



# ScanEx capabilities for establishing of decentralized networks

Vladimir Gershenzon

CEOS WGCV 24

Frascati, Italy

8-11 November, 2005

## Research & Development Center ScanEx

Private Russian company specializing in  
**satellite remote sensing**

- Receiving stations (HW&SW)
- Image processing software
- Image archiving and distribution
- Research in RS and thematic applications

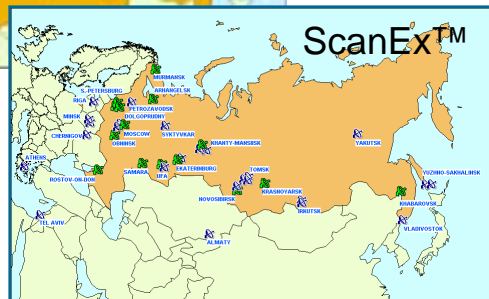
Integrated remote sensing systems  
using experience in all these fields.

## Satellite Portable Ground Stations (PGS) for meteorological purposes

Portable Ground Stations “ScanEx™” and “Alice-SC™”  
Reception data from NOAA satellites  
series in HRPT format



39 “ScanEx™” and 7 “AliceSC™”  
Portable Ground Stations are  
in operational work at present  
(Feb., 2005), 11 of which are  
installed in Federal Department  
of hydro-meteorology and  
environment protection of Russian  
Federation.



Portable Ground Station “Liana™”  
Reception data from NOAA satellites  
series in APT format



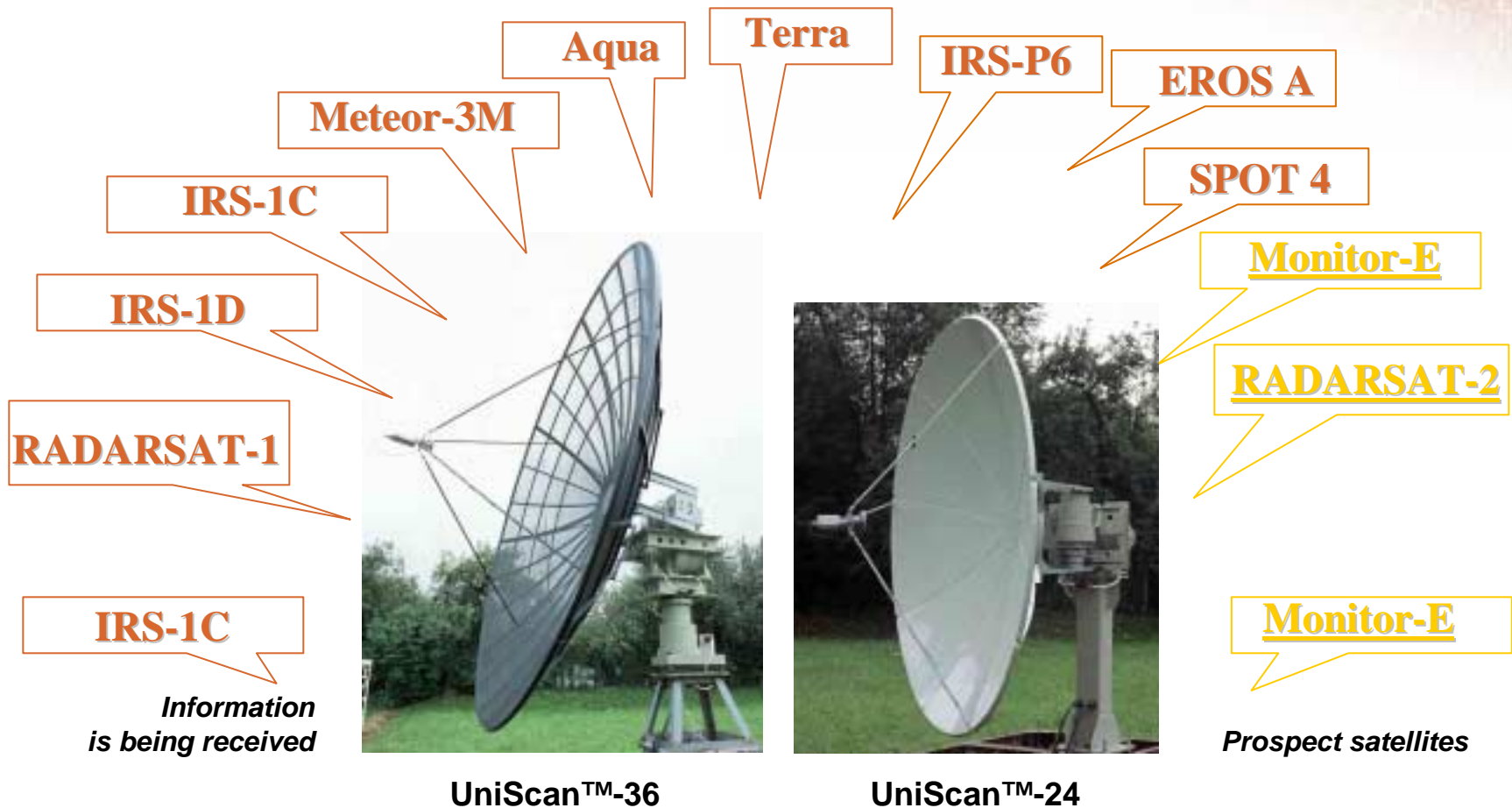
81 “Liana™” Portable Ground  
Stations are in operational work  
at present (Feb., 2005), 50  
of which are installed in Federal  
Department of hydro-meteorology  
and environment protection  
of Russian Federation.



## Operational network of EOScan™ ground stations, manufactured by R&D Center ScanEx



## From Earth RS satellites to UniScan™ ground station



## Operational UniScan™ stations network



## Moscow Archive and Reception Center - MARC



MARC is the first ground station within Russia and CIS countries that started receiving data from RADARSAT-1 satellite. Since 1 November, 2004 MARC starts acquisitions and taking orders from customers for RADARSAT imaging. Please, contact RADARSAT Int. to put order for Network Stations in Russia and CIS – [info@rsi.ca](mailto:info@rsi.ca)

## Ground stations networks in Russia

Ministry of natural resources of Russian Federation (MPR)

Ministry of emergency situations (EMERCOM)

Hydro meteorological Service of Russian Federation (Rosgidromet)

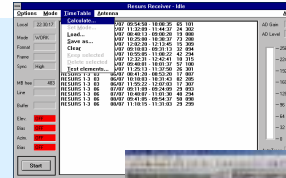
Research and educational organizations



# Software of R&D Center ScanEx for satellite data acquiring, archiving and processing

## Scan Receiver®

Data reception and antenna control



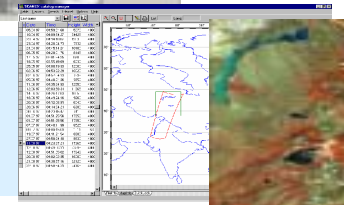
## ScanMagic®

Data viewing and preliminary processing



## ScanEx Catalogue Manager®

Data archiving



## ScanEx Image Processor®

in-depth processing of remotely sensed data and creation of thematic products.



## ScanEx NeRIS®

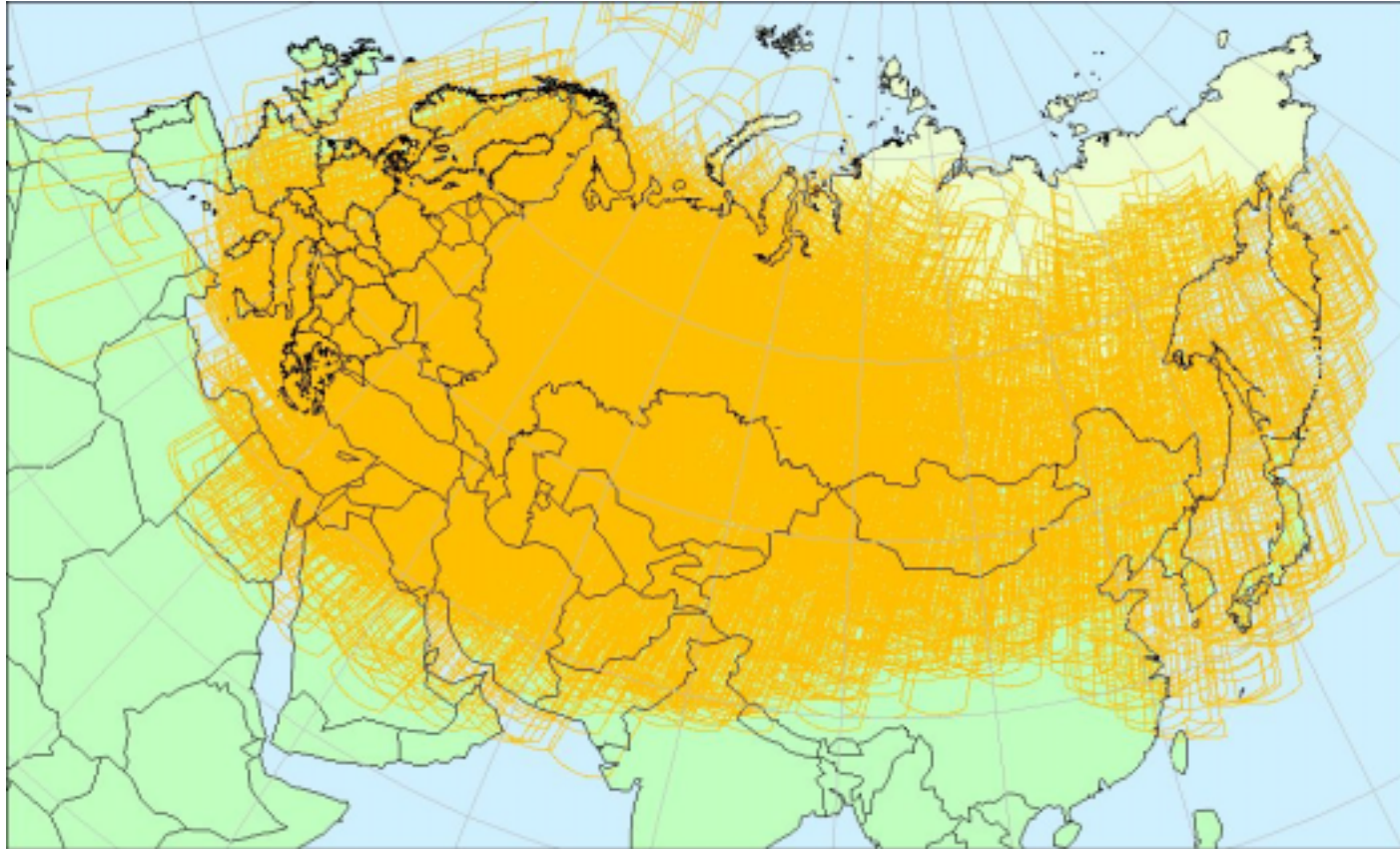
thematic interpretation of spatial data on the basis of artificial neural networks



## Resurs-O1 MSU-E image commercial archive of R&D Center ScanEx. October, 2005

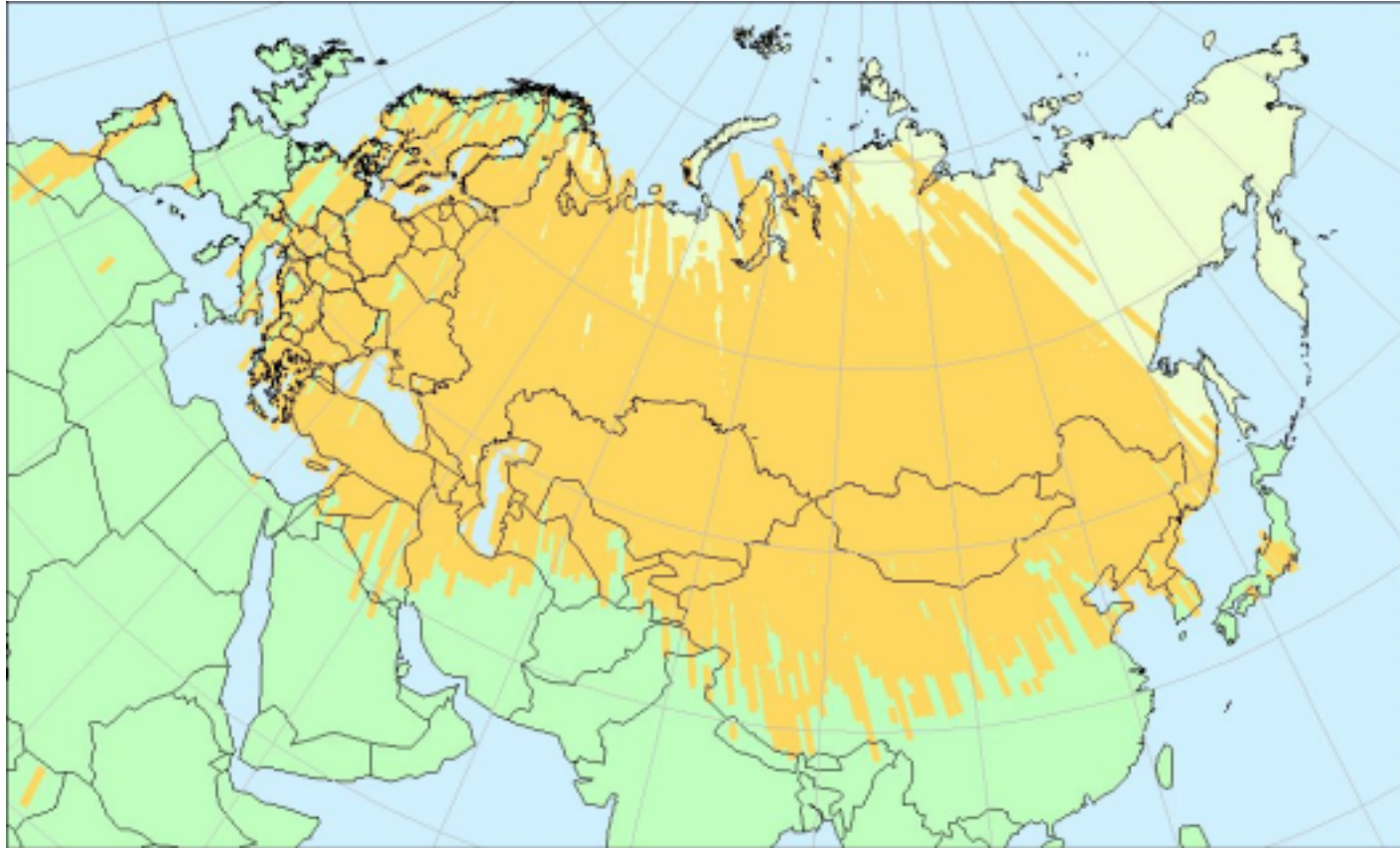


## Resurs-O1 MSU-SK image commercial archive of R&D Center ScanEx. October, 2005





## Meteor-3M MSU-E image commercial archive of R&D Center ScanEx. October, 2005



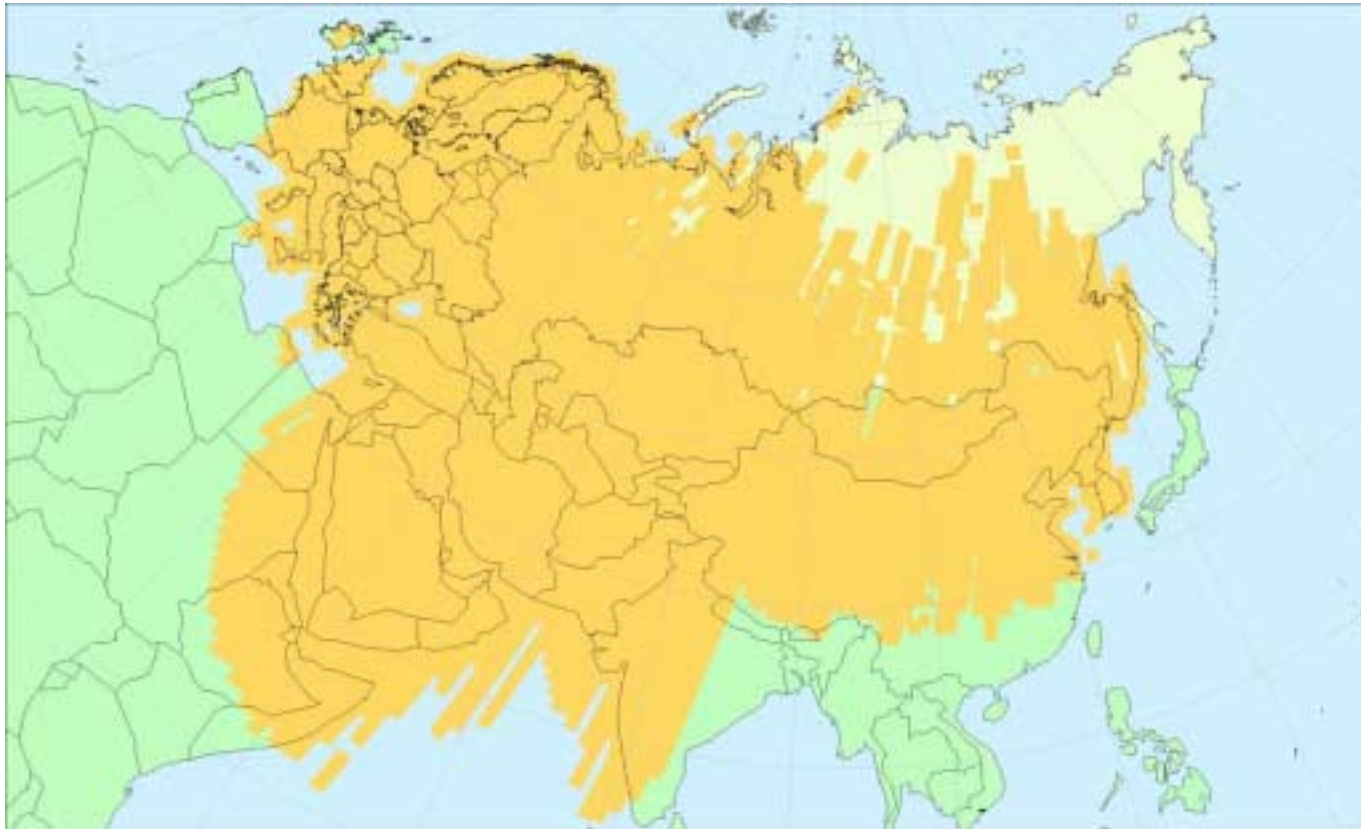


# IRS-1C/1D PAN image archive of R&D Center ScanEx

October, 2005



# IRS-1C/1D LISS-3 image archive of R&D Center ScanEx October, 2005



## Global Forest Watch

**Global Forest Watch** ([www.globalforestwatch.org](http://www.globalforestwatch.org)) is an initiative of the World Resources Institute ([www.wri.org](http://www.wri.org)). Since 1998 is in Russia as Forest Watch Russia Project.



### Participants of the Forest Watch Russia:

Greenpeace Russia,

Biodiversity Conservation Center,

International Socio-ecological Union,

International Forest Research Institute,

R&D Center ScanEx,

“Altai-XXI Century” Foundation,

Friends of Siberian Forests (Krasnoyarsk)

and other.



## On-line monitoring of intact forests

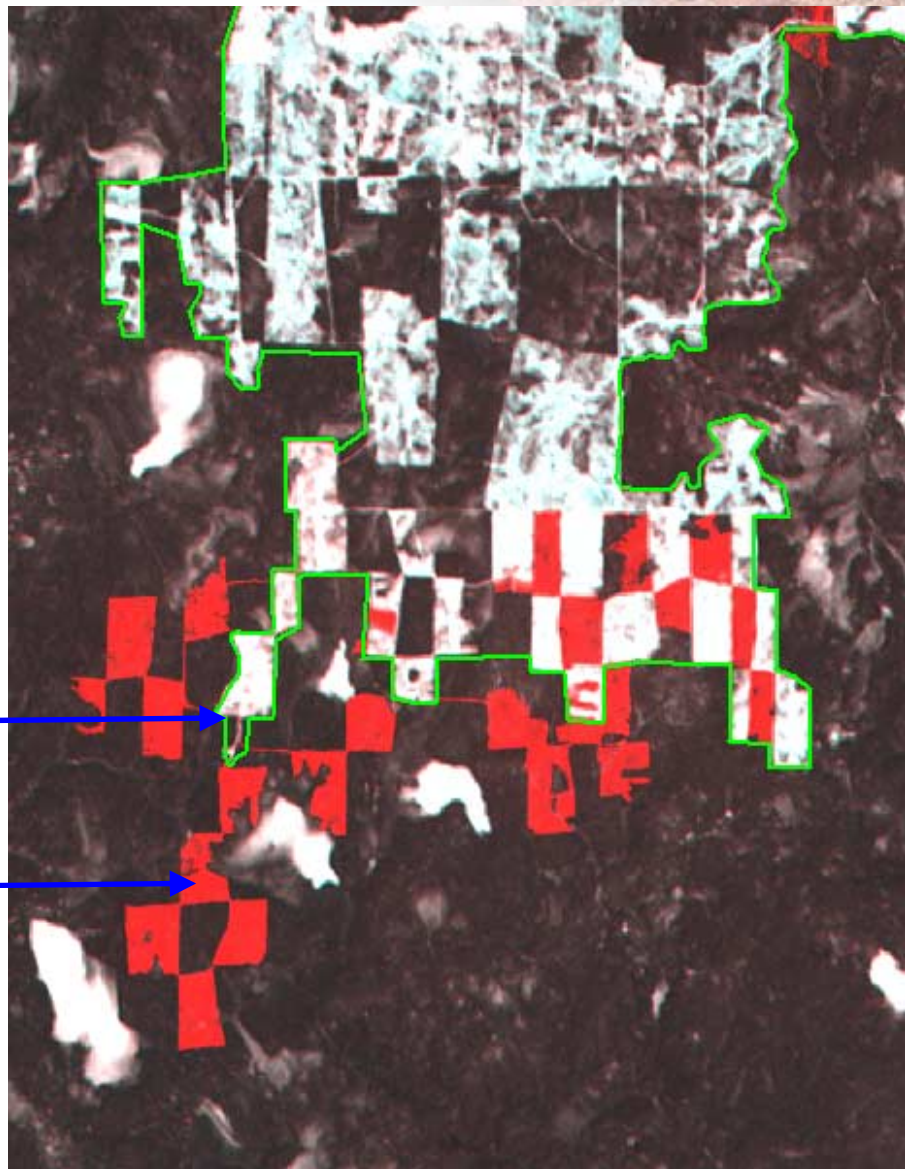
Monitoring of intact forests with use of satellite images of high resolution.

Joint Project of Greenpeace Russia and R&D Center ScanEx

Landsat 7, 2000 + IRS PAN, 2004

Border of intact forests

New clearings





# Non-profit projects of “Transparent World” NGO

Non-profit libraries of satellite images Landsat 4, 5 ,7, Aster

<http://www.transparentworld.ru/bibl>

Educational projects:

- Internet competition “Alive map”  
<http://www.transparentworld.ru/livingmap>;
- atlases and mosaics of satellite images
- atlas of UNESCO World heritage sites (RF)

Educational programs with use of RS data

<http://www.transparentworld.ru>

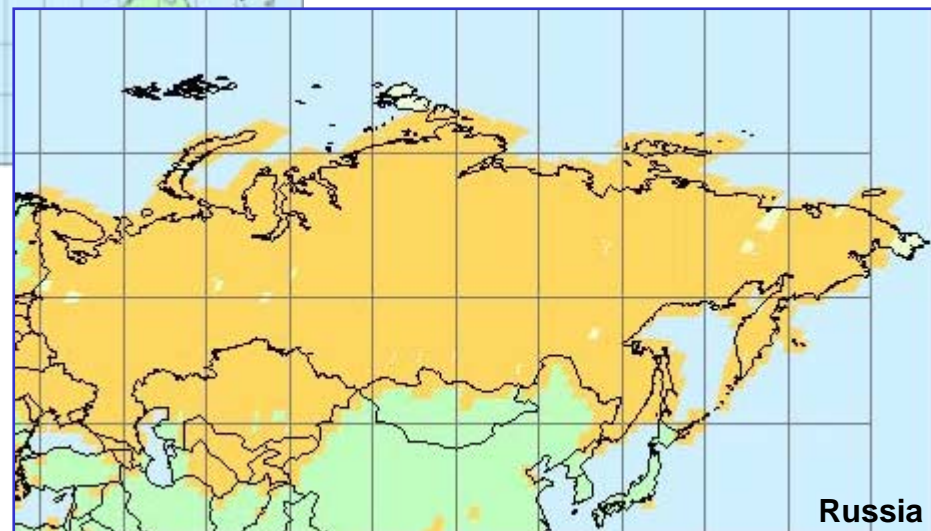
# Non-profit Landsat 7 image Library

[www.transparentworld.ru](http://www.transparentworld.ru)



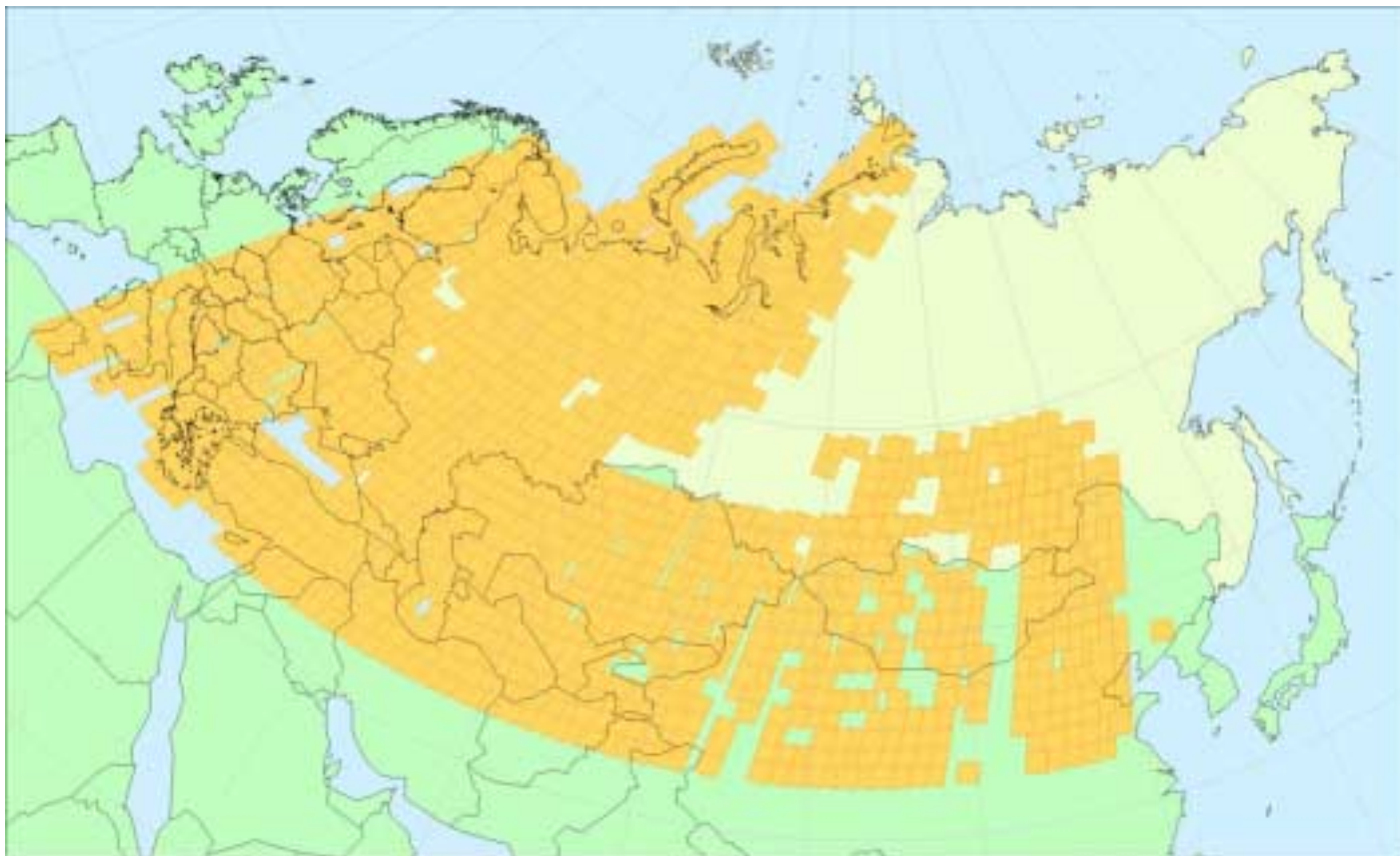
Present status  
October, 2005

51 participants,  
~ 2,900 scenes



# Landsat 4,5 image non-profit archive of R&D Center ScanEx for territory of Russia

October, 2005 – **total 1,327 scenes**



## Our Internet addresses

[www.scanex.ru](http://www.scanex.ru)

[www.transparentworld.ru](http://www.transparentworld.ru)

[www.kosmosnimki.ru](http://www.kosmosnimki.ru)

<http://eostation.scanex.ru>





We are open for cooperation!

22/5, L'VA TOLSTOGO ST., MOSCOW, 119021, RUSSIA

PHONE: +7 095 246-2593, +7 095 651-3590

FAX: +7 095 246-2593, +7 095 651-3587

[HTTP:// WWW.SCANEX.RU](http://www.scanex.ru)

E-MAIL: [INFO@SCANEX.RU](mailto:info@scanex.ru)