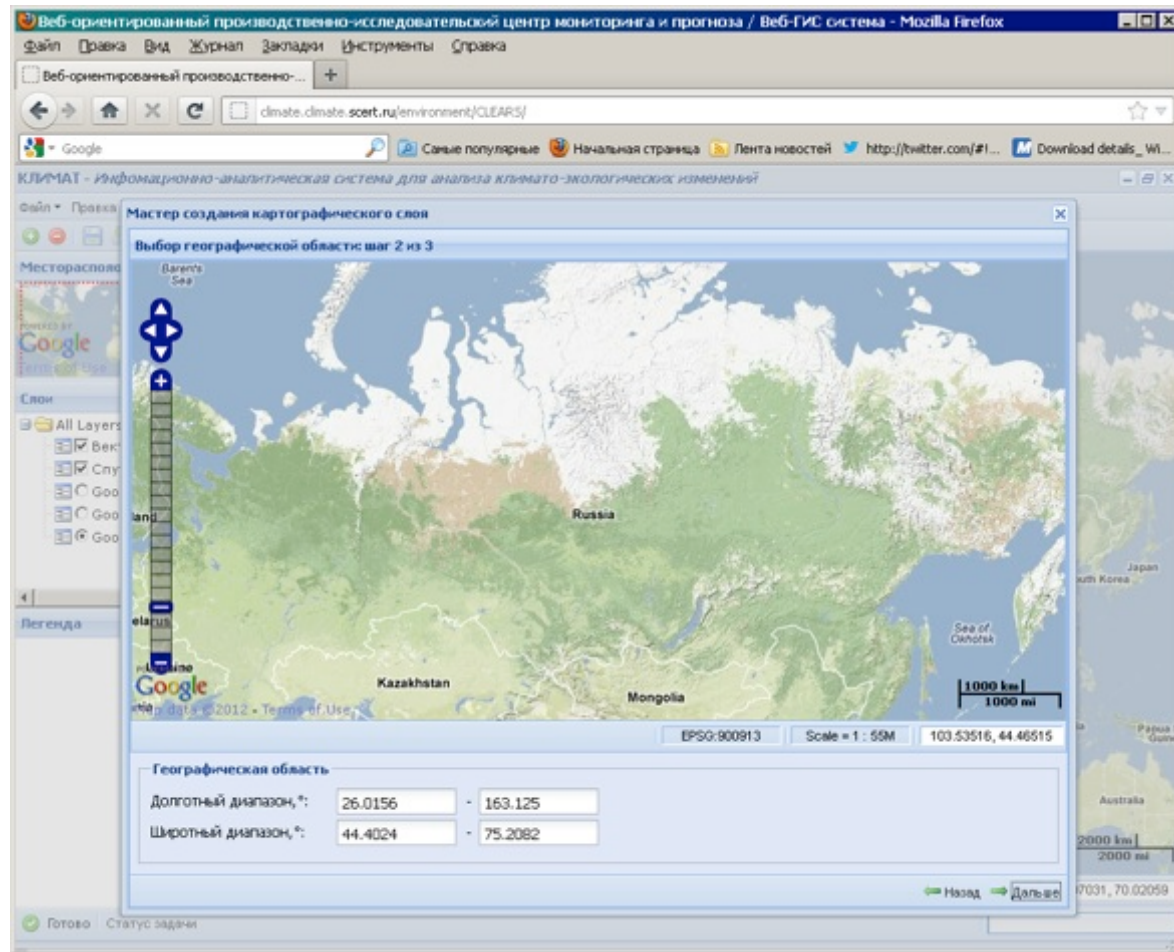
Начальная дата: 01.07.2002

Конечная дата: 31.07.2002

Назад Далее

Готово Статус задачи

Wizard_2



Wizard_3

Веб-ориентированный производственно-исследовательский центр мониторинга и прогноза / Веб-ГИС система - Mozilla Firefox

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climate.climate.scert.ru/environment/CLEAR5/

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Мастер создания картографического слоя

Проверка параметров и настройка графического вывода: шаг 3 из 3

Характеристика

Метеорологический параметр: Температура атмосферы

Набор данных: ECMWF ERA-40 Reanalysis

Уровень высоты: 2m

Временной шаг: 6h

Обработка данных

Тип обработки: Минимум

Период за диапазон лет: Нет

Временной интервал

Начальная дата: 01.07.2002

Конечная дата: 31.07.2002

Географическая область

Долготный диапазон, °: 26.0156 - 163.125

Широтный диапазон, °: 44.4024 - 75.2082

Параметры графического вывода

Тип графика: Растр

Тип изображения: Поле

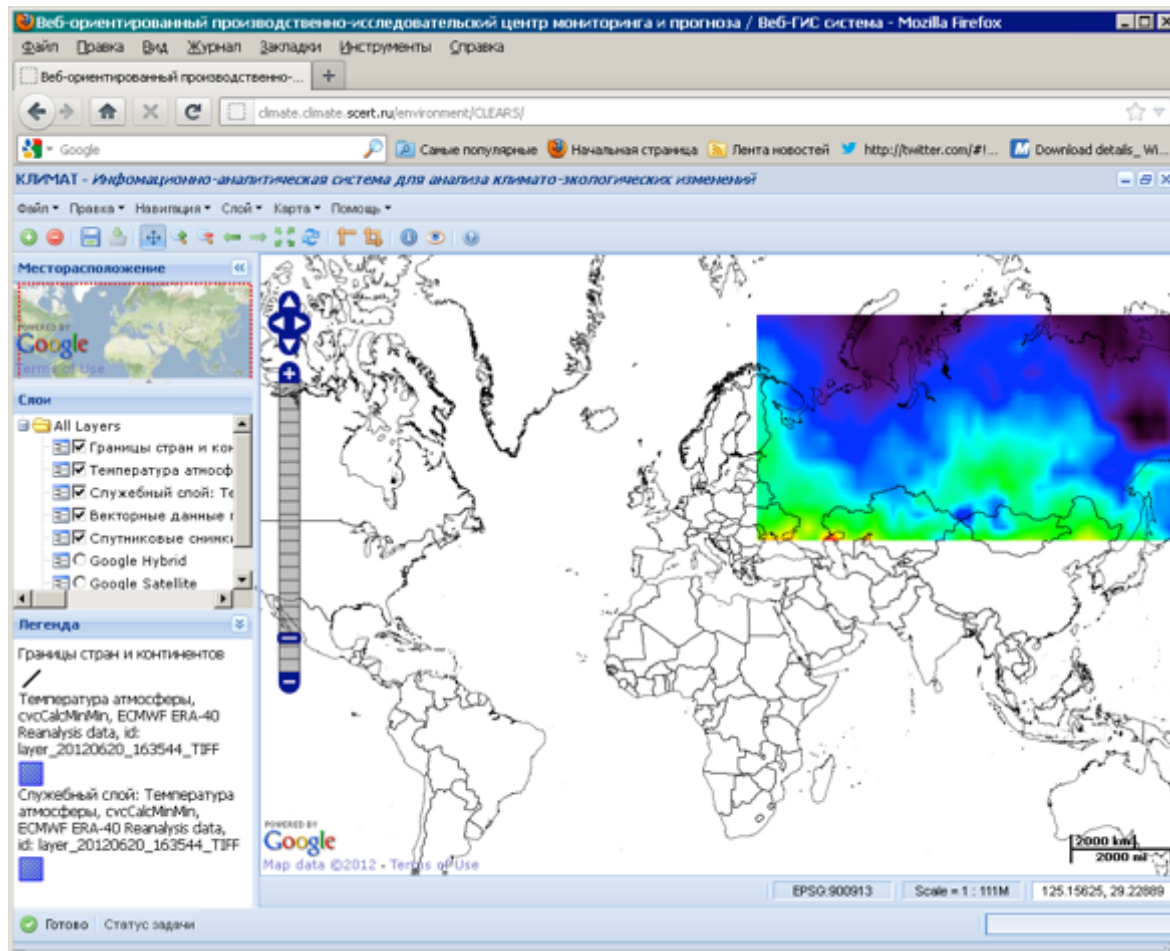
Базовый слой: Растр

Вектор

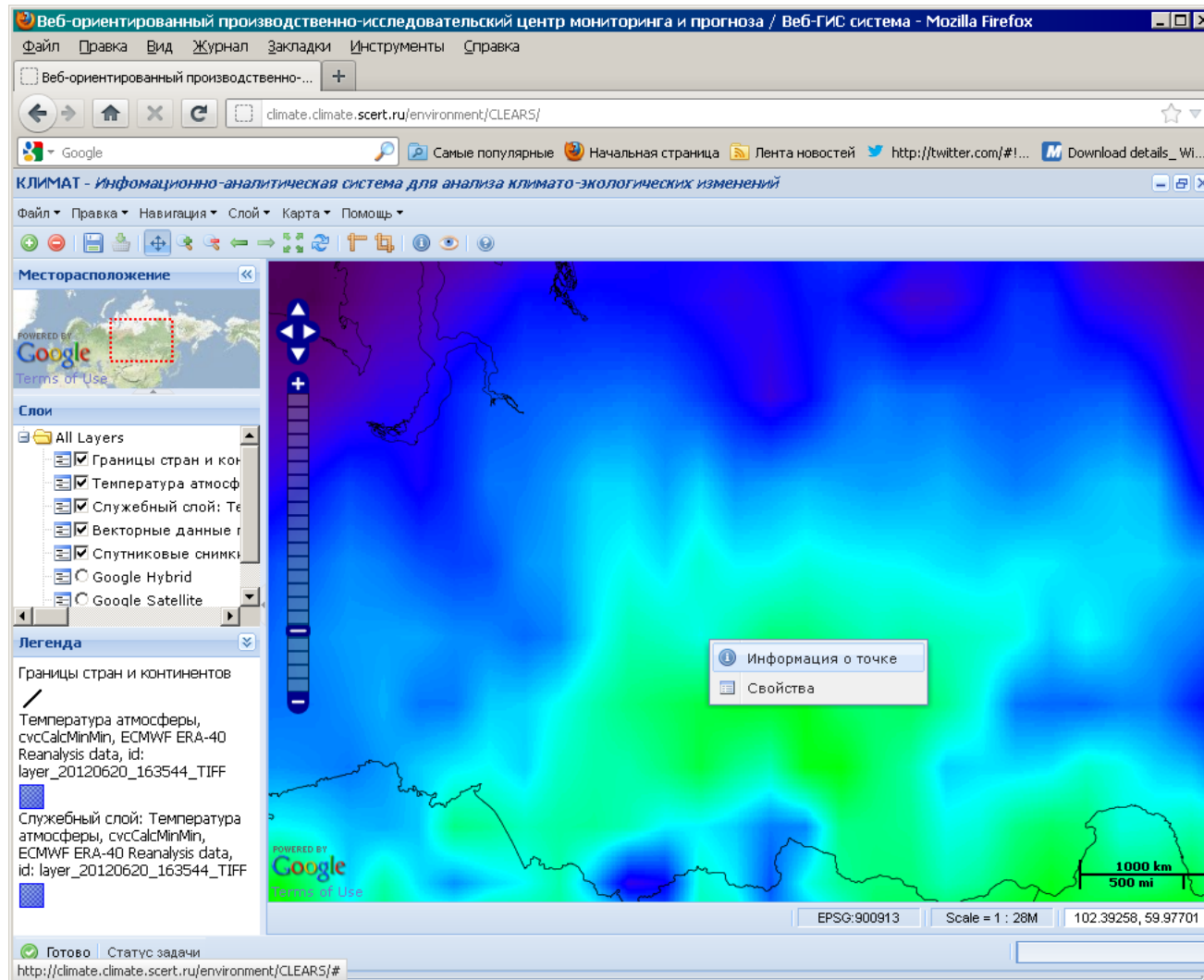
Назад Дальше

Готово Статус задачи

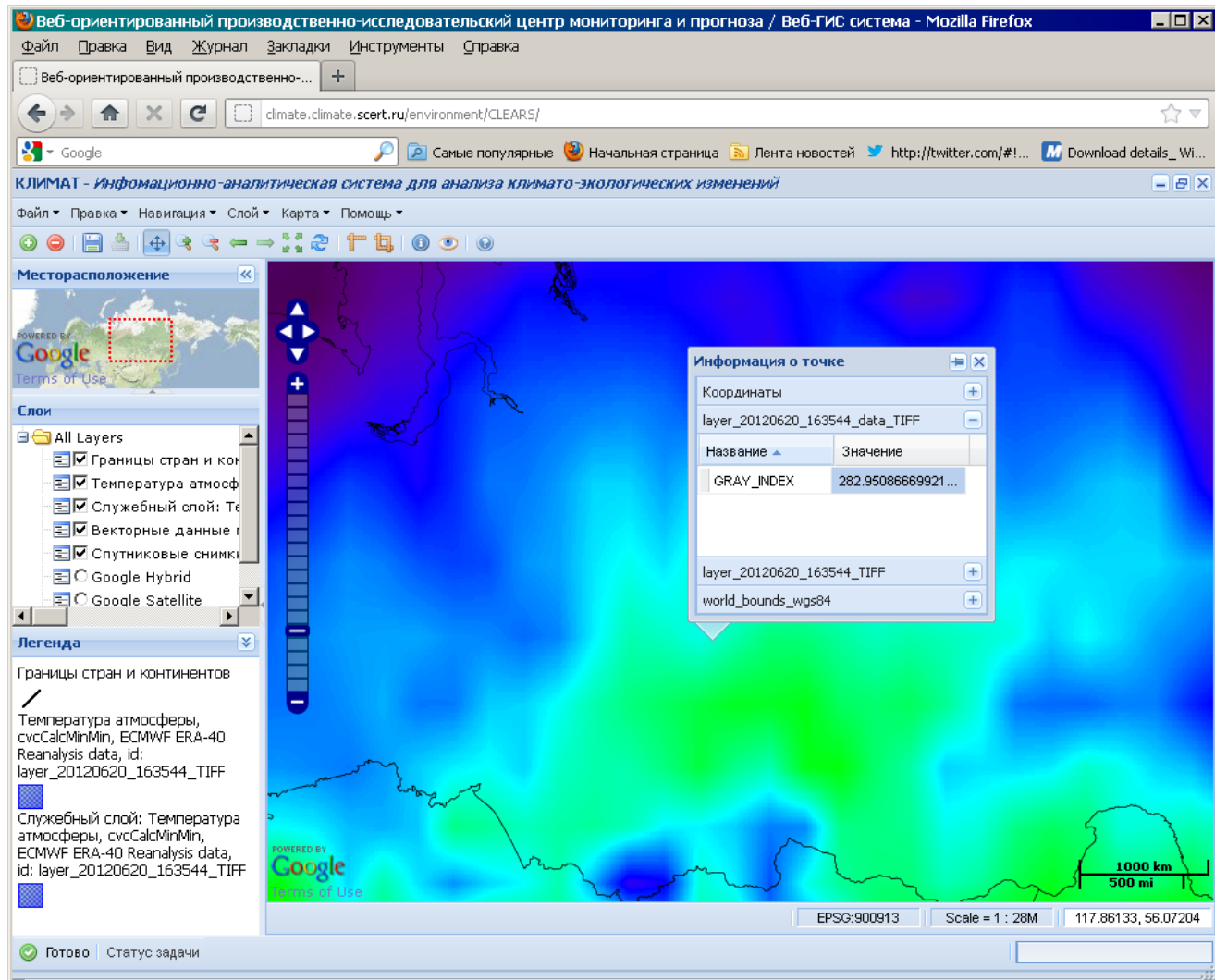
Wizard_Result



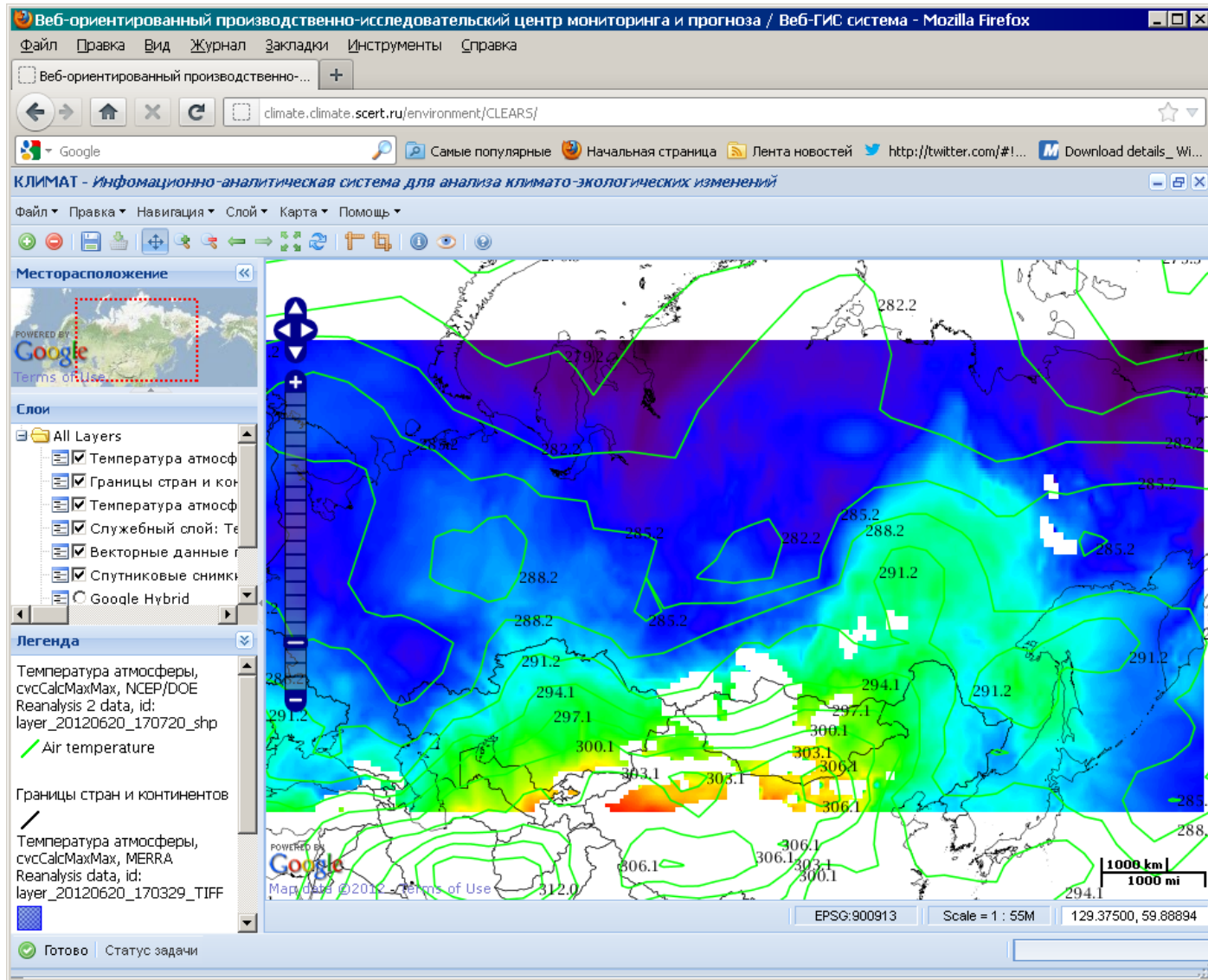
Coordinates



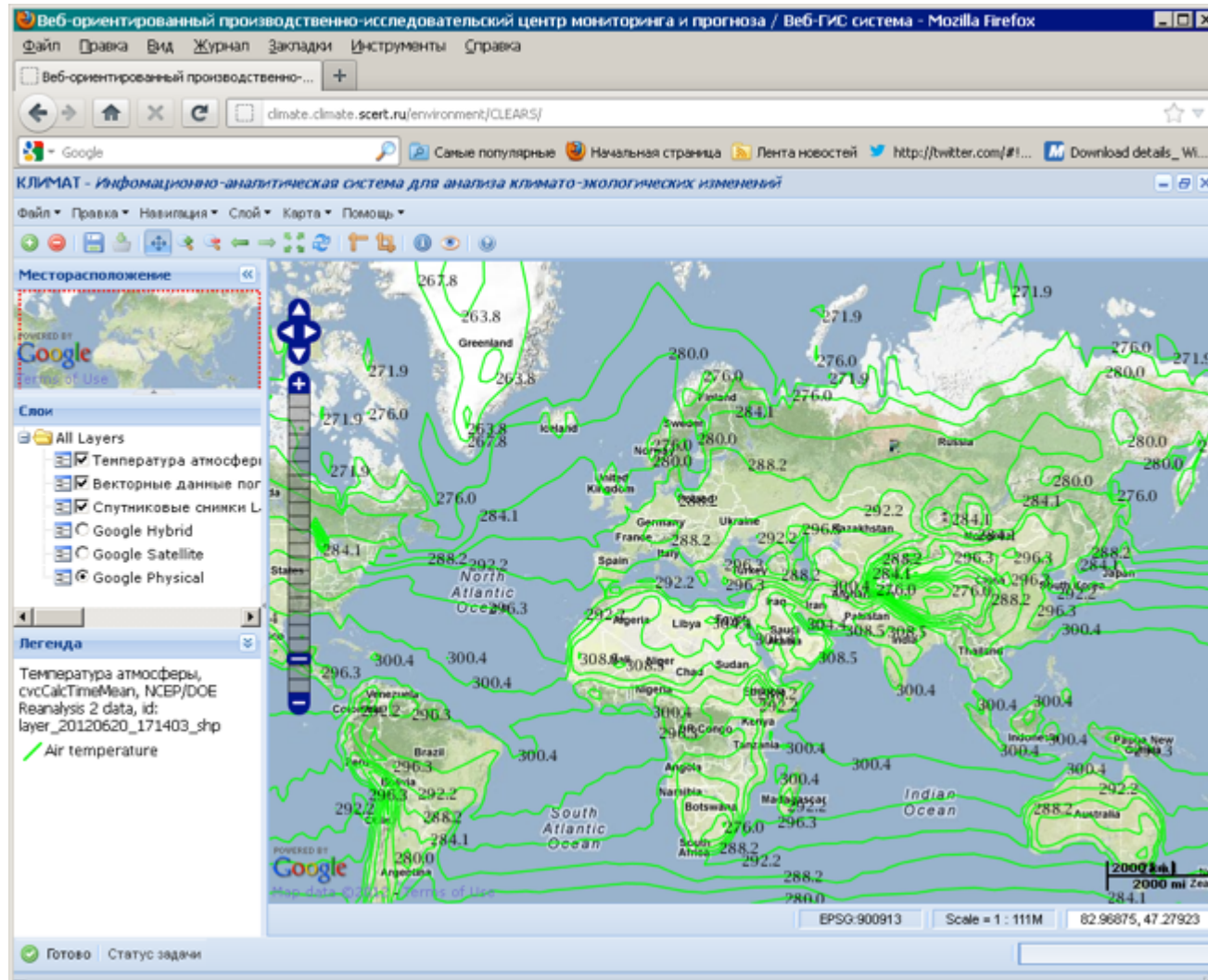
Temperature_value



merra_tmp_max_850mb_24.06.1990_03.0 7.1990_plus_shape_NCEP2



NCEP2_tmp_average_sfc_01.06.1979_30.06.1983_climatological_shape



Conclusions

Results envisaged:

Instrument for reliable analysis of climatic and environmental changes;

Element of distributed environment of geo-referenced data and computations applications.



Thanks for your attention!